Japan Display Inc.

# FY25/3 H1
# Corporate Presentation

November 13, 2024

# PersonalTech
# For A Better World

Japan Display Inc.

JDI

# FY25/3 H1 Overview

# FY25/3 H1 Overview ①

- **On Track for JDI's Game-Changing NextGen OLED eLEAP Mass Production Launch in December 2024**
- **Expanding Activity to Deliver Greater eLEAP Production Capacity & Build Out Global eLEAP Ecosystem on Back of Strong Customer Demand. Decided Not to Extend MOU with Wuhu on Launch of eLEAP Fab in China in October 2024. In addition to China and India, Discussions with Potential Partners in North America, Europe, and the Middle East**

# FY25/3 H1 Overview ②

- **H1 Sales Down YoY on Reduced Shipments of LCD Smartphone and VR**
- **Shrank Losses on Improved Product Mix, Fixed Cost Reductions & Tighter Inventory Management**
  **Improved EBITDA +26%、OP +28%、Net Income +41% YoY**
- **Actively Deploying JDI's World-Class IP Portfolio. New Cross-Licensing Agreement with Taiwanese Display Giant, AOU. JDI Receives Licensing Revenues.**

# FY25/3 H1 Overview ③

- **Despite H1 Results In-Line with Forecast, Significantly Revising Down H2 Sales and Profit Forecasts. Expect to Miss Target of Turning EBITDA Positive in H2**
- **Radical Corporate Transformation Required to End Chronic Losses Rooted in JDI's Display Business. Global Display Industry Continues to Be Structurally Unprofitable with Excess Supply.**
- **In Parallel with Executing Further Structural Reforms to Deliver Profitability in JDI Display Business, Will Enter New High-Growth Areas in BEYOND DISPLAY Strategy**

# FY25/3 H1 Overview ④

- **JDI Will Deploy its Core Capabilities to 3 New Business Domains, All Large Markets with Significant Growth & Profit Potential, and with JDI Having Advantaged Capabilities to Deliver Customer Value and Participate in the Growth and Profitability:**

  1. **Sensors**
  2. **AI Data Centers**
  3. **Advanced Semiconductor Packaging**

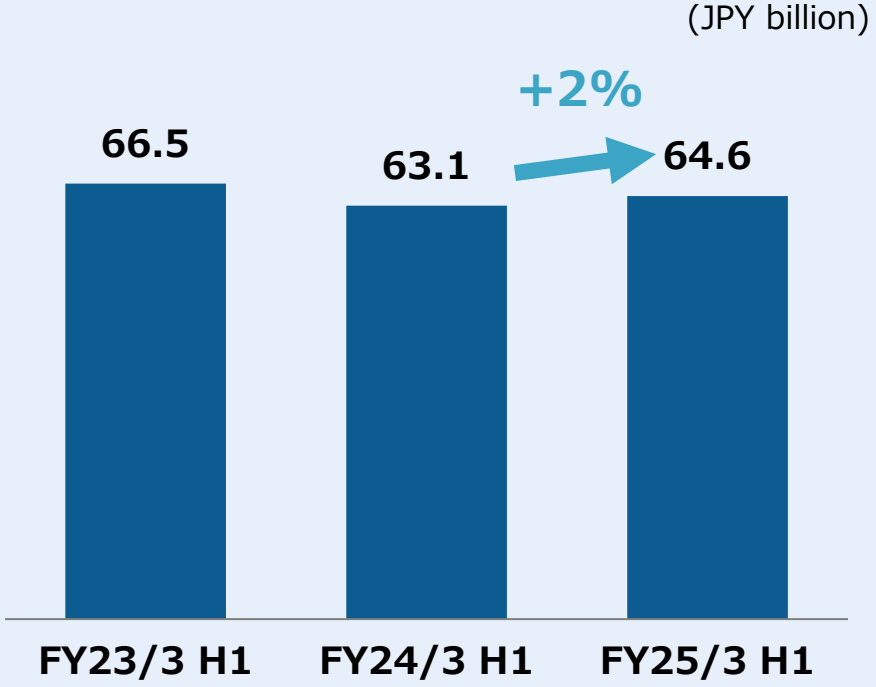
- **JDI Will Take All Necessary Actions to Drive Growth in JDI Shareholder Value**

# FY25/3 H1 Overview | Automotive (Core)

**Long-Term Growth Driver with Robust Stability due to Long-Term Supply Contracts**

**Ongoing Major Customer Engagements for eLEAP, 2VD, & Other NextGen JDI Tech**

**Despite discontinuing low-margin products & lower end-customer demand, new products & favorable FX boosted sales**



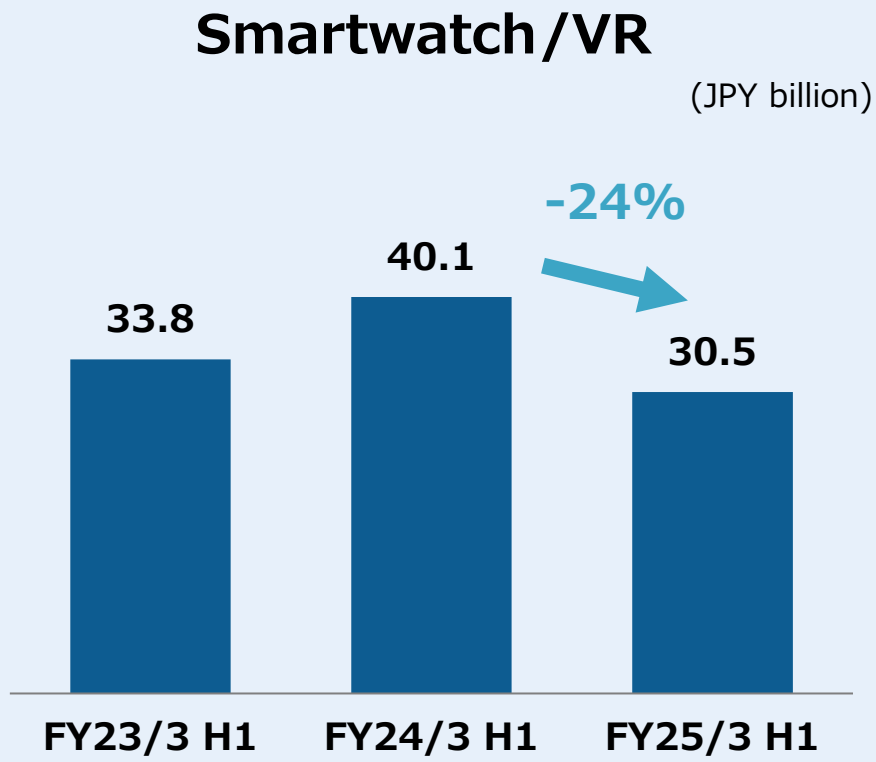

Note: To better reflect the nature of our business, JDI changed segment names from FY24/3 Q2 as follows: “Mobile” to “LCD Smartphone” and “Non-Mobile” to “Smartwatch/VR.” Please note that this is only a name change and does not impact the segment definitions themselves.

# FY25/3 H1 Overview | Smartwatch/VR (Core)

**Diverse Product Portfolio Offers Both Ongoing Growth & Stability**

**Strategically Important OLED Business Flat YoY While VR Down Significantly**

**On Track To Launch of eLEAP Mass Production in December 2024**



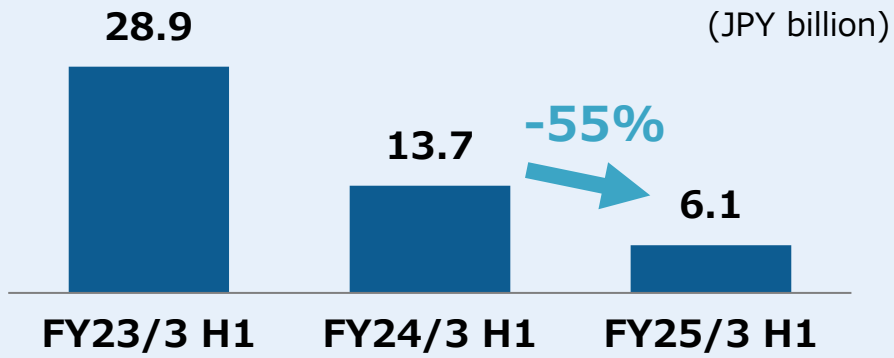
# FY25/3 H1 Overview | LCD Smartphone (Non-Core)

**Exiting Commoditized LCD Smartphone Business to Focus Engineering Resources on JDI Proprietary NextGen Tech**

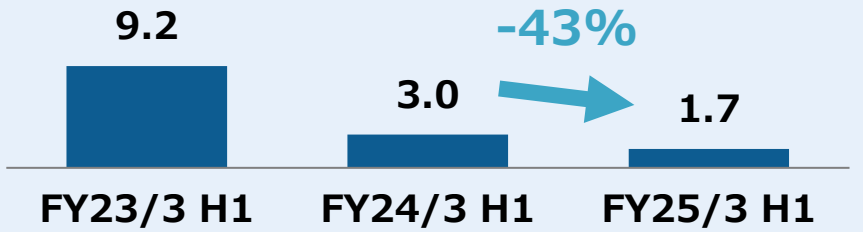
**-53% YoY**

**Will Re-enter Smartphones with Competitively Advantaged eLEAP**

## LCD Smartphone US/Euro




## LCD Smartphone China



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# FY25/3 H1
# Earnings Review

# FY25/3 H1 (6M) Earnings Summary

## Shrank Losses Despite Lower Sales On Back of Improved Product Mix, Fixed Cost Reductions, & Tighter Inventory Management
## EBITDA +26%, OP +28%, & NI +41% YoY Improvement

| (Units: JPY billion) | FY24/3 H1 | FY25/3 H1 | YoY | |
|---|---|---|---|---|
| **Sales** | **119.9** | **102.9** | **-14%** | **Core businesses (Automotive & Smartwatch/VR) down on weaker VR shipments. Continuing to downsize non-core LCD smartphone business** |
| Core Businesses | 103.2 | 95.1 | -8% | |
| Non-Core Businesses | 16.7 | 7.8 | -53% | |
| **EBITDA** | **-18.1** | **-13.4** | **+4.7** | **Profits improved on back of improved product mix, fixed cost reductions, & tighter inventory management** |
| **Operating Profit** | **-21.4** | **-15.5** | **+6.0** | |
| **Net Income** | **-28.7** | **-16.8** | **+11.9** | **Fall-off of JPY 9.2B impairment loss recorded last year, and JPY 1.8B gain from sale of former Higashiura fab** |

# FY25/3 Q2 (3M) Earnings Summary

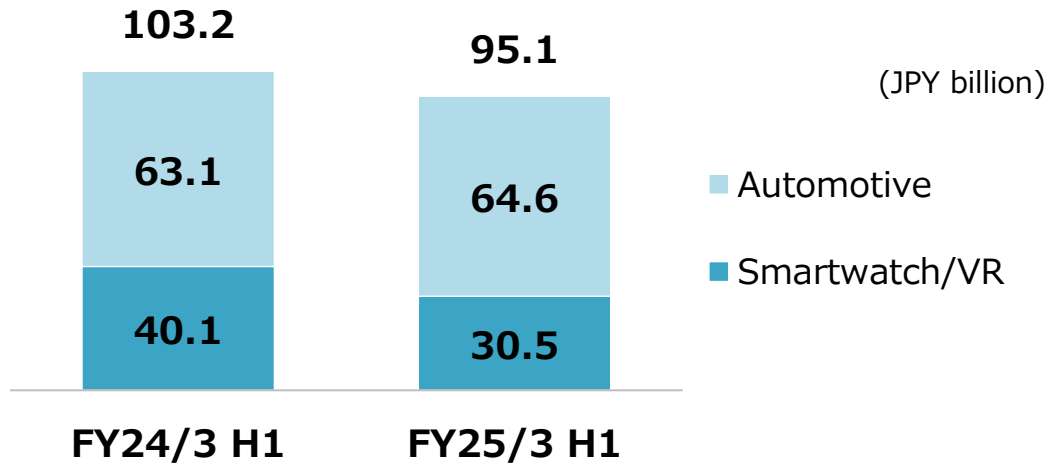
## EBITDA (-25%) and Operating Profit (-12%) on Sales Decline
## Net Income Improved by 37% on Fall-Off of Impairment Losses

| (Units: JPY billion) | FY24/3 Q2 | FY25/3 Q2 | YoY | |
|---|---|---|---|---|
| **Sales** | **66.9** | **47.0** | **-30%** | **Core Automotive & Smartwatch/VR business down due to weaker consumer demand. Continuing to downsize non-core LCD smartphone business** |
| Core Businesses | 58.2 | 45.1 | -23% | |
| Non-Core Businesses | 8.6 | 1.9 | -78% | |
| **EBITDA** | **-5.9** | **-7.4** | **-1.5** | **Despite product mix improvement and fixed cost reductions, losses widened on lower sales** |
| **Operating Profit** | **-7.6** | **-8.4** | **-0.9** | |
| **Net Income** | **-16.5** | **-10.3** | **+6.1** | **Fall-off of JPY 9.2B impairment Loss recorded last year** |

# FY25/3 H1 (6M) Sales by Segments

## Core (Automotive, Smartwatch/VR) Sales Down on Lower VR Shipments
## Non-Core LCD Smartphone Down on Strategic Downsizing

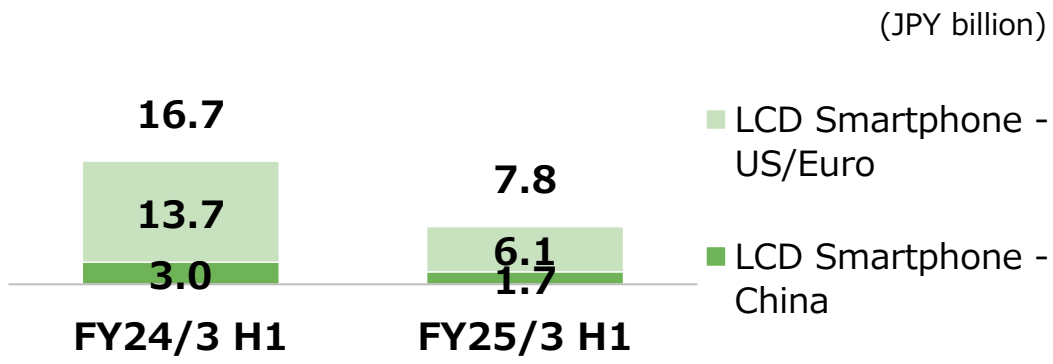
Core Businesses




**Automotive (YoY +2.4%)**
Growth on back of increased customer demand and FX tailwind

**Smartwatch/VR (YoY -23.9%)**
Large decline in VR demand
OLED smartwatch sales flat

Non-Core Businesses

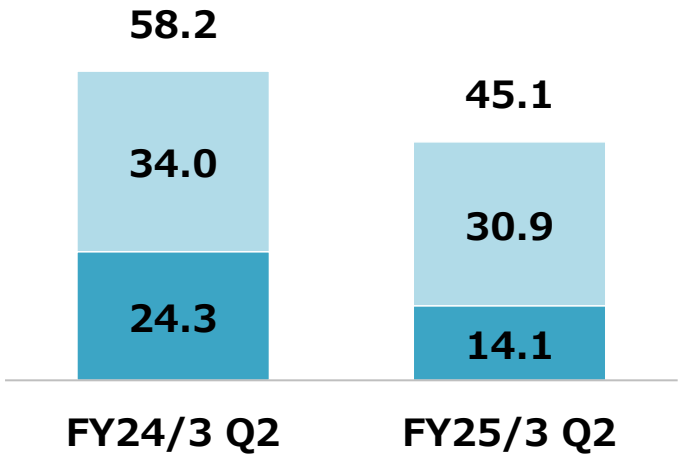



**LCD Smartphone (YoY -53.3%)**
Strategically exiting non-core LCD Smartphone business to focus resources on core businesses and next-generation products

# FY25/3 Q2 (3M) Sales by Segments

## Core Business (Automotive, Smartwatch/VR) Sales Down on Weaker End-Customer Demand
## LCD Smartphone Down on Strategic Downsizing

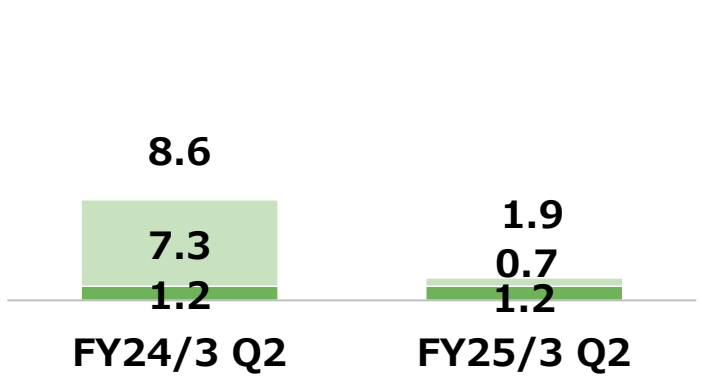
Core Businesses




**Automotive (YoY -8.9%)**
Down on discontinuation of low-margin products and reduced end-customer demand, despite increased sales from new products

**Smartwatch/VR (YoY -41.8%)**
Weaker consumer demand for VR and smartwatch

Non-Core Businesses

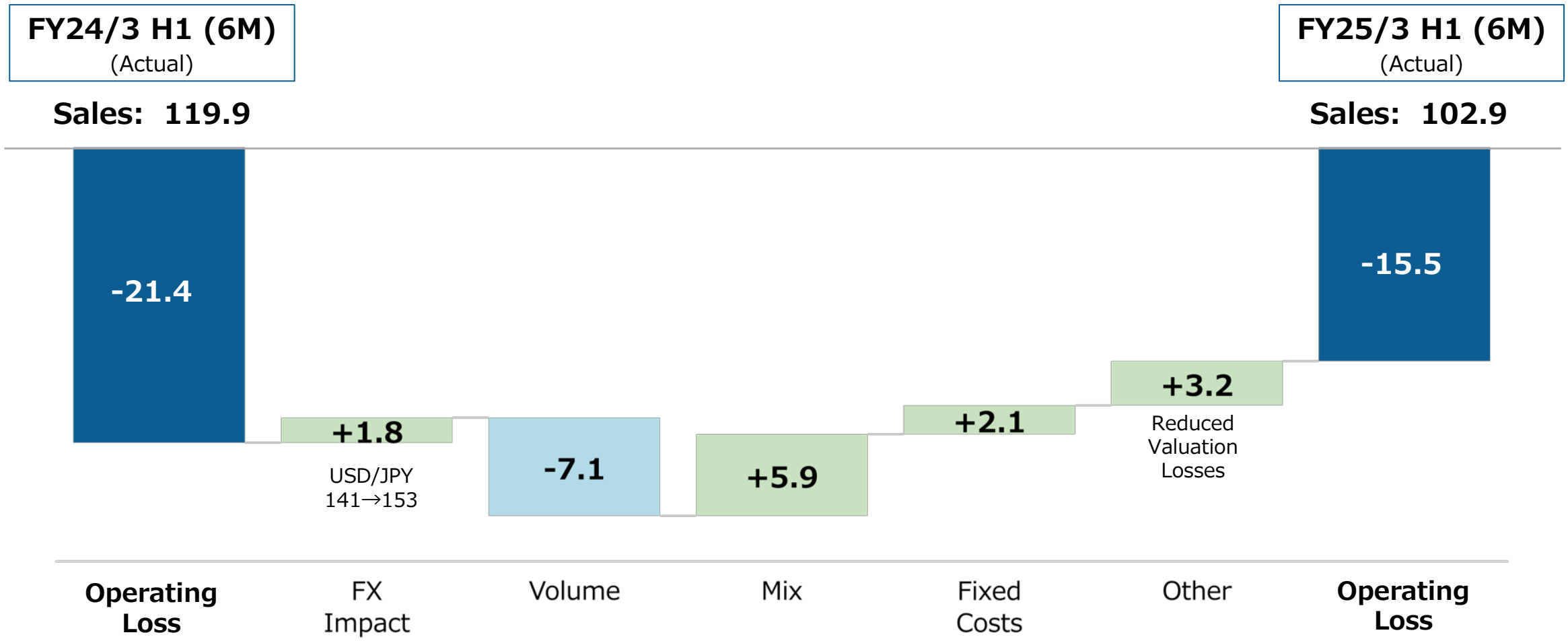



**LCD Smartphone (YoY -77.9%)**
Strategically exiting non-core LCD Smartphone business to focus resources on core businesses and next-generation products

# FY25/3 H1 (6M) Operating Profit Change Breakdown (YoY)

## Year on Year

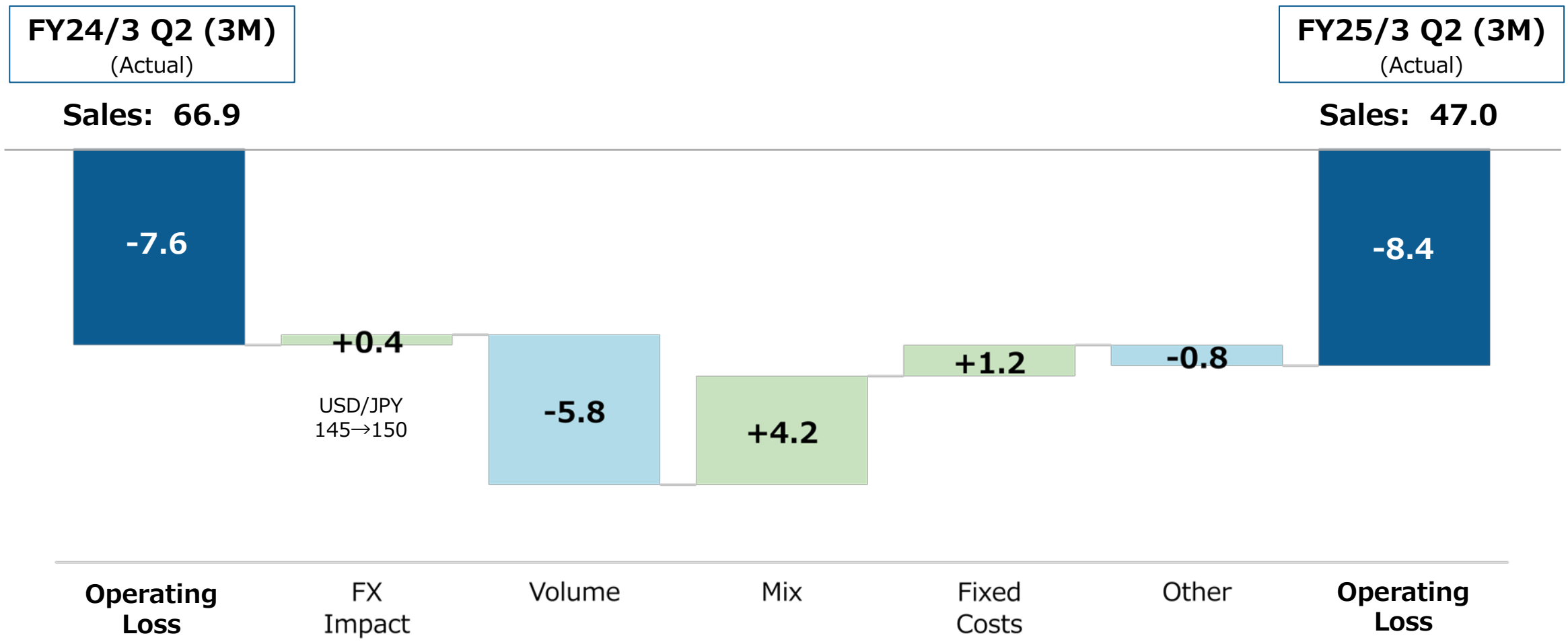
(JPY billion)



# FY25/3 Q2 (3M) Operating Profit Change Breakdown (YoY)

## Year on Year

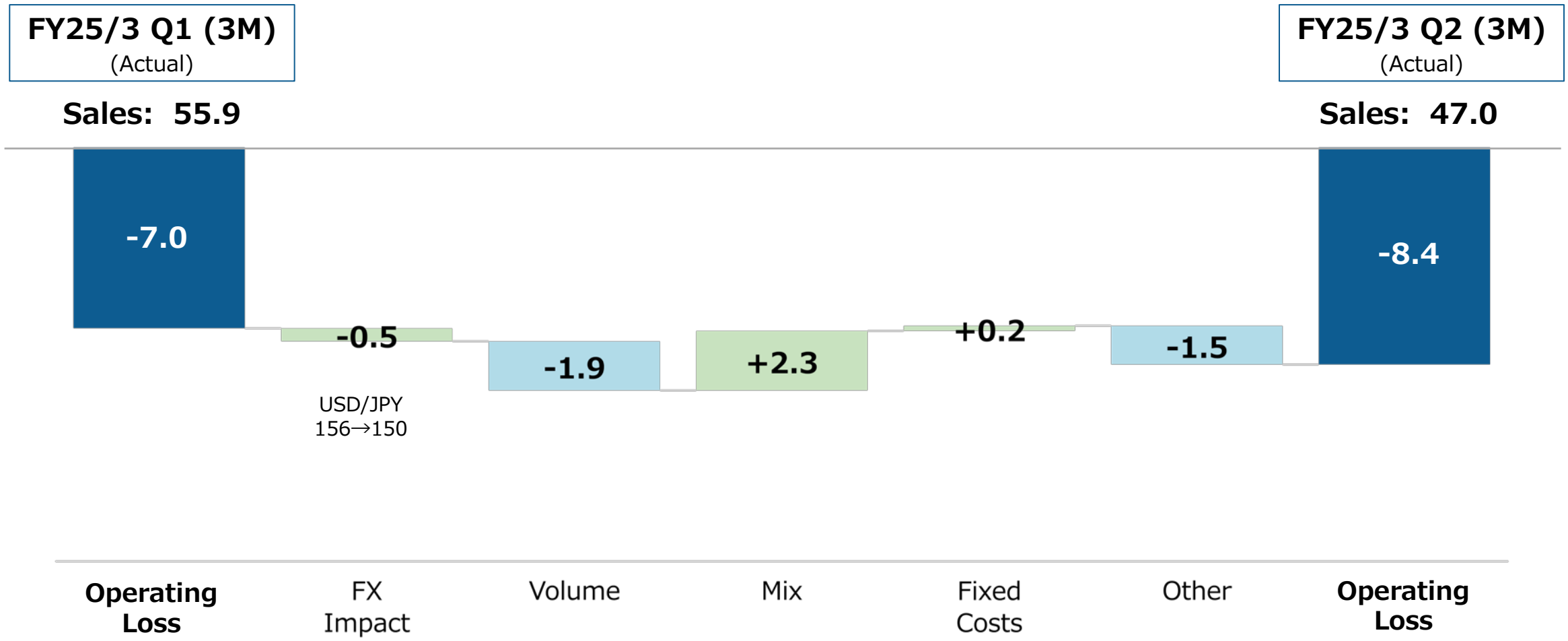
(JPY billion)



# FY25/3 Q2 (3M) Operating Profit Change Breakdown (QoQ)

## Quarter on Quarter

(JPY billion)



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# FY25/3 Forecast

# FY25/3 Forecast (Downward Revision)

## Forecast Revised-Down on Lower End-Customer Demand for Smartwatch & Auto & Lower Expected Licensing Revenue from eLEAP/HMO

| (JPY billion) | FY25/3 H1 | FY25/3 H2 | FY25/3 H2 | FY25/3 Full-Year | FY25/3 Full-Year |
|---|---|---|---|---|---|
| | Actual | Prev FCST | New FCST | Prev FCST | New FCST |
| **Sales** | **102.9** | **117.3** | **77.1** | **221.8** | **180.0** |
| Automotive (Core) | 64.6 | 65.6 | 52.8 | 131.8 | 119.7 |
| Smartwatch/VR (Core) | 30.5 | 49.5 | 23.5 | 80.8 | 51.7 |
| LCD Smartphone - US/Euro (Non-Core) | 6.1 | 0.0 | 0.2 | 5.9 | 6.2 |
| LCD Smartphone -China (Non-Core) | 1.9 | 1.6 | 0.6 | 3.3 | 2.4 |
| **EBITDA** | **-13.4** | **1.3** | **-12.9** | **-11.7** | **-26.4** |
| **Operating Profit** | **-15.5** | **-2.9** | **-16.2** | **-18.2** | **-31.7** |
| **Recurring Profit** | **-17.3** | **-6.4** | **-19.5** | **-24.3** | **-36.8** |
| **Net Income** | **-16.8** | **-9.6** | **-22.5** | **-26.6** | **-39.3** |

FY25/3 H2 FX assumption: USD/JPY=150

# FY25/3 Operating Profit Forecast Breakdown

## H1 Actual vs. Forecast

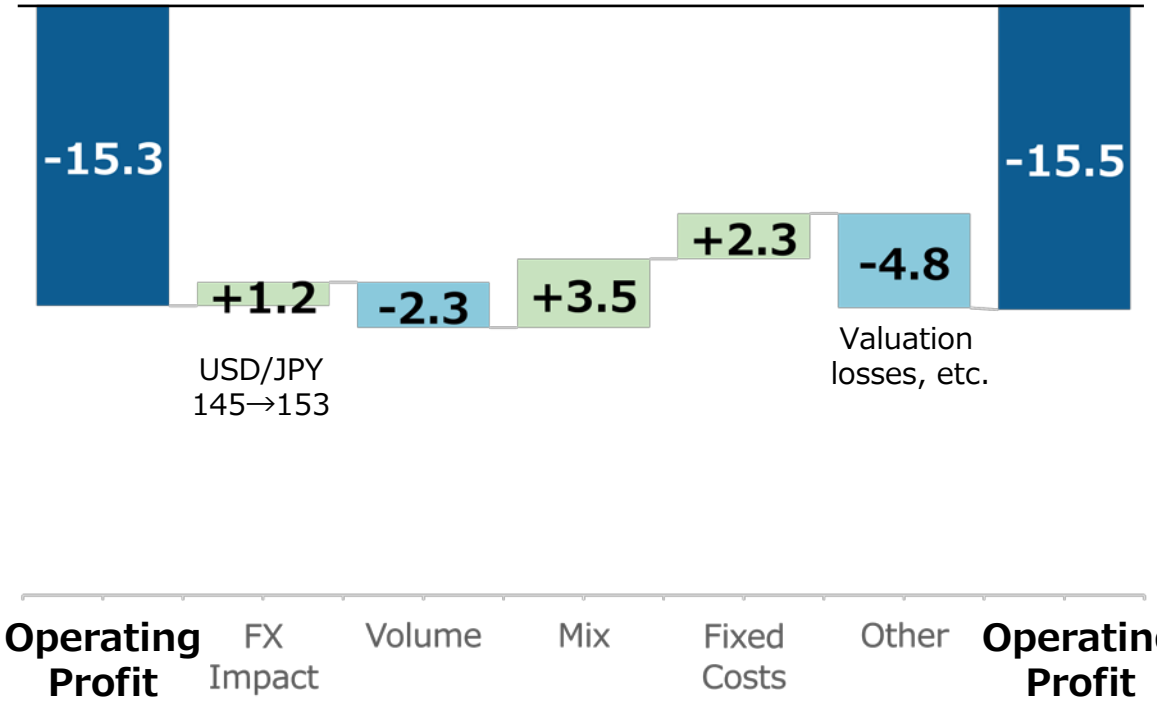
(JPY billion)

**FY25/3 H1** (Forecast)

**Sales : 104.5**

**FY25/3 H1** (Actual)

**Sales: 102.9**




## New H2 Forecast vs. Previous Forecast

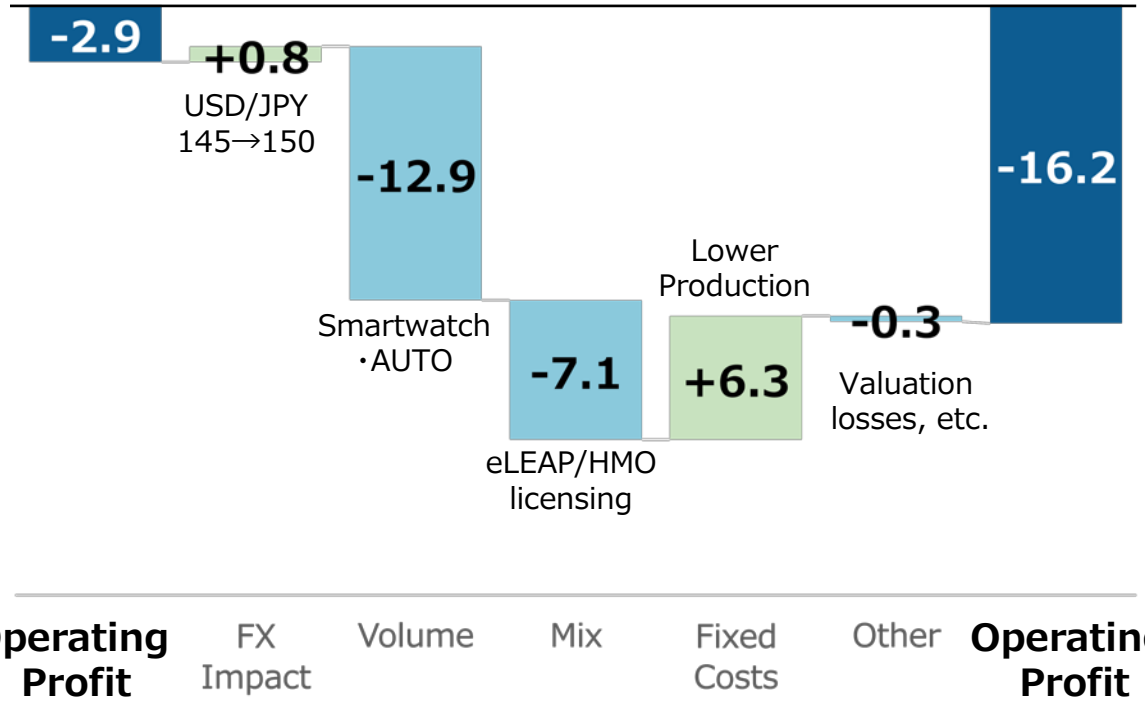
(JPY billion)

**FY25/3 H2** (Prev. Forecast)

**Sales : 117.3**

**FY25/3 H2** (New Forecast)

**Sales : 77.1**



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# BEYOND DISPLAY
# Creating A New JDI

JDI

# BEYOND DISPLAY

# BEYOND DISPLAY: Deploy JDI Core Capabilities to High Growth Areas

## JDI Core Capabilities

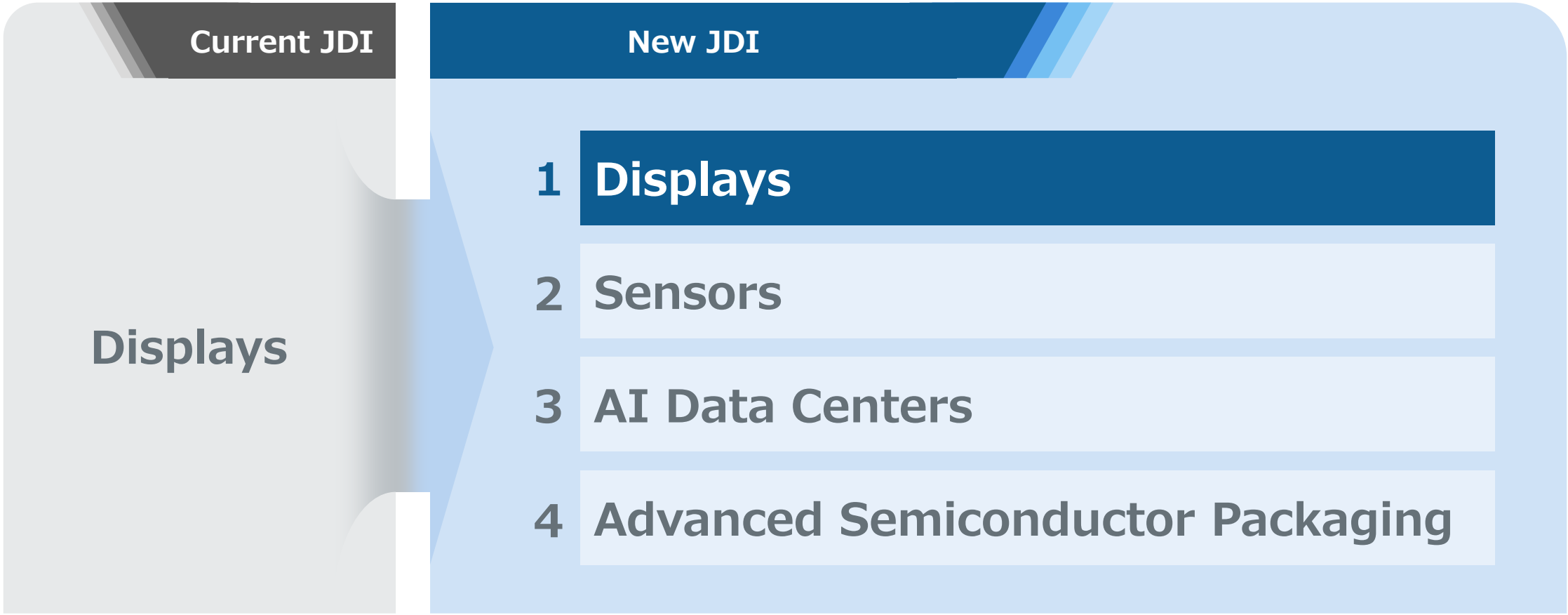
| World-Class Technology | Robust IP Portfolio | Deep Customer Trust | Robust Geopolitical Position |
|---|---|---|---|
| JDI brings together deep technology & engineering capabilities from Hitachi, Sony, and Toshiba | Robust IP portfolio comprising over 16,000 patents means JDI receives substantial revenues from cross-licensing agreements with other display manufacturers | World-class quality coupled with established customer relationships results in customer trust and brand loyalty | JDI offers Japan-based supply chain diversification and risk reduction in a world plagued with rising geopolitical tensions |

# BEYOND DISPLAY: Drive New Sources of Growth & Profitability

## Deploying JDI Resources to New High-Growth Areas

| Current JDI | New JDI |
| --- | --- |
| Displays | 1 Displays |
| | 2 Sensors |
| | 3 AI Data Centers |
| | 4 Advanced Semiconductor Packaging |

# BEYOND DISPLAY: Drive New Sources of Growth & Profitability



# Displays: Structural Transformation to Profitability & Growth

**Displays are a foundational technology for modern society with a significant global market size of USD 120 billion annually**
**JDI has unmatched technological capabilities in displays to deliver customer & social value & improve people's lives**

## Key Actions for JDI Display Profitability

- **Deliver on JDI Global No. 1 Technology Leadership (eLEAP, 2VD, etc.)**
- **Sign Alliance Partnerships for eLEAP Global Ecosystem Buildout**
- **Drive Asset Light Business Model**
- **Further Cut Costs**


Source: TAM is from "Worldwide Flat Panel Display Market (Active Matrix)", OMDIA, October 2023

# JDI Global No. 1 Technology Leadership: eLEAP

## eLEAP Is The Winning OLED Technology

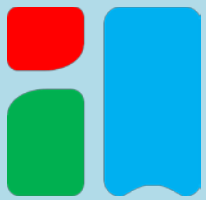
### Despite Its Superb Performance, OLED Has Inherent Issues

These issues make OLED dysfunctional for a wide variety of display applications

- **Short Lifetime**
- **High Production Cost**

### eLEAP Powerfully Moves OLED Forward

eLEAP keeps all of OLED's advantages while solving its shortcomings

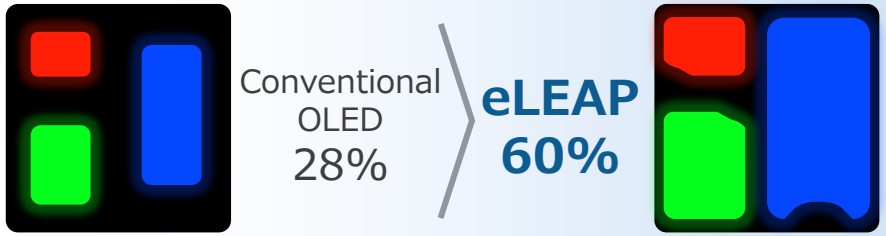


**eLEAP** + **Long Lifetime** + **Low Cost**

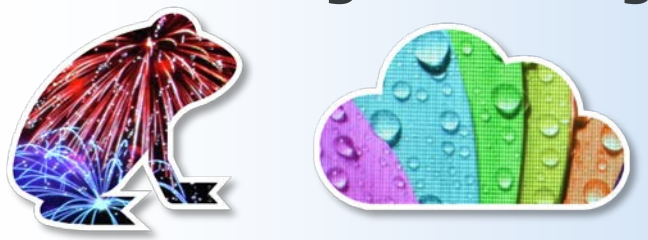
# JDI Global No. 1 Technology Leadership: eLEAP

## eLEAP's Unprecedented Customer Value

### High Brightness (2X)




**Brightness, vividness & free shapes unimaginable with existing technology**



**eLEAP**

### Long Lifetime (3X)

| Lifetime Comparison | New | After 1yr | After 3yrs | After 5yrs |
|---|---|---|---|---|
| | 0h | 1000h | 3000h | 5000h |
| Conventional OLED |  |  |  |  |
| eLEAP |  |  |  |  |

※ Image assuming luminance deterioration due to 3h / day lighting with brightness equivalent to 600nit

# JDI Global No. 1 Technology Leadership: eLEAP

## eLEAP's Unprecedented Environmental Value

**Maskless OLED deposition is a breakthrough, environment positive production process that eliminates mask cleaning chemicals**
**150k tons p.a. of CO2 emission reduction via deployment at JDI Mobara**

### 150k tons of yearly CO2 emissions =

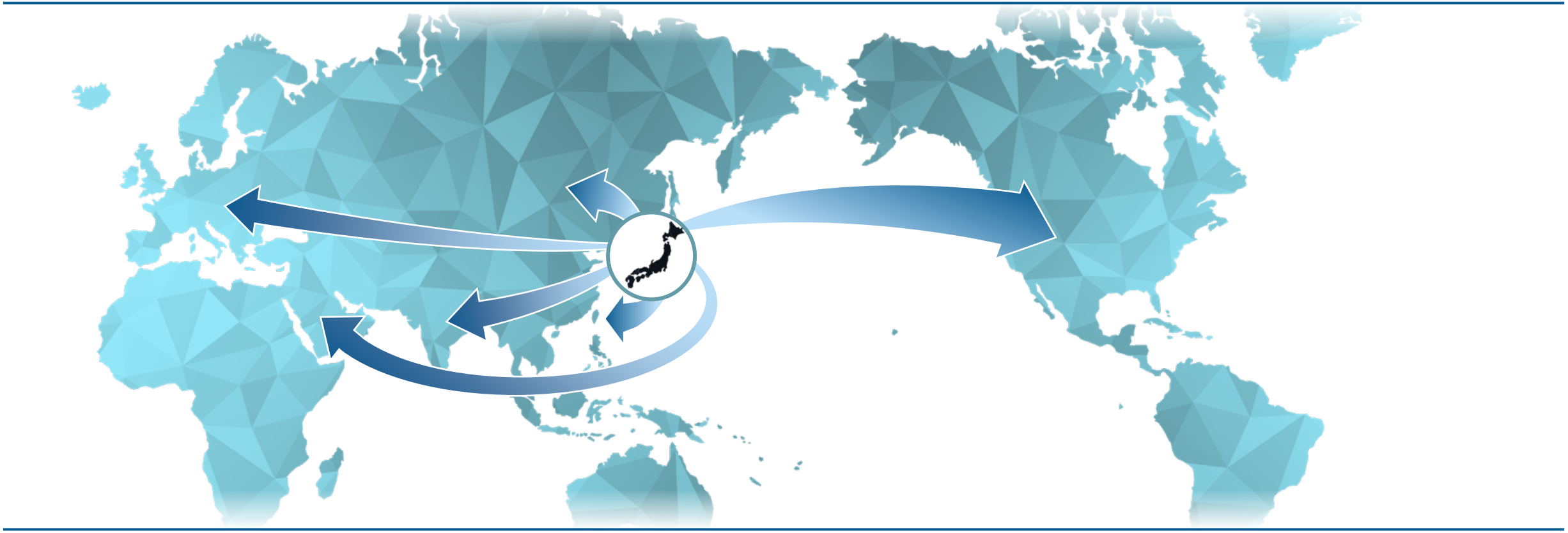
CO2 Absorption Volume of 17M cedar trees

Cedar forest the size of 3.7k Tokyo Domes

CO2 emissions are JDI's calculations based on G6 Mobara plant at 30 k sheets/month

# Building Out Global Alliances

## JDI in its discussions with strong partners globally to build out the global eLEAP ecosystem, while fostering supply chain diversification and derisking



# JDI Global No. 1 Technology Leadership: 2 Vision Display (2VD)

## World's First Automotive Grade Dual Touch 2VD that Simultaneously Displays Different Content to Driver and Passenger

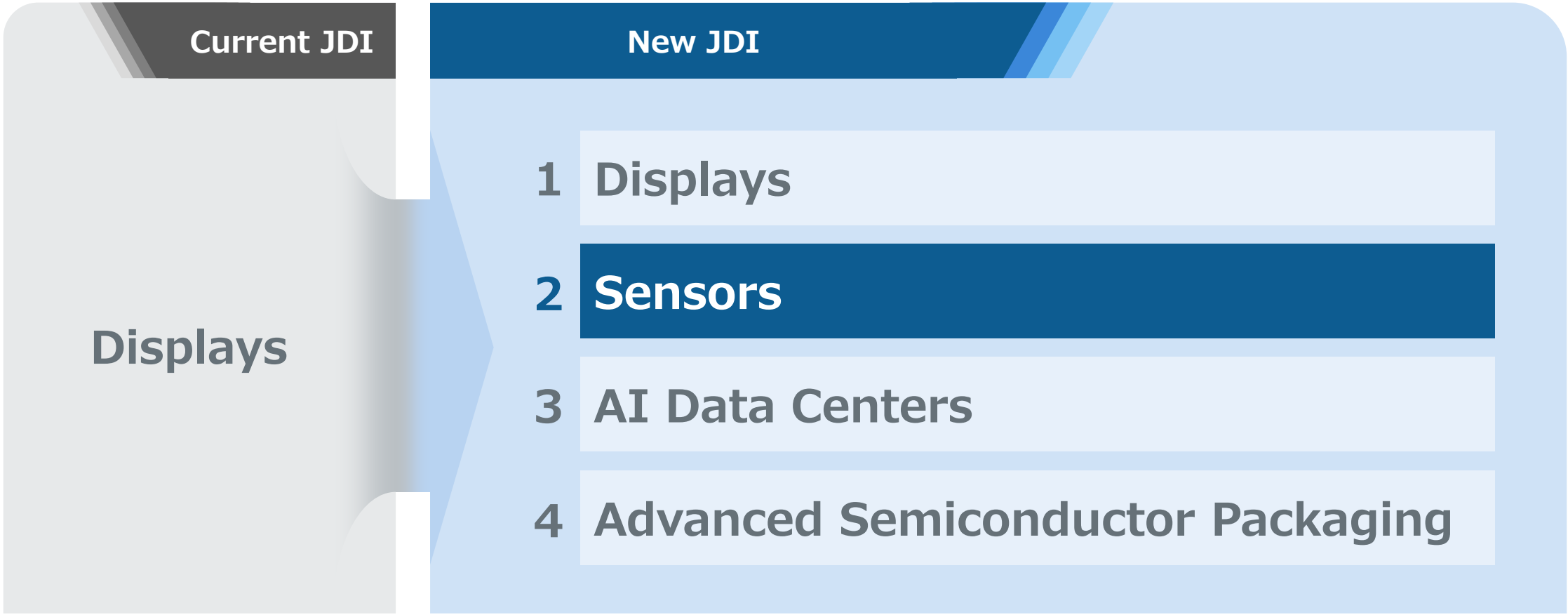
**JDI has developed the world's first 2 Vision Display (2VD) technology that meets automotive grade image quality requirements while simultaneously displaying different image content based on viewing direction**


**As another world first, JDI has incorporated Dual Touch into its new 2VD technology that identifies discrete touch operations from different users**



JDI Develops World's First Automotive Grade Dual Touch 2 Vision Display (2VD): LINK

# BEYOND DISPLAY: Drive New Sources of Growth & Profitability



# Sensors: Massive Global Market with Strong Growth & Margins

- **The sensor market is massive, with global market size of USD 295 billion in 2024, projected to grow to USD 426 billion by 2030**
- **Sensors have a significant technical overlap with displays, so JDI has world-class advanced sensor technology that positions it to win in sensors**
- **Sensors also have structurally higher margins – unlike displays, where increasingly larger display sizes push down profitability per surface area manufactured, sensors are much smaller and allow for significantly higher profitability per surface area**
- **Smaller sensor sizes also mean that JDI can produce them efficiently with its current G4.5 and G6 fabs – there's no need to do extraordinarily expensive capex and build next-generation fabs**



Source: Statista.com - Size of the global sensor market

# JDI's Highly Sophisticated Sensor Technology Portfolio

## JDI has a broad sensor technology portfolio which it can deploy towards the sensor market opportunity

**Virgo Smart Ring**

Life Science Sensor

**X-Ray Sensor**

Life Science Sensor

**Depth Sensor**

Industrial Sensor

**Fingerprint Sensor**

Security/IOT Sensor

**Biometric Sensor**

Life Science Sensor

**Flexible Tactile Sensor**

Life Science Sensor

**ZINNSIA**

Input/IOT Sensor

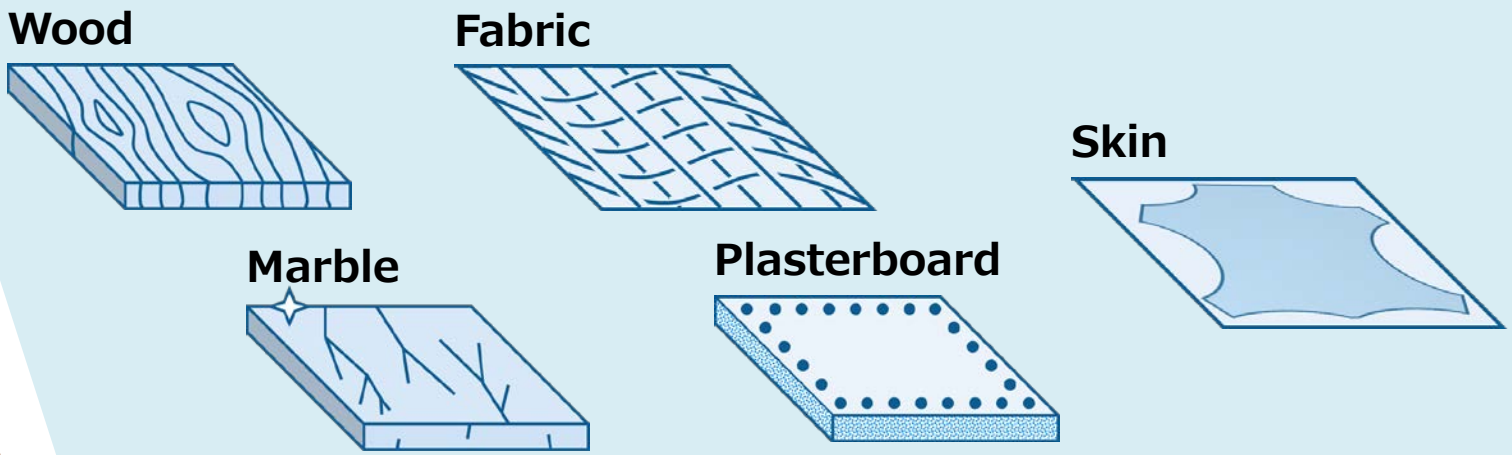
**5G Millimeter Wave Reflector**

Industrial Sensor

# JDI Global No. 1 Technology Leadership: ZINNSIA ①

## JDI's World-Leading High-Precision Sensor Interface that Transforms a Broad Range of Materials into Sensors and Touch Controls

**ZINNSIA makes it possible to sense movements even on materials that were previously difficult to use as sensors**




**Because ZINNSIA can be used across a broad range of materials, it will drive new applications of sensor & touch technology in a wide variety of new markets**

# JDI Global No. 1 Technology Leadership: ZINNSIA ②

## With ZINNSIA, Everything Is A Switch

# ZINNSIA – Key Features ③

## Reasons for ZINNSIA Precise Detection Capabilities:

- Sensor Design ✓
- Proprietary Custom ICs ✓
- System Driven ✓
- Firmware (Algorithm) ✓

**Using JDI's advanced process knowledge and manufacturing expertise, ZINNSIA has:**

- Excellent Noise Resistance
- Unrestricted Sensor Substrate (Bendable)
- Full range of sizes
- Product-specific Firmware Adjustment

# JDI Global No. 1 Technology Leadership: X-Ray Sensors

## Sensor Panels for X-ray Inspection Equipment Using Cutting-Edge Backplane Technology

JDI designs, sensors for medical and industrial X-ray inspection systems by applying our advanced semi-conductor and TFT technologies. Providing sensor panels with various features according to customers' needs

Usage for Healthcare Applications

&

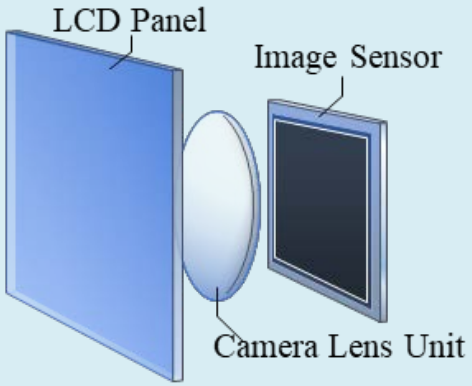
Usage for Industrial Applications

Capable of capturing high-resolution X-ray images, enabling accurate diagnoses in medical settings and precise inspections in industrial environments

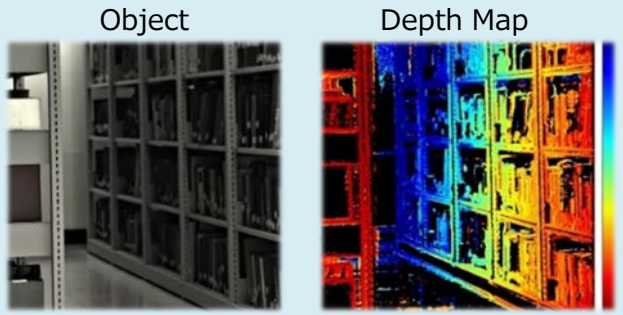
# JDI Global No. 1 Technology Leadership: Depth Sensors

## JDI Developed the World's First 3D Imaging Technology that Simultaneously Captures Both Normal Video and Depth Maps

**This 3D imaging technology makes it possible to capture with a single camera both video data, including color information, and depth maps, including distance and position information**




**Depth Map Capture via New 3D Imaging Technology**




**In fields such as autonomous driving, there is a need to accurately gauge the shape and position of people, buildings, and patterns, and import them as data**

# JDI Global No. 1 Technology Leadership: Image Sensors

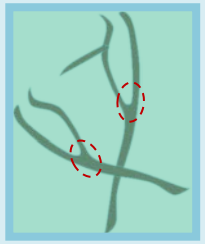
## Applying TFT Technology to Thin, Light, Curved, & Flexible Matrix Sensors for Wearable Biosensor Applications

**As one form of custom-designed substrates such as TFT, JDI applies advanced semiconductor and TFT technology to implement sensor substrates on various biosensor devices**

**Fingerprint Imaging**

**As Wearable**

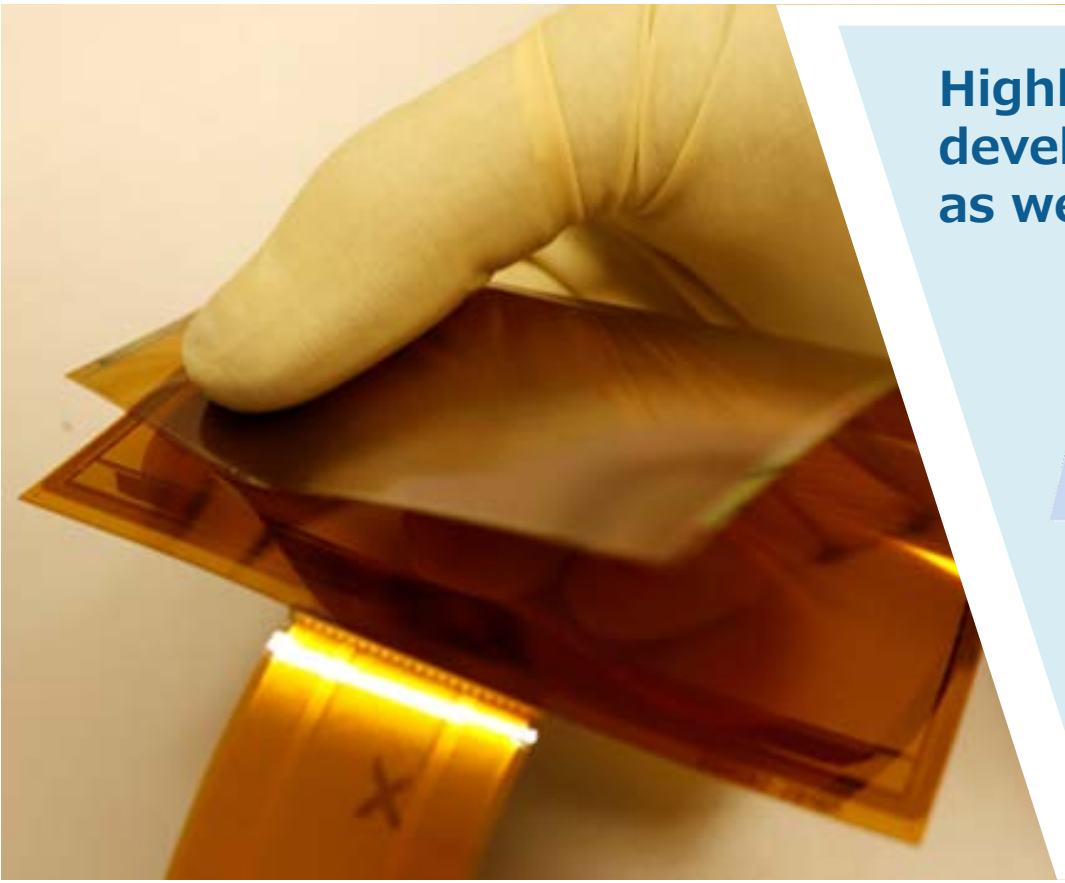
**Vein Imaging**



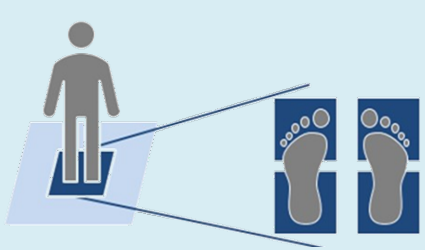
**JDI's high security performance is certified by the Federal Bureau of Investigation (FBI) under Personal Identity Verification (PIV)**

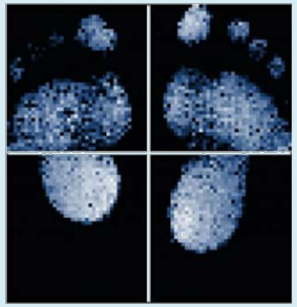
# JDI Global No. 1 Technology Leadership: Flexible Tactile Sensors

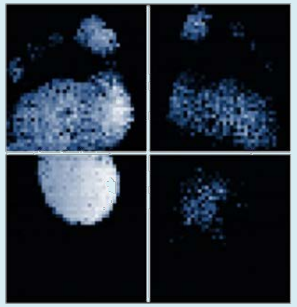
## JDI Flexible LTPS TFT Tactile Sensors with Active-Matrix Technology Enables High-Precision Measurement Over a Wide Area



**Highly accurate tactile measurement is required for the development of a number of new technologies & products, as well as for advanced sports and medical research**







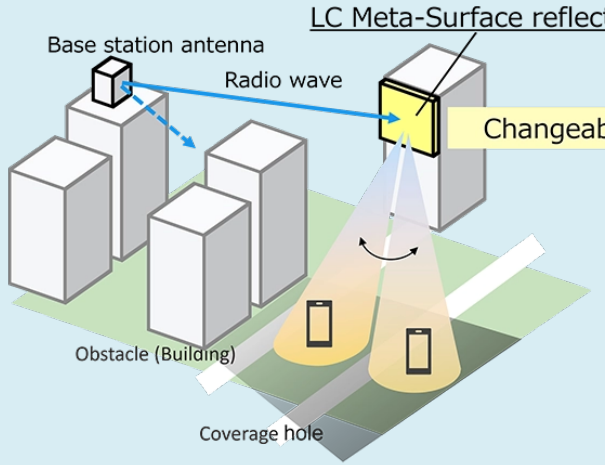
**Weight Distribution Measurement**

**A high-resolution, crosstalk-free flexible tactile sensor by combining advanced active-matrix tech used in displays with a conductive pressure sensitive layer**

# JDI Global No. 1 Technology Leadership: 5G Millimeter Wave Reflectors

## World-Leading 5G Meta-Surface Millimeter Wave Reflectors that Significantly Improve 5G Transmissions Infrastructure


**5G Meta-Surface reflector technology applies JDI's world-leading expertise in liquid crystals to optimize and significantly improve 5G radio wave transmissions**




▶ **Area Adaptation**
Adjustment due to environmental change

▶ **Dynamic Area Construction**
Adjustment to changes in human flow

**Enables reflecting & controlling of high-capacity millimeter waves to optimize 5G transmission in areas with poor communication coverage**

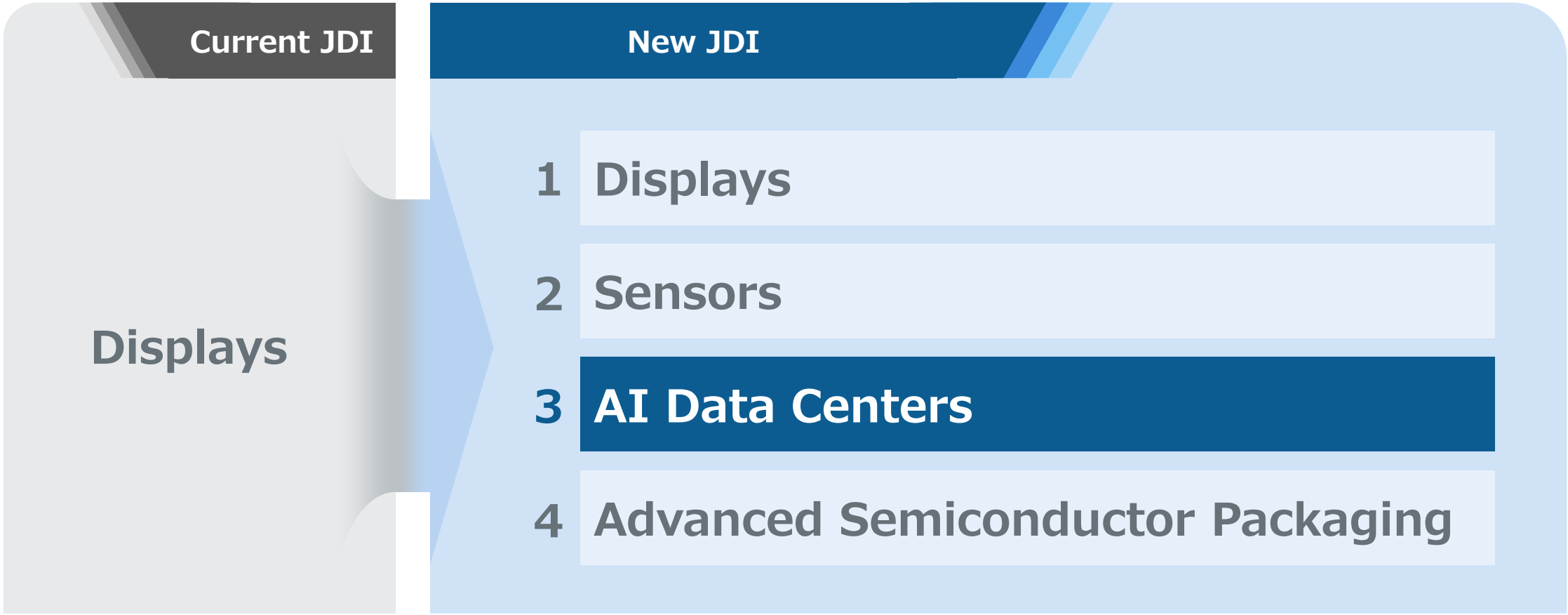
# JDI Global No. 1 Technology Leadership: Virgo Smart Ring

## Virgo is the World's First Smart Ring Using a Flexible Substrate OPD Sensor Allowing a Thin Profile, Full Flexibility, & Wide Sensing Area

Based on JDI's advanced biometric sensor and smart ring technology, solutions such as the Virgo smart ring can automatically acquire wellness data including heart rates, blood oxygen levels, sleep time, step counts and more


JDI's Virgo smart ring is the first in the world to be equipped with an organic photodetector (OPD) sensor, formed on a flexible substrate, giving it a thin profile that allows highly efficient sensing

# BEYOND DISPLAY: Drive New Sources of Growth & Profitability



# AI Data Centers: Explosive Growth Opportunity

- **Japanese compute demand is forecast to increase 100,000X from 2020 to 2040**
- **However, significant bottlenecks block AI data center build outs**
- **JDI has multiple sites that are suitable for AI data center build outs and is currently in discussions with multiple AI data center partners and/or buyers for these sites**



Source: Mitsubishi Research Institute “Impact of Generative AI Growth on Demand for Japan’s Electric Power”

# Explosive Demand for Data Centers in Japan

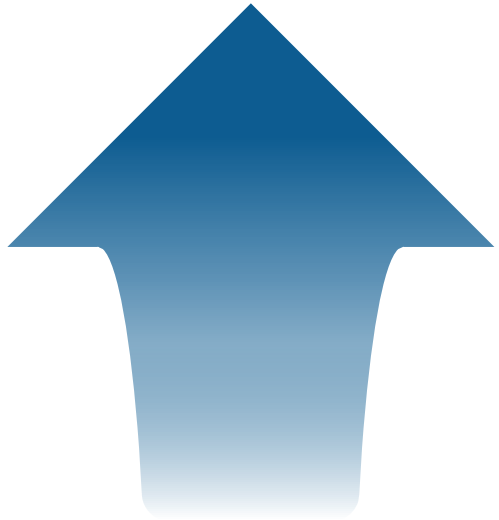
- **Massive data processing capacity is required for generative AI as well as for conventional computation tasks which are carried out at local data centers**
- **Demand is growing exponentially, leading to an extreme demand for data centers in Japan & related investment opportunities**

Generative AI
Cloud Operators
Telecom Carriers
Content Creators
Tech Companies
System Integrators
Financial Services

**All searching for data center capacity in Japan!**

## Japanese Compute Demand 2020~2040

# 100,000X





Source: Mitsubishi Research Institute “Impact of Generative AI Growth on Demand for Japan’s Electric Power”

# However, 3 Critical Bottlenecks for Japan Data Center Buildout

**Exploding Demand for Data Centers In Japan**

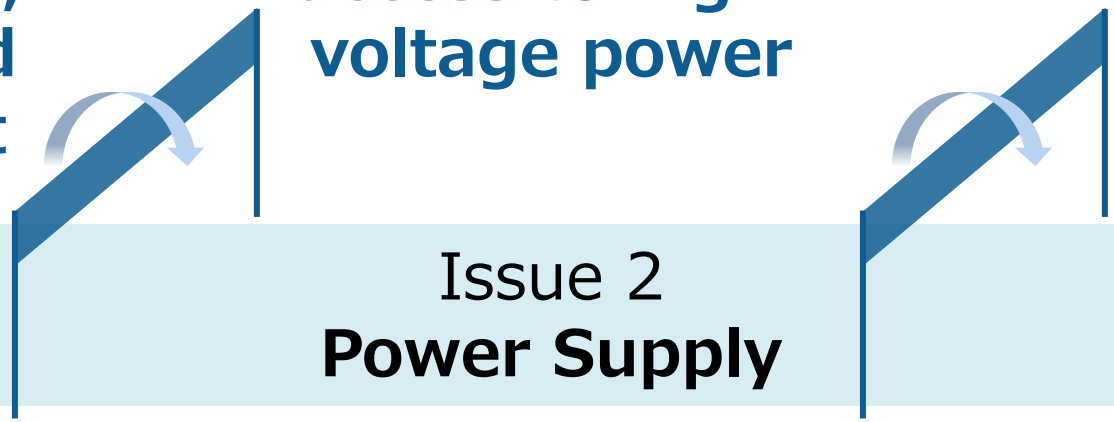
**BUT**

**3 Critical Bottlenecks**

**Shortage of appropriate locations: Japan = 73% mountainous, tsunami risk, good locations built out**

**Shortage of grid hookups with access to high-voltage power**

**5 year leadtimes due to construction shortages**



Issue 1
**Location**

Issue 2
**Power Supply**

Issue 3
**Construction**

# JDI Mobara V3 Fab

## JDI's currently unused Mobara V3 fab fully solves all 3 issues, offering a superb data center opportunity with close proximity to Tokyo

### Location

Land Area:
**236,302 m²**

**68 km** to Tokyo

**8 km** from ocean

### Power Supply

Power Supply Availability:
**44 MWh**

### Construction

Built-Out Floor Area:
**166,843 m²**

Clean Room Area:
**54,250 m²**

# JDI Mobara V3 Fab – Direct Access to Trunk Power Line

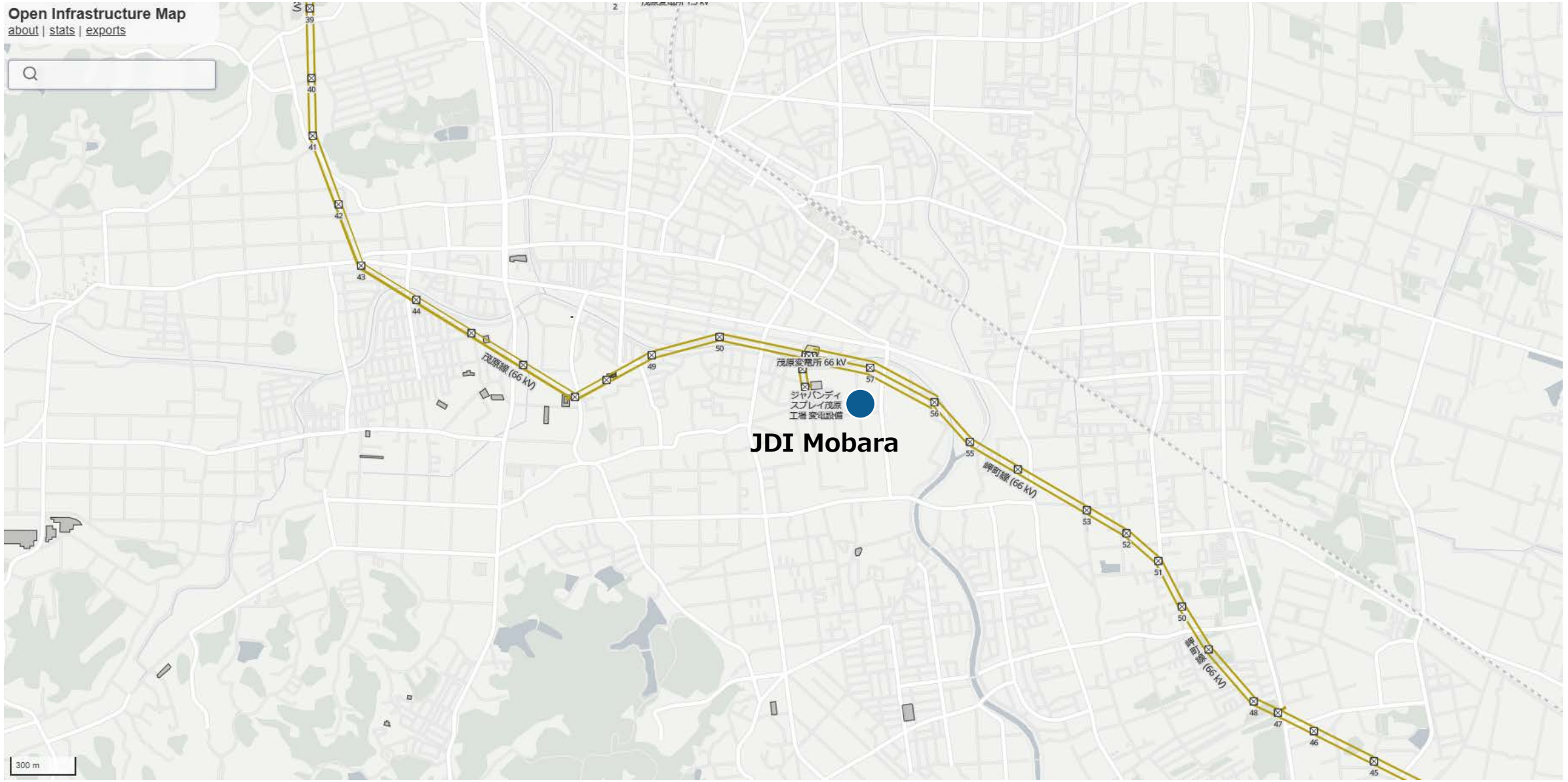



Image Source: https://openinframap.org/

# JDI Tottori Fab

## JDI's Tottori fab (ending production in March 2025) provides access to Japan's central western region as well as Osaka

### Location

Land Area:
**113,000 m²**

**146 km** to Osaka

**7 km** from ocean

### Power Supply

Power Supply Availability:
**41 MWh**

### Construction

Built-Out Floor Area:
**120,000 m²**

Clean Room Area:
**29,500 m²**

# JDI Tottori Fab – Direct Access to Trunk Power Line

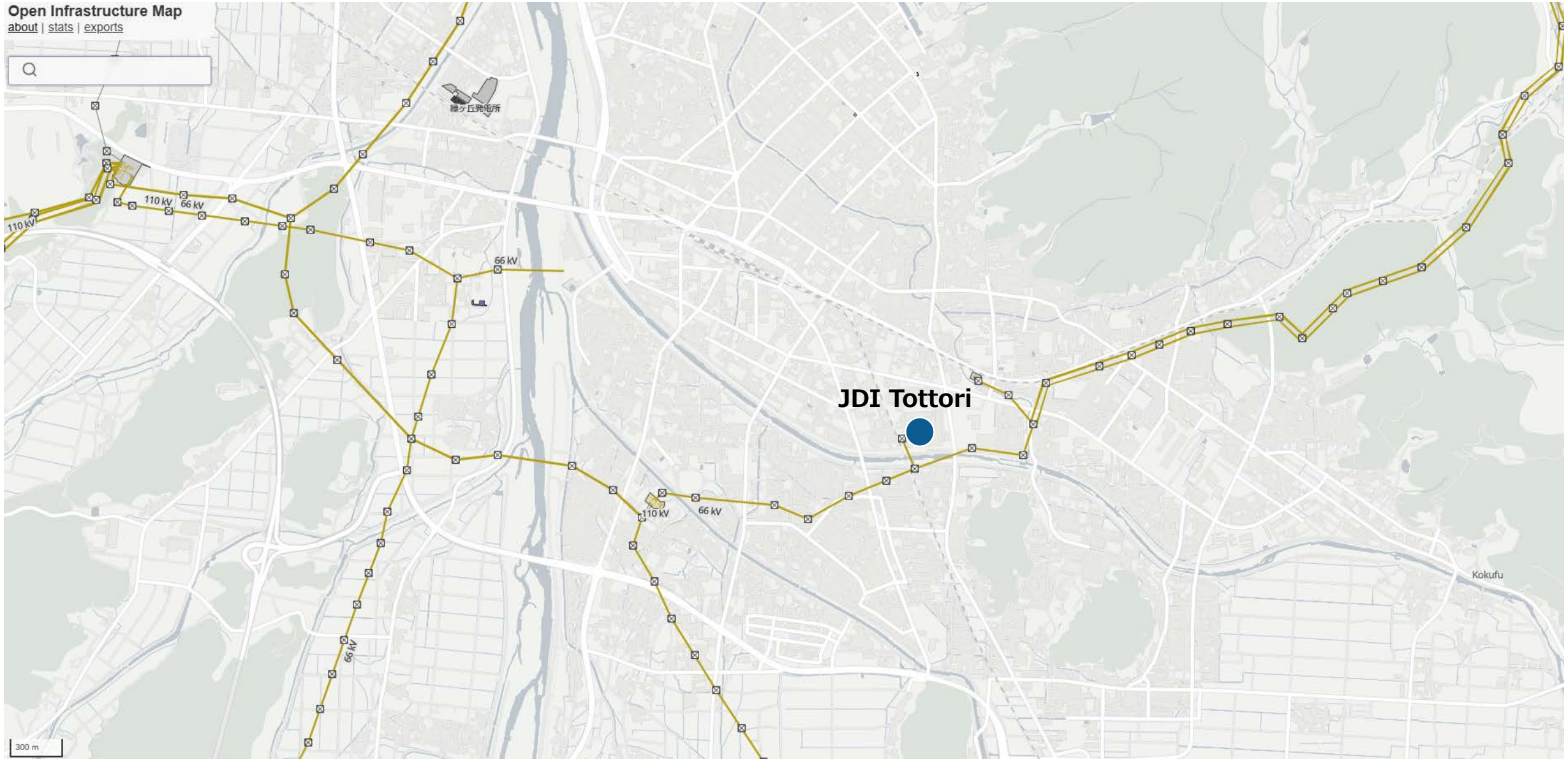



Image Source: https://openinframap.org/

# JDI Sakura (Former Fab Site)

## JDI Sakura is currently undeveloped but is just 59 km away from central Tokyo & adjacent to a massive 275 kV trunk line

### Location

Land Area:
**68,657 m²**

**59 km** to Tokyo

**15 km** from ocean

### Power Supply

Power Supply Availability:
**Undeveloped**

### Construction

Built-Out Floor Area:
**Undeveloped**

Clean Room Area:
**Undeveloped**

# JDI Sakura – Direct Access to Trunk Power Line

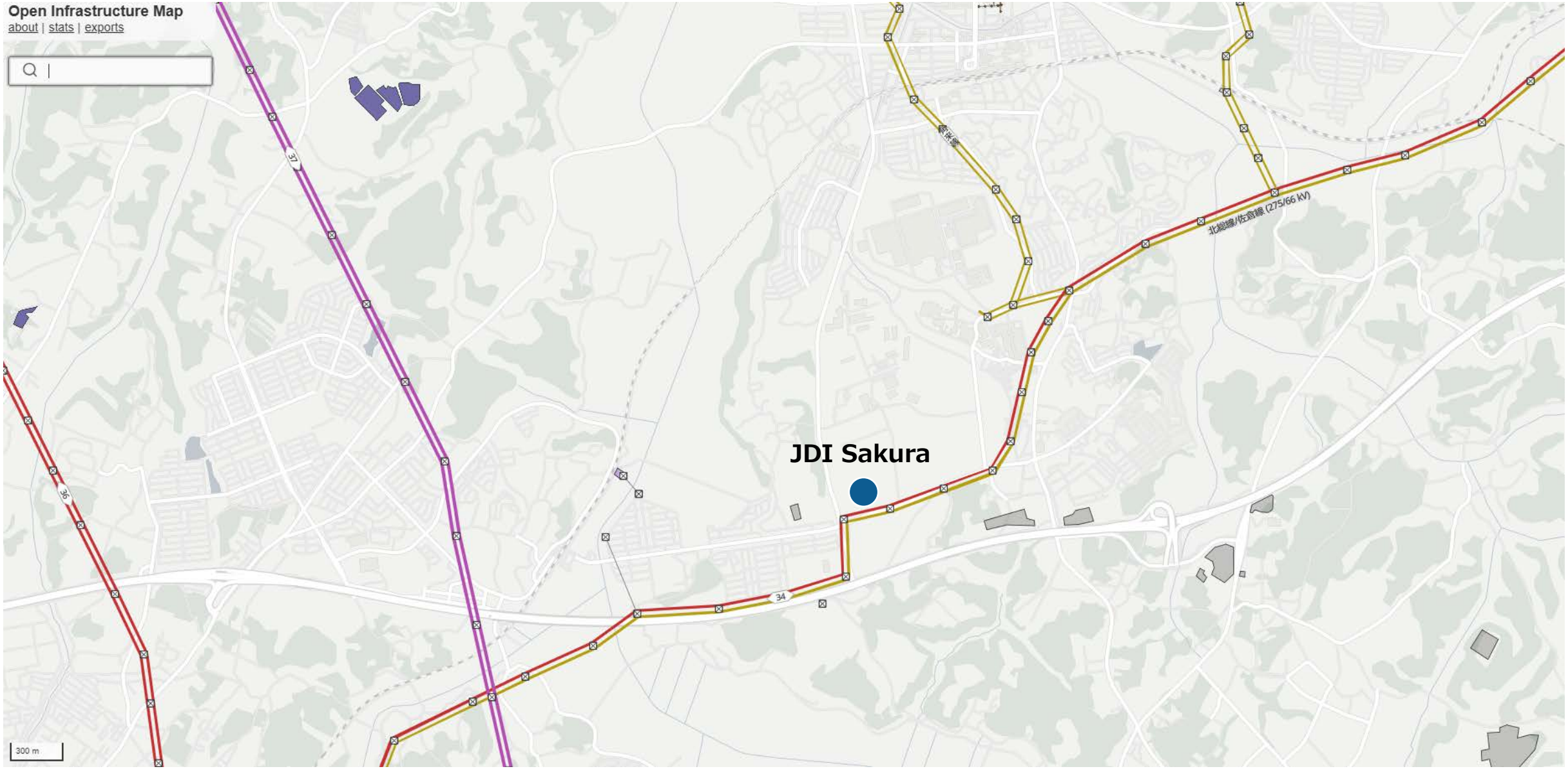



Image Source: https://openinframap.org/

# BEYOND DISPLAY: Drive New Sources of Growth & Profitability

| Current JDI | New JDI |
| --- | --- |
| Displays | 1 Displays |
| | 2 Sensors |
| | 3 AI Data Centers |
| | 4 **Advanced Semiconductor Packaging** |

# ASP: Technology Shift to Glass Requires JDI Capabilities ①

- **Advanced Semiconductor Packaging (ASP) a large & growing market, with global market size of USD 50 billion in 2024, projected to grow to USD 133 billion by 2034**
- **ASP undergoing a major technology shift from organic to glass substrates, because AI semiconductors' heat output exceeds the thermal tolerances of organic substrates and increasing use of chiplets requires larger glass substrates**
- **Major semiconductor manufacturers are thus buying display fabs, which offer high-resolution glass processing capabilities (e.g., TSMC buying Innolux fabs (from Aug '24) , Micron buying AUO fabs (from Aug '24))**



Source: Precedence Research – Semiconductor Packaging Market

# ASP: Technology Shift to Glass Requires JDI Capabilities ②

- **JDI is the world leader in ultra-high resolution processing of glass substrates for displays, such as its development of JDI's world's highest resolution VR displays (2500 ppi), so its capabilities are deeply relevant to ASP**
- **JDI is currently in discussions with multiple semiconductor industry partners to pursue ASP together**

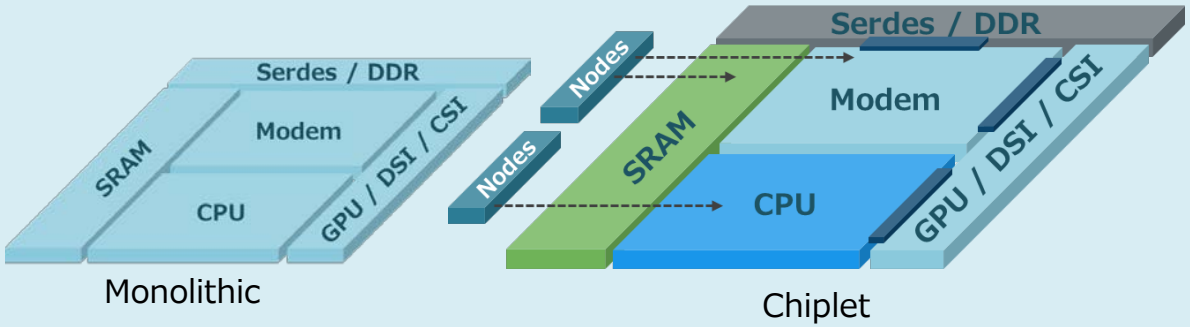
# Trends in Chiplets and Semiconductor Packaging Substrates

In response to the evolution of Moore's Law, not only Semiconductor Frontend processes but also **Backend processes are evolving**

Current trends and standards include chipletization, interposer adoption, high-density wiring, and low dielectric constant progress. This hints at the need for larger substrate sizes and increased usage of glass for substrates and interposers.

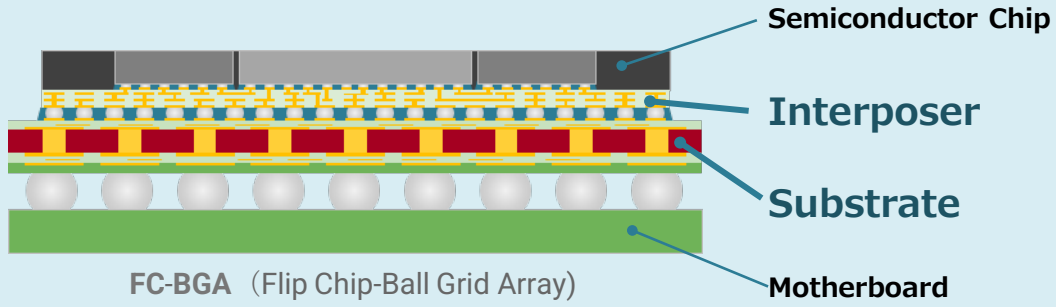
## Chipletization

- Standardization by a consortium, including major semiconductor manufacturers and fabless companies lead to emergence of chiplets instead of a monolithic setup
- It is difficult to make larger monolithic ICs, because wafer size and thus the number of units per wafer is limited.
- **As a result, larger substrate sizes are required for a chiplet approach**




## High-density wiring, low dielectric constant, & larger sizes

- AI processor manufacturers consider glass cores (base material for substrate) and aim for a **size enlargement** of up to 240 sqmm
- Large sizes are prone to warping if organic substrates are used, more rigid **glass substrates** support larger size manufacturing
- Also, high transfer speeds requires a low dielectric constant, for which **glass substrates** shows better performance
- **Glass** is also a highly promising target material for interposers




**The shift to larger substrate sizes, adoption of glass, & requirements for high density wiring are a significant JDI technology opportunity**

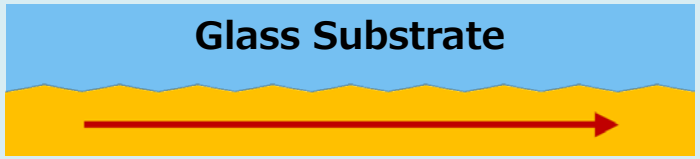
# JDI's Glass Substrates Are The Superior ASP Solution

## The use of the right substrate in advanced semiconductor packaging is crucial to reach the required performance criteria

**Glass has a smoother surface compared to Organic substrates, resulting in less transmission loss at high frequencies**

At high frequencies, due to the skin effect, signals are transmitted only on the surface, so the smooth surface of the glass substrate results in less signal loss


**Surface roughness approximately 2um (Skin depth approximately 0.4um @28Ghz)**




**Surface roughness < 0.01um**

**&** **Glass substrates are highly rigid, have low distortion, and excellent thermal stability, making it possible to create fine wiring patterns of several um lines/spaces suitable for high-density signal wiring.**

→ **Glass Substrates = Improvements to both Electrical and Mechanical Properties**

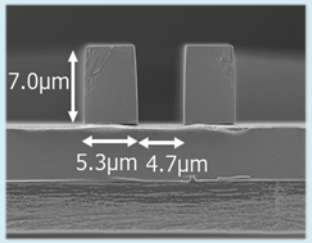
Major semiconductor manufacturers are accelerating the development of glass substrates as next-generation semiconductor package substrates (interposers), and expansion of glass substrate processing technology and supply chains can be expected.

## JDI can produce glass substrates using existing TFT backplane processes, enabling larger sizes and lower costs

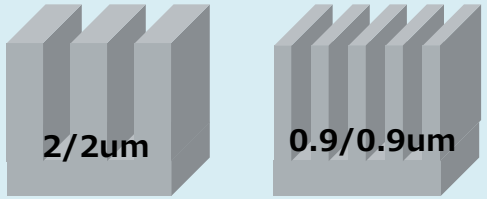
# JDI ASP Technology Applications & Capabilities

## High-Density Wiring

L/S=5/5um

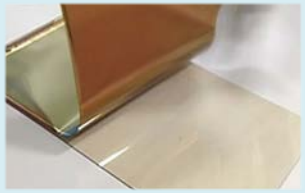



Further fine-processing

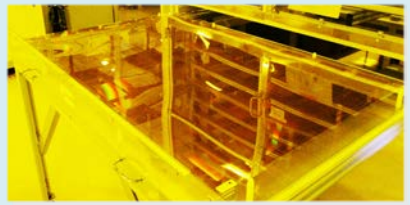



## Thin Film & Glass Processing Technology

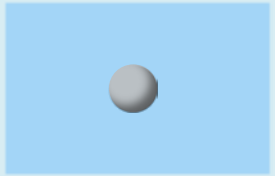
Applying film substrate technology



Film debonding from large glass

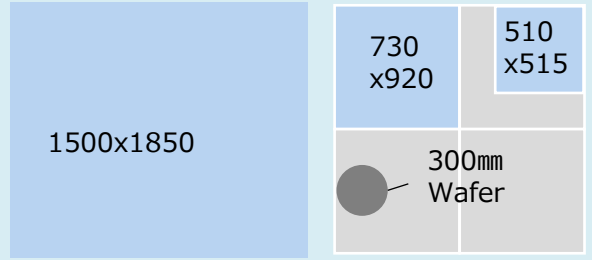


Glass etching, hole making

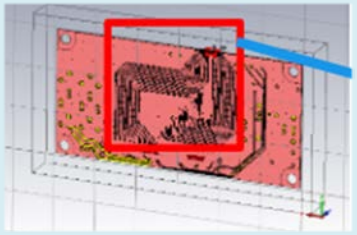


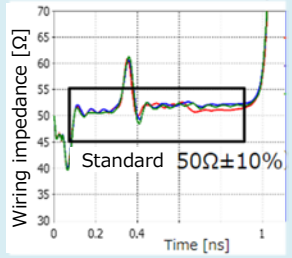
## High Quality & Low Cost

Large substrate processing




Wiring design and transmission characteristic simulation






Established Clean Room Environment

# BEYOND DISPLAY: Planned Disclosures

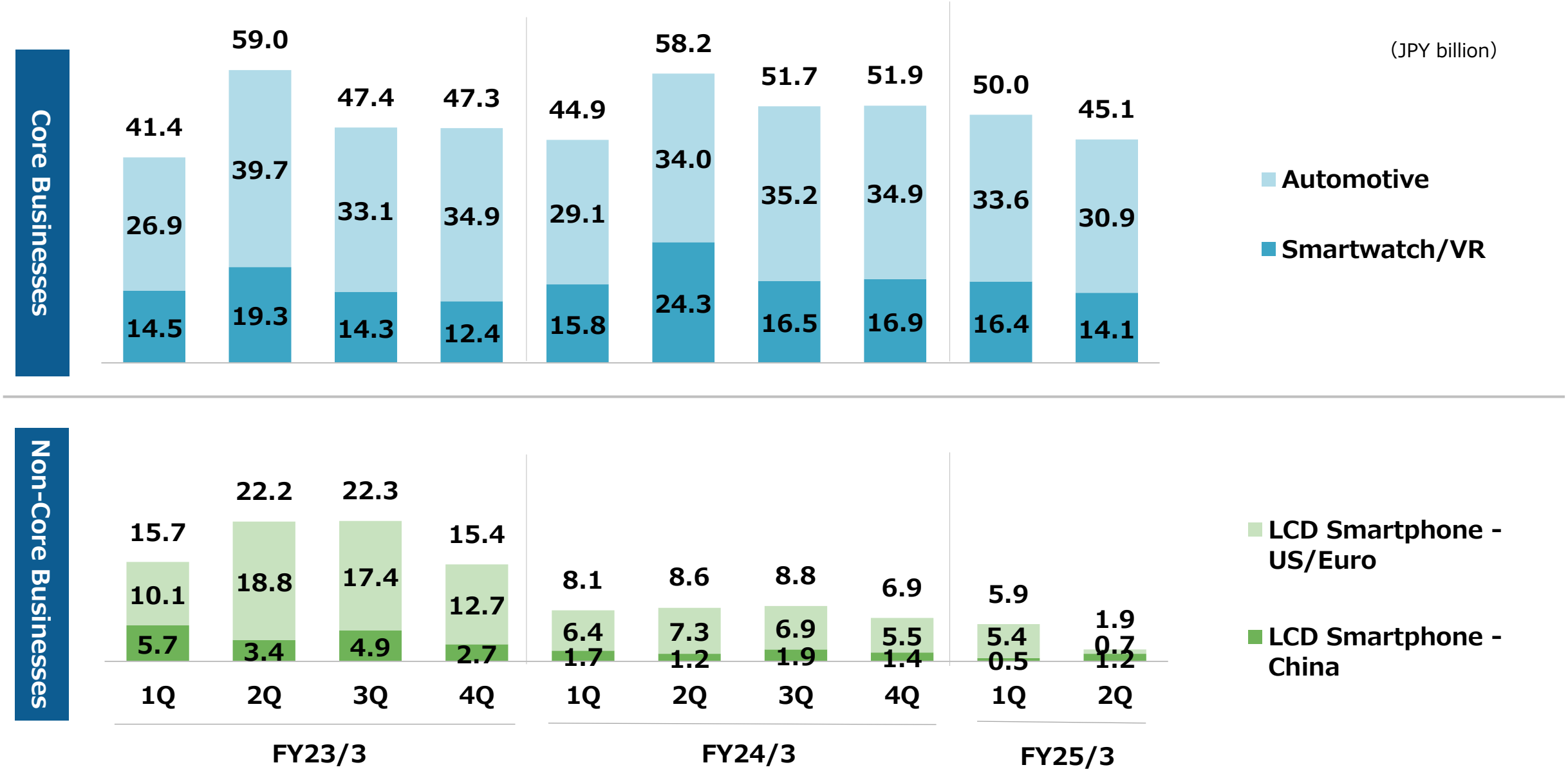
- **The structural transformation underpinning JDI's BEYOND DISPLAY strategy is already underway, and JDI expects to make several related announcements in the near future**
- **JDI will provide further details with respect to the BEYOND DISPLAY strategy and KPIs and any related announcements in the interim at its Q3 earnings announcement in February 2025**

Japan Display Inc.

JDI

# Appendix

# Quarterly Sales Breakdown by Segments



# Consolidated B/S

| (JPY billion) | FY24/3 | FY25/3 H1 | *vs. FY24/3* |
|---|---|---|---|
| Cash and deposits | 29.3 | 24.3 | *-5.1* |
| Accounts receivable | 29.3 | 23.4 | *-5.9* |
| Accounts receivable (EMS) | 17.9 | 12.1 | *-5.9* |
| Inventories | 64.0 | 61.1 | *-2.8* |
| Other | 11.5 | 9.0 | *-2.5* |
| **Total Current Assets** | **152.0** | **129.8** | *-22.1* |
| **Total Fixed Assets** | **72.0** | **67.3** | *-4.7* |
| **Total Assets** | **224.0** | **197.2** | *-26.8* |
| Accounts payable | 46.3 | 35.1 | *-11.2* |
| Interest-bearing debt | 34.8 | 45.6 | *+10.8* |
| Equipment payables | 18.1 | 14.6 | *-3.5* |
| Other liabilities | 39.2 | 34.5 | *-4.6* |
| **Total Liabilities** | **138.3** | **129.8** | *-8.5* |
| **Total Net Assets** | **85.7** | **67.3** | *-18.4* |
| **Shareholders Equity Ratio** | **38.1%** | **34.0%** | *−4.1pts* |

Note: The difference between the amount of “Cash and Deposits” in the Balance Sheet & “Cash & Equivalents” in the Cash Flow Statement is Deposits.

# Consolidated P&L

| (JPY billion) | FY24/3 Q2 (3M) | FY25/3 Q2 (3M) | YoY | FY24/3 H1 (6M) | FY25/3 H1 (6M) | YoY |
|---|---|---|---|---|---|---|
| **Sales** | **66.9** | **47.0** | *-19.9* | **119.9** | **102.9** | *-17.0* |
| **EBITDA** | **-5.9** | **-7.4** | *-1.5* | **-18.1** | **-13.4** | *+4.7* |
| **Operating Profit** | **-7.6** | **-8.4** | *-0.9* | **-21.4** | **-15.5** | *+6.0* |
| Non-Operating Income | 1.7 | 0.6 | *-1.0* | 4.4 | 1.1 | *-3.3* |
| Non-Operating Expenses | -1.2 | -1.7 | *-0.5* | -2.1 | -2.9 | *-0.8* |
| **Recurring Profit** | **-7.0** | **-9.5** | *-2.4* | **-19.1** | **-17.3** | *+1.8* |
| Extraordinary Income | 0.1 | 0.1 | *+0.0* | 0.1 | 1.8 | *+1.7* |
| Extraordinary Losses | -9.2 | -0.7 | *+8.5* | -9.2 | -0.8 | *+8.4* |
| Income Before Income Taxes | -16.1 | -10.1 | *+6.1* | -28.2 | -16.3 | *+11.9* |
| **Net Income** | **-16.5** | **-10.3** | *+6.1* | **-28.7** | **-16.8** | *+11.9* |
| Avg. FX rate (USD/JPY) | 144.6 | 149.7 | | 141.1 | 152.8 | |
| Q-End FX rate (USD/JPY) | 149.6 | 142.7 | | 149.6 | 142.7 | |

# Consolidated Cash Flow Statement

| (JPY billion) | FY24/3 H1 (6M) | FY25/3 H1 (6M) | *YoY* |
|---|---|---|---|
| Income before income taxes | -28.2 | -16.3 | *+11.9* |
| Depreciation & amortization | 3.4 | 2.1 | *-1.3* |
| Change in working capital | 9.5 | 2.8 | *-6.7* |
| Other | 7.1 | -5.1 | *-12.2* |
| **Cash Flow from Operating Activities** | **-8.3** | **-16.5** | *-8.2* |
| Purchase of fixed assets | -8.6 | -3.2 | *+5.4* |
| Proceeds from sale of fixed assets | 0.2 | 5.9 | *+5.7* |
| Other | -1.3 | -0.6 | *+0.7* |
| **Cash Flow from Investing Activities** | **-9.7** | **2.2** | *+11.8* |
| Net increase / decrease in short-term borrowings | 20.0 | 10.5 | *-9.5* |
| Other | -0.4 | -0.2 | *+0.2* |
| **Cash Flow from Financing Activities** | **19.6** | **10.3** | *-9.3* |
| Ending Balance, Cash & Equivalents | 29.1 | 23.7 | *-5.4* |
| **Free Cash Flow** | **-16.9** | **-19.8** | *-2.9* |

Note: Free Cash Flow = Cash Flow from Operating Activities less Capex


# Thank You!

Any information related to market trends or industries mentioned in this document is based on information available at present and JDI does not guarantee that this information is accurate or complete.

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