

innodisk

Innodisk Corporate Investor Conference (Symbol: 5289)

Randy Chien, Chairman 2024.08.20

DISCLAIMER

This file and the financial information and forecast information are based on information obtained by the company from internal and external sources. The actual operating results and financial conditions of the company may differ from these predictive sets of information due to various uncontrollable factors.

The viewpoints in this file reflects the company's opinion on the future by the current date. If there are any changes or adjustment in the future, the company is not responsible for notifying the reader or updating the content.

Agenda

- Company Profile and Overview
- Market Trend and Product Strategy
- Yilan Phase 2 R&D And Manufacturing Center
- AI In Action Global Campaign
- ESG Commitment
- Financial Information
- Q & A

COMPANY PROFILE & OVERVIEW

**2024**Founded
19 years2024/1H
Revenue
NT\$4.37B**Capital**
NT\$902M**EPS**
NT\$7.16**Patents**
188 (+9)**Customers**
4,000+

GLOBAL BUSINESS OPERATIONS



Lot Size (Sq. Meter)

27,000Floor Area: 1st building (Sq. Meter)**12,000**

2023 Capacity (SMT x 6)

900K

Maximum Capacity (SMT x 8)

1,200KFloor Area: 2nd building (Sq. Meter)**15,000**

AI System and Solution
AI Peripheral
AI Purpose-built Camera

**YILAN R&D AND MANUFACTURING CENTER**



Floor	Space
17F	1,650 m ² (Aetina)
16F	3,300 m ²
7F	3,300 m ² (Aetina 660 m ²)
5F	3,300 m ²
4F	3,300 m ²
3F	3,300 m ²
2F	1,650 m ² (Aetina 660 m ²)

Total :19,800 m²

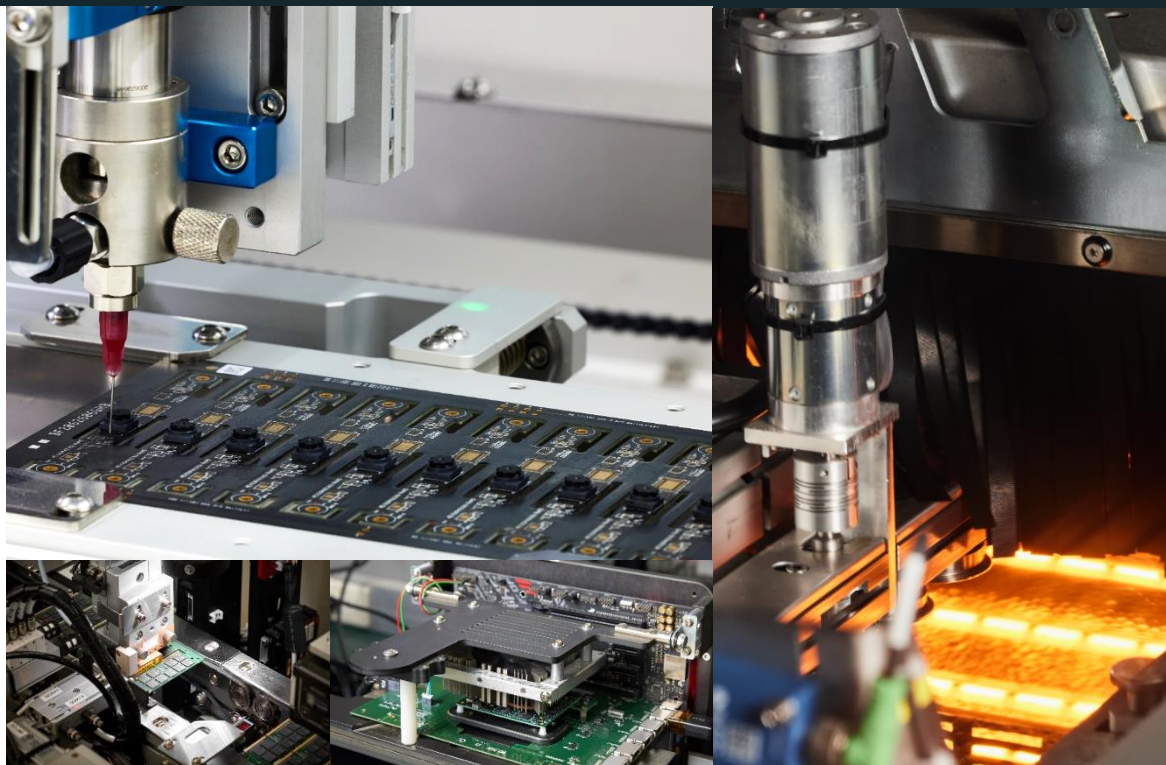
INNODISK HEADQUARTER

**PRODUCTION**

1,350K / Monthly (2024)

CERTIFICATIONSISO9001 / ISO14001 /
ISO45001 / QC080000 /
ISO14064-1 / ISO27001**MANUFACTURING**

New Taipei City / Yilan County

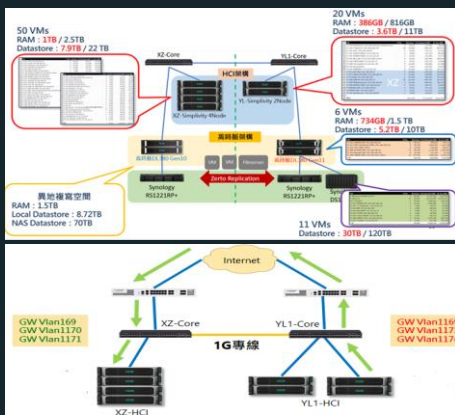
**QUALITY, SUSTAINABILITY
OUR TOP PRIORITY**

Strengthen the resilience of the information security architecture and create a multi-level zero-trust architecture. Improve information security governance & GAI intelligent integration innovation.

Strengthen zero-trust architecture

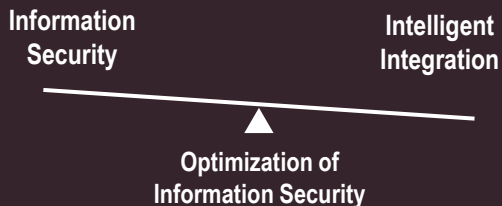
Strengthen the resilience network & zero-trust architecture

1. Deploy the information security protection - R&D end, manufacturing end, backend
2. Establish Xizhi / Yilan Information Service Maintenance Support Center
3. Refine information service operation methods (authority, data management, processing timeliness) and implement education and training to enhance the information literacy of colleagues

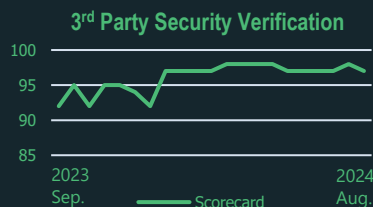
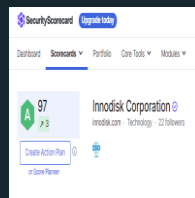


Focus on Information security risks

Intelligent innovation under information security risks are controllable

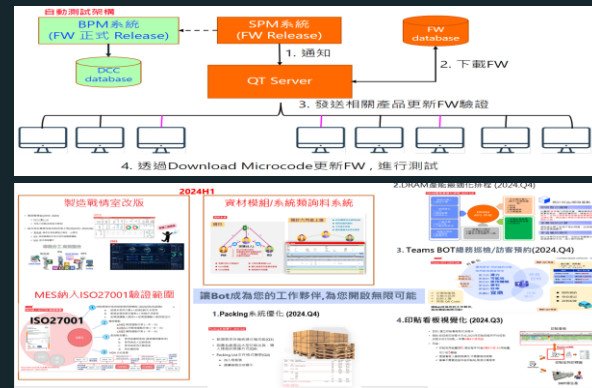


1. Maintained **A level** under 3rd party verification
2. Passed ISO27001 certification and joined alliances such as TWCERT/CC and IoT Internet Industry Association to strengthen information security protection



GAI landing & intelligent integration

1. Use of GAI technology in the field to achieve intelligent/efficient professional and efficient implementation
2. Leverage multiple 3rd-party resources to deepen the company's intelligent integration situation in GAI/ML/RPA
3. Projects to continue ESG sustainable IT:
 - Procurement of hardware devices and data deployment from IT to implement sustainable IT
 - Cloud applications maximize the benefits of energy consumption and carbon emissions



PARTNERSHIP AND AWARDS



Official Intel®
Gold Level Partner



Official partner of
Azure Sphere



NVIDIA Elite Partner (Aetina)
MGX Partner (Aetina)

Gartner

2018-2023
World's **TOP 1**
Industrial Grade SSD Provider

Interbrand

2018-2023
TOP 40 International
Taiwanese Brand

TRENDFORCE

2019-2023
World's **TOP 10**
DRAM Module Provider

Forbes

Asia's **200** Best Companies
Under A Billion



2021 InnoAGE™ SSD



台灣精品
TAIWAN EXCELLENCE

2020 3.5" Fire Shield SSD

2021 InnoAGE™ SSD



2022 Ultra Temperature
DDR4 DRAM Module
2023 nanoSSD



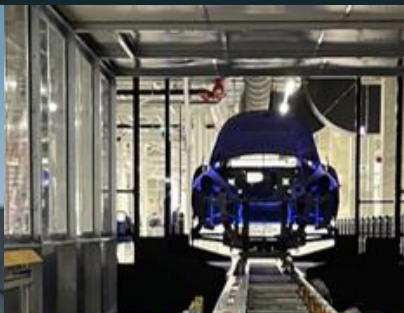
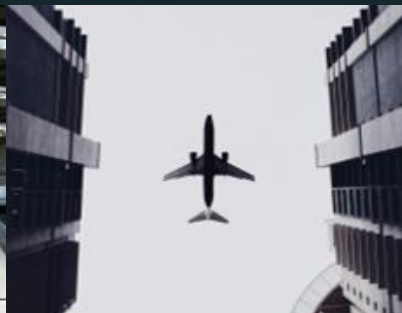
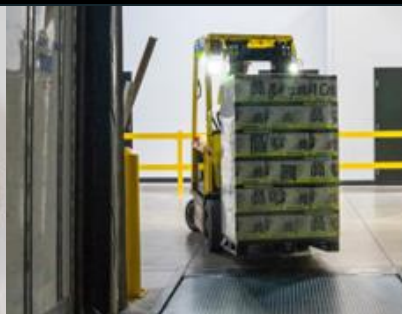
2024 USB Camera Module



Most Innovative
Memory Technology

2022 Ultra Temperature
DDR4 DRAM Module

MARKET TREND & PRODUCT STRATEGY

**Communication****Manufacturing****Transportation****Aerospace****Edge Servers****Smart Energy****Surveillance & Safety****Healthcare****Retail & Logistics****Entertainment**

4000⁺ Clients **83** Partners

Industry Evolution toward AI

FROM IPC TO AI NEW ERA WE ARE THE KEY TO THE INDUSTRY GROWTH



INDUSTRIAL PC
MARKET



VERTICAL
MARKET (IIoT)

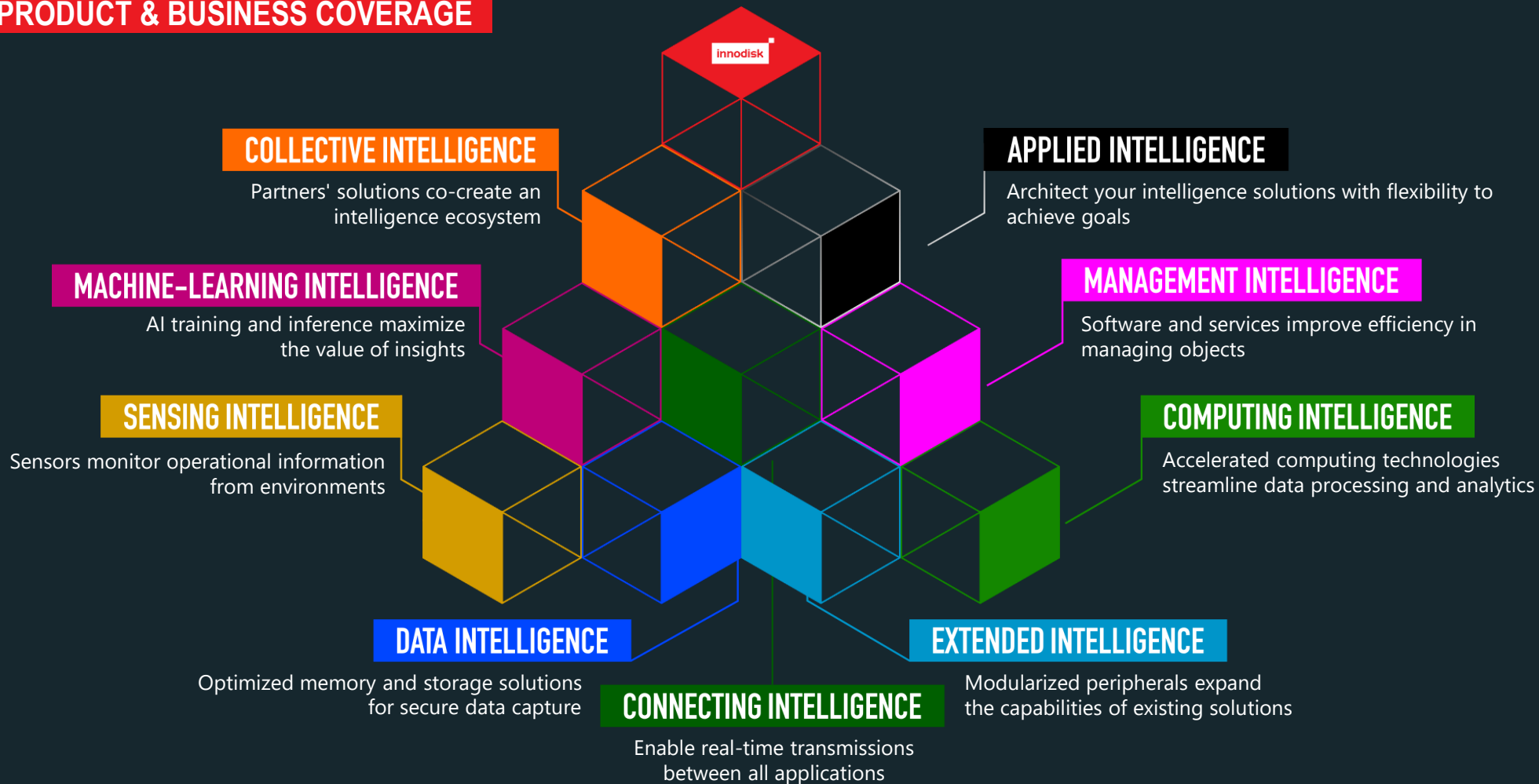


SMART VERTICAL
MARKET (AIoT)

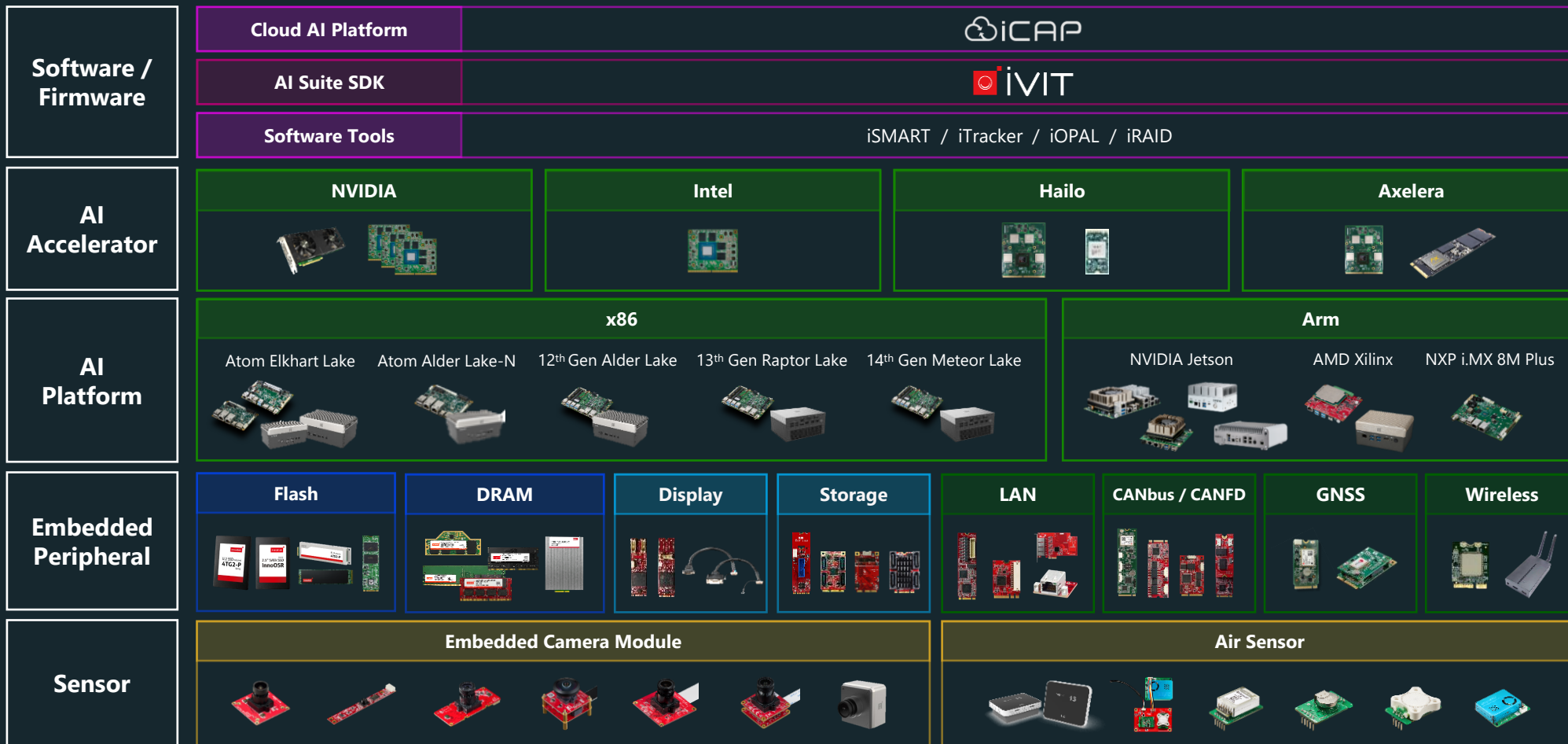


ARTIFICIAL
INTELLIGENCE

PRODUCT & BUSINESS COVERAGE



Innodisk AI Solution Architecture / Innodisk Edge AI Building Blocks



ARCHITECT INTELLIGENCE

We are architects of intelligence

Leveraging collective minds to design purposeful infrastructure that unlocks AI's true potential to shape better futures.

ECOSYSTEM PARTNER

Global Partnership for
Edge AI Solution

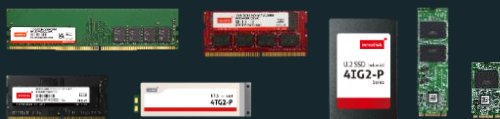
AI TRAINING / INFERENCE



CAMERA MODULE



FLASH / DRAM



LAN MODULE



CUSTOMIZED SOLUTION

Customization Service and
Integrated Solution

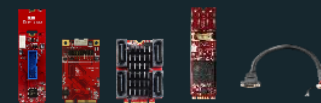
MANAGEMENT PLATFORM



AI ACCELERATOR / COMPUTING PLATFORM



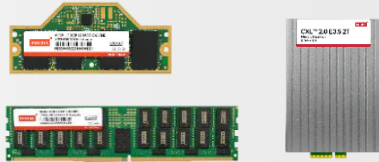
I/O MODULE



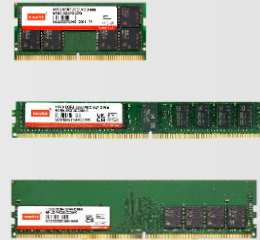
DATA INTELLIGENCE | PRODUCT PORTFOLIO

DRAM

AI Memory



Embedded Memory



Server Memory



Wide Temperature Memory



DRAM IC



Customized Memory



FLASH

PCIe



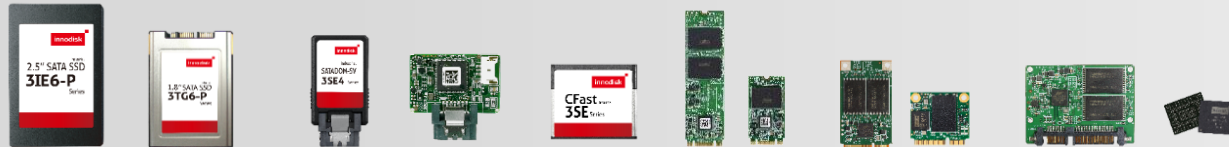
SD



USB



SATA



PATA





DATA INTELLIGENCE | SOLUTION FEATURES

INDUSTRIAL GRADE SSD



Multi-level PLP
(Power-Loss -
Protection)



Features
for Vertical
Markets



Longevity
Support



Combination with
Public & Private
Cloud



Optimized Firmware
for Industrial
Applications



Data Security
& Integrity

INDUSTRIAL GRADE MEMORY MODULE



The only module house
focus on industrial
customers



Highest quality
Original IC



Free upgradation
of anti-sulfuration



Fixed BOM &
6-month PCN
policy



100% tested by
in-house testing
software iRAM



Highly
customized

RELIABLE INDUSTRIAL-GRADE PRODUCTS & TECHNICAL SUPPORT



DATA INTELLIGENCE NEW PRODUCT OVERVIEW



PCIe 4.0 SERIES

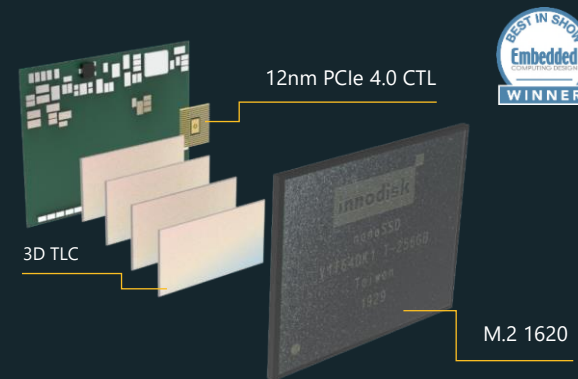
PRODUCT FEATURE

Focus on Edge AI Computing Accelerate the Practical Application of AI Intelligence

- PCIe 4.0 / NVMe 1.4
- Low power consumption and small form factor
- Complete products (M.2 1620, 2230, 2242, 2280, CE Express)
- Support NVMe Namespace for storage efficiency and security

nanoSSD PCIe 4TE3

- PCIe Gen4 x4
- High Performance
- Small form factor
- Capacity up to 1TB





DATA INTELLIGENCE NEW PRODUCT OVERVIEW



Edge Server SSD

PRODUCT FEATURE

- Targeting edge server applications
- Low-latency / Excellent Performance / High Endurance
- High Capacity: 12.8TB (U.2) / 6.4TB (E1.S)
- Excellent Speed: 6600/4800 MB/s



SATA 3TG9-P & PCIe 4TG2-P

PRODUCT FEATURE

- Reliable & high-end data logger assisting in the implementation of autonomous driving applications
- High Capacity: SATA III & PCIe Gen4 16TB
- Optimized thermal management



DATA INTELLIGENCE NEW PRODUCT OVERVIEW



CXL Memory Expansion

PRODUCT FEATURE

- Flexible memory capacity expansion for data intensive workloads.
- Boost utilization & optimized allocation: Balance memory bandwidth to CPU cores and scale up memory without overprovisioning in the future.
- Target market: AI server / data center / deep learning
- Sample available in 2024 Q3



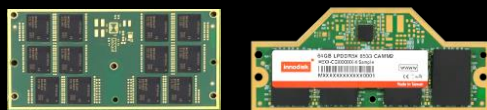
MRDIMM (Multi-ranked Buffered DIMM)

PRODUCT FEATURE

- Data transfer rate of up to 8800 MT/s, doubling the bandwidth of DDR5 RDIMM.
- Target market: AI server / data center / high performance computing
- Sample available in 2024 Q4.



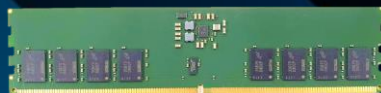
DATA INTELLIGENCE NEW PRODUCT OVERVIEW



CAMM2 & LPCAMM2

PRODUCT FEATURE

- It features shorter traces between the CPU and memory, resulting in increased speed and reduced power consumption.
- Target market: Rugged laptop, handheld device
- Sample available in 2024 Q4.



DDR5 6400 MT/s High Frequency Memory

PRODUCT FEATURE

- Enhanced performance: Increased 100% of speed than DDR4 3200MT/s.
- Target market: Edge AI / High Performance Computing / Image Recognition.
- Sample available in 2024 Q4.



COMPUTING INTELLIGENCE | PRODUCT PORTFOLIO

COMPREHENSIVE AI ACCELERATOR

GPU

**GRAPHICS
PROCESSING UNITS**

FPGA

**FIELD PROGRAMMABLE
GATE ARRAYS**

ASIC

**APPLICATIONS SPECIFIC
INTEGRATED CIRCUITS**

CPU

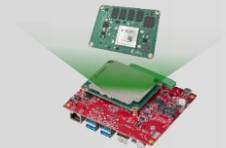
**CENTRAL
PROCESSING UNITS**

COMPREHENSIVE EDGE AI SOLUTION

NVIDIA Jetson Solution



AMD Xilinx FPGA Solution



Intel x ASIC Solution

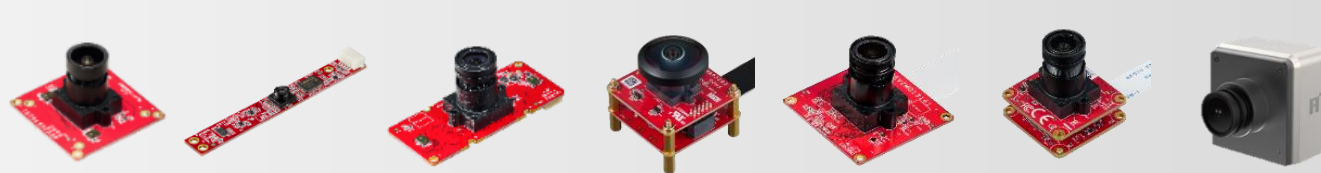


NVIDIA GPU x Intel Solution



SENSING INTELLIGENCE | PRODUCT PORTFOLIO

Camera



CAN + GNSS



Air Sensor



GNSS





SENSING INTELLIGENCE CAMERA MODULE | NEW PRODUCT OVERVIEW



**MIPI CSI-2
Camera Modules**

- High bandwidth, low latency.
- ISP inside, optimized image quality.
- Low light & HDR features are idea for embedded applications.
- Support the latest NVIDIA Jetson & the latest Intel platform.
- Sample available in 2024 Q4.



**GMSL
Camera Modules**

- Implement ADI MAXIM GMSL SerDes to extend service range up to 15 M.
- IP67 housing design is idea for outdoor application.
- High bandwidth, low latency.
- ISP inside, optimized image quality
- Support the latest NVIDIA Jetson platform.
- Sample available in 2024 Q4.

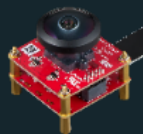


**MIPI over Type C
Camera Modules**

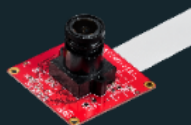
- Rugged design & easy installation.
- Customized type-c cable to extend MIPI service distance.
- High bandwidth, low latency.
- ISP inside, optimized image quality.
- Low light & HDR features are idea for embedded applications.
- Support the latest NVIDIA Jetson & the latest INTEL platform.
- Sample available in 2024 Q4.



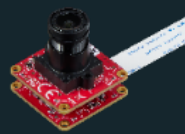
SENSING INTELLIGENCE CAMERA MODULE | MIPI DRIVER COMPLIANCE



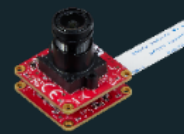
EV2M-GOM1
2M@ 30 FPS
Fisheye



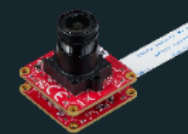
EV2M-OOM1
2M@ 60 FPS
Global Shutter



EV2M-OOM2
2M@ 30 FPS
Low Light

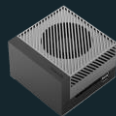


EV8M-OOM1
8M@ 30 FPS
HDR



EVDm-OOM1
13M@ 20 FPS
HDR, High Resolution

NVIDIA



Jetson
AGX Orin



Jetson
Orin NX



Jetson
Orin Nano

Intel



Intel® Core™
Ultra processor



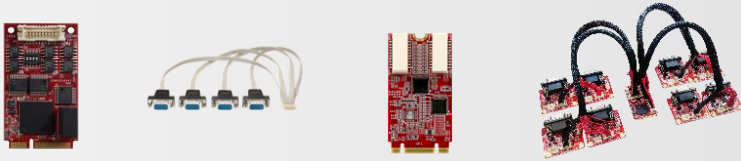
Raptor Lake
13th Gen



Alder Lake
12th Gen

CONNECTING INTELLIGENCE | PRODUCT PORTFOLIO

Serial



LAN



CANbus & CANFD



CAN + GNSS



Wi-Fi





CONNECTING INTELLIGENCE

CANbus / CANFD | NEW PRODUCT OVERVIEW



EMUC-F2S3
(2024 Q3)



EGUC-F2S3
(2024 Q4)



ESPC-F2S3
(2024 Q4)

PRODUCT FEATURE

- Ideal for the automotive industry and embedded systems.
- Guarantee for adaptability and compatibility
- Adhere to 2.5K voltage isolation protection standards
- Industrial-grade hardware specifications and quality
- Rich software support and SocketCAN driver can be easily deployed on Linux operating systems

Innodisk CANbus SDK



GUI Tool



Sample Code



Driver

CANbus Software Tool

CANopen



Microsoft

SAE
INTERNATIONAL
J1939

ROS





CONNECTING INTELLIGENCE LAN MODULE | NEW PRODUCT OVERVIEW



ELPL-G401



EGPL-G401
(2024 Q3)

PRODUCT FEATURE

COMPACT QUAD LAN FOR MULTI-PORT NETWORK DEMAND

- Leverages Intel Ethernet chipset
- Provide for high-performance connectivity at 10/100/1000 Mbps.
- Isolated design and wide temperature tolerance ensure superior safety and reliability.
- Compact form factor efficiently meets diverse networking needs within limited spaces.
- Ideal for automation, surveillance, networking, and commercial applications.



**Extreme
Reliability**



**Compact
Size**



EXTENDED INTELLIGENCE | PRODUCT PORTFOLIO

Storage



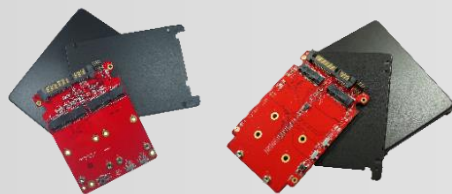
Display



Testing Tool



Disk Array



InnoEx Virtual I/O





MANAGEMENT INTELLIGENCE NEW SOLUTION OVERVIEW

InnoAgent

Out-Of-Band Remote Management Module

- Hardware module designed for out-of-band remote management.
- Independent connections via UART, RS232, or GPIO.
- Supports remote restart even during a system crash.

InnoOSR

Full Recovery, Just One Click Away

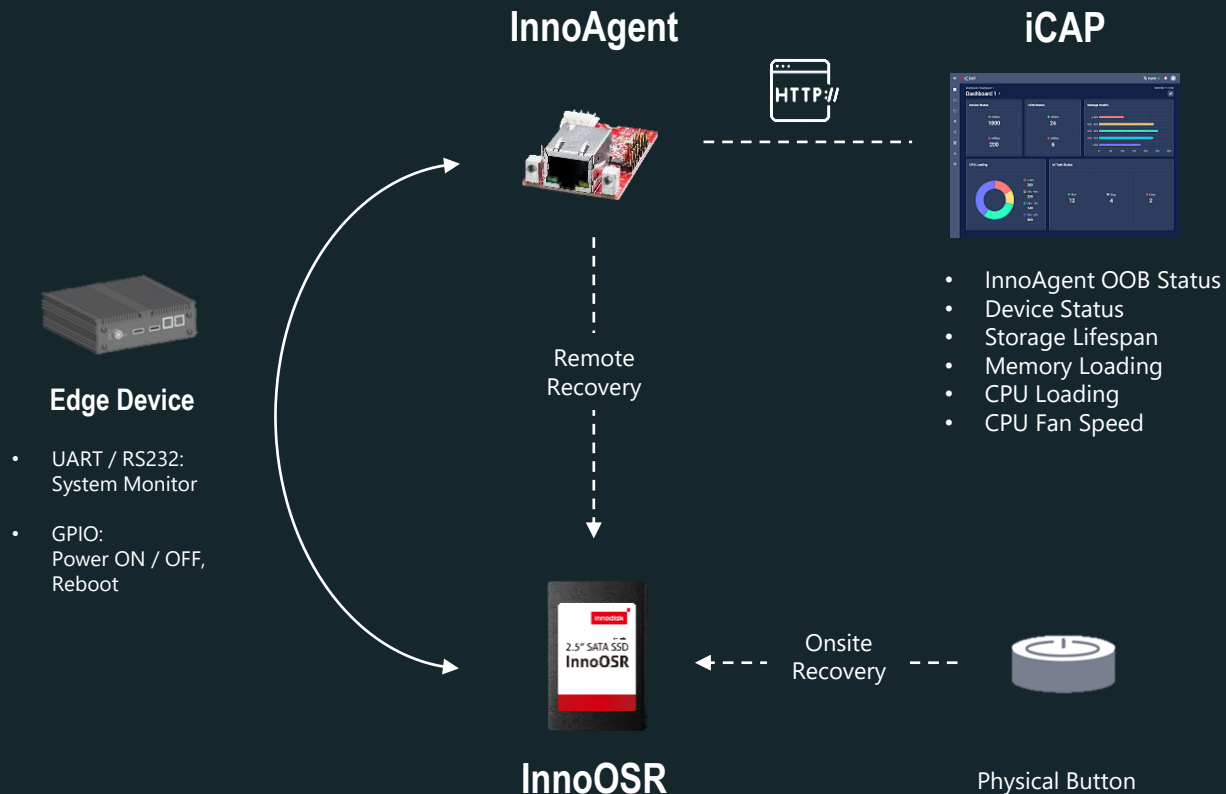
- Dedicated SSD with unique architecture.
- One-click system recovery using physical buttons.
- Integrates with InnoAgent for remote restoration.

iCAP

Cloud Administration Platform

- Manage SSDs, memory, and other components in edge devices.
- Access and control devices through remote management.
- Compatible with internet-connected phones, tablets, and laptops.

INTEGRATED REMOTE MANAGEMENT SOLUTION

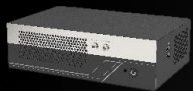




APPLIED INTELLIGENCE NEW SOLUTION OVERVIEW



iVIT-T
AI Training Server



iVIT-I
AI Inference Edge System



iVIT
Vision Intelligent Tool Kit

AI VISION DEVELOPMENT KIT

PRODUCT FEATURE

- **No-Code:** User-friendly platform for effortless creation of AI models, supporting classification and object detection.
- **Auto-Labeling:** iVIT-T's auto-labeling feature predicts annotations, saving time in the data labeling process.
- **Heterogeneous Platform Support:** Intel (Openvino), NVIDIA (TensorRT), and Hailo (HailoRT).
- **End-to-End Process Support:** Complete development process, including data preparation, training, evaluation, and deployment in the edge.
- **Cutting-Edge AI Performance:** Featuring the Intel 14th Gen Ultra CPU, it delivers peak performance and efficiency, combined with advanced AI capabilities powered by NVIDIA's Ada Lovelace architecture.
- Sample available in 2024 Q4



APPLIED INTELLIGENCE NEW SOLUTION OVERVIEW



InnoTracking
People Tracking Solution
(2024 Q3)

PRODUCT FEATURE



Personnel tracking

Stranger tracking and video playback



Utilize existing on-site cameras

for cross-camera and cross-time facial searches



Efficient energy-saving

Using CPU for inference without GPU



AI-enhanced video search

No pre-registration required



Visitor recognition

VIP or Black List recognition



Developed with 3rd party experts from Taiwan

ensuring reliable ongoing maintenance and updates.



YILAN PHASE 2

R&D AND MANUFACTURING CENTER

GRAND OPENING: PHASE II R&D AND MANUFACTURING CENTER

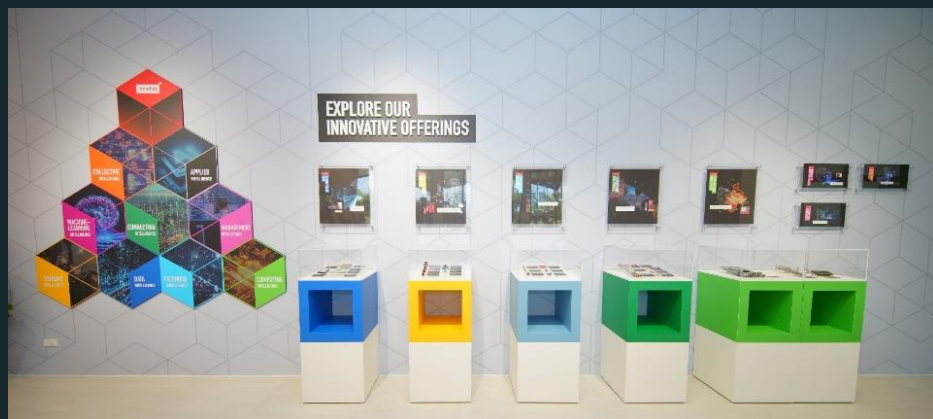
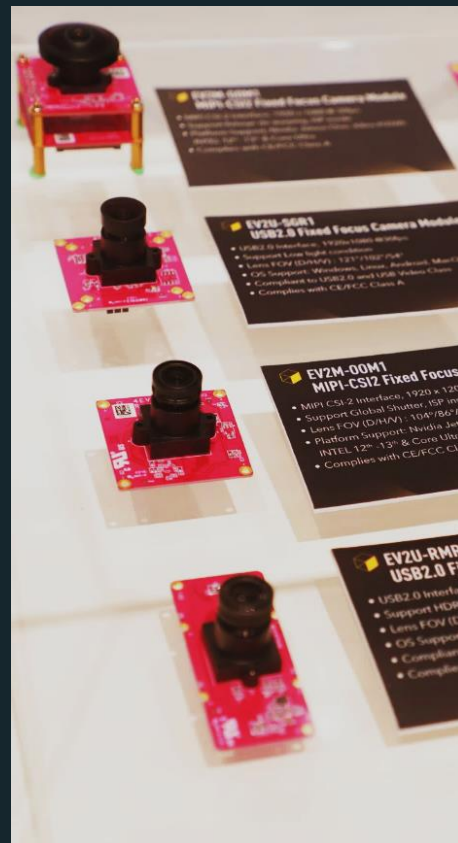
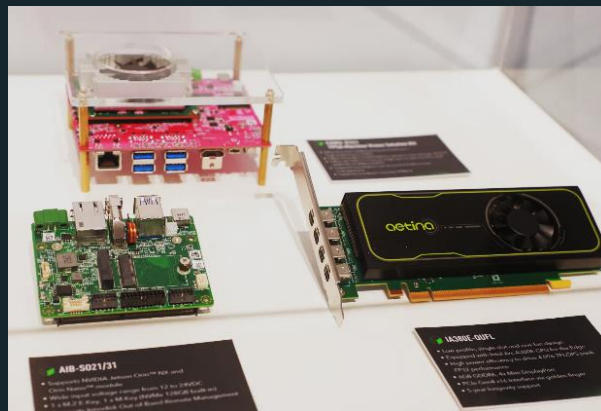
The manufacturing plant becomes Innodisk's AI core base

2022/02/22 Groundbreaking Ceremony
2024/07/01 Grand Opening



GRAND OPENING: PHASE II R&D AND MANUFACTURING CENTER

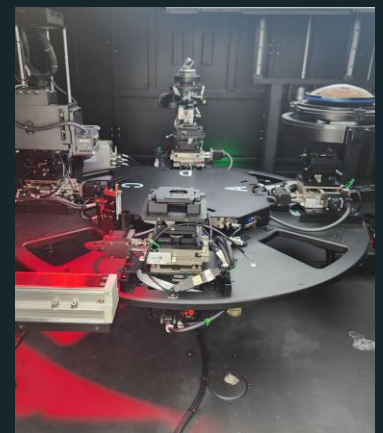
The manufacturing plant becomes Innodisk's AI core base



INNODISK GROUP AI PRODUCTION BASE



INNODISK GROUP AI PRODUCTION BASE

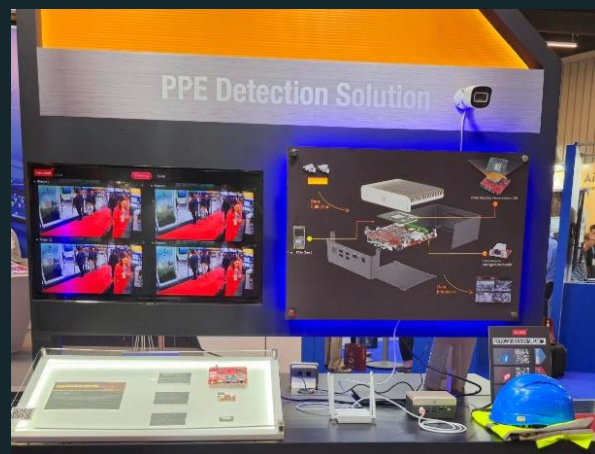


AI IN ACTION GLOBAL CAMPAIGN

140+ Events Worldwide

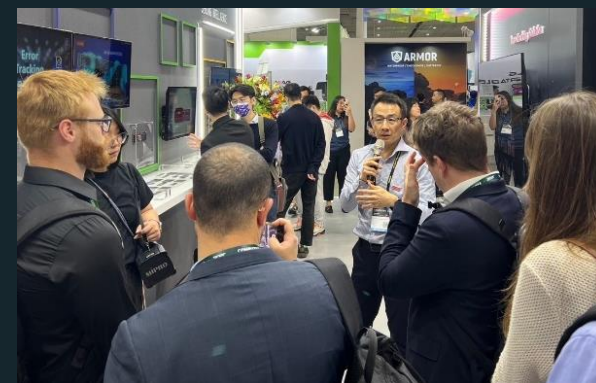
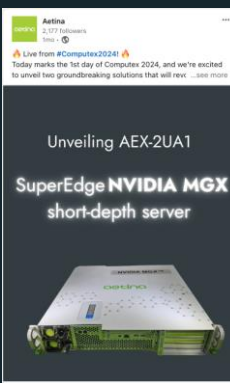
EMBEDDED WORLD 2024

@Nuremberg, Germany



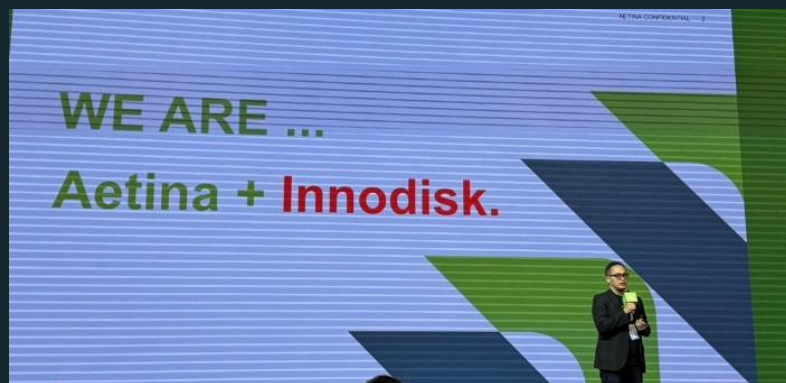
COMPUTEX 2024

@Taipei, Taiwan



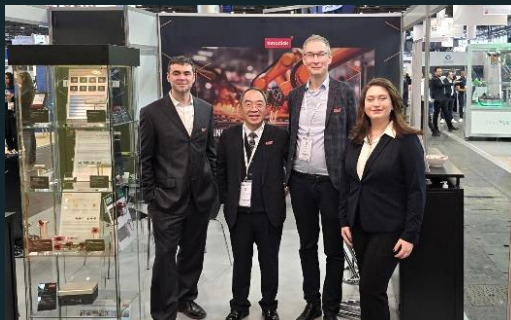
NVIDIA AI SUMMIT 2024

@Taipei, Taiwan



INNODISK AI IN ACTION

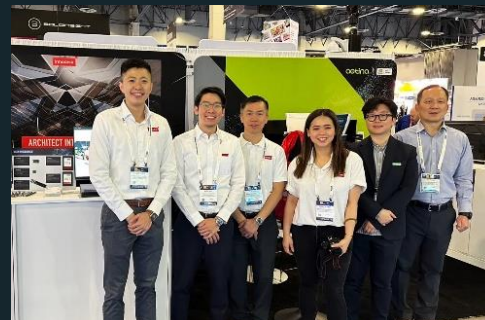
Promote AI solutions with global partners



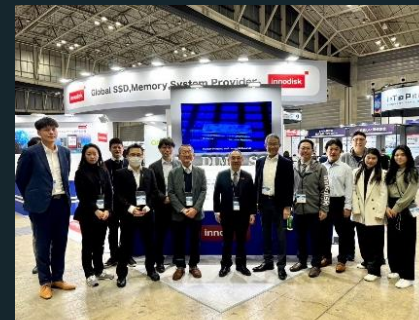
GLOBAL INDUSTRIES @FRA



MEDICAL EXPO @CHN



ISC WEST @USA



Edge Tech+ @JPN



Arm EDGE AI Seminar @TW



WIN EURASIA 2024 @TUR



Aimex 2024 @AUS



LOCAL SEMINARS

ESG COMMITMENT

INNODISK'S PATH TO SUSTAINABILITY

2024 HIGHLIGHTS

- Maintaining a Corporate Governance Evaluation between 6% to 20%.
- Signed the "Biodiversity Support Action" and proposed the "Wuweigang Biodiversity Three-Year Plan"
- Implementing RBA, adhering to the highest standards, fostering trust with corporate clients.



2024 OBJECTIVES

- Expand sustainable impact by inviting value chain partners to invest in biodiversity.
- Monitor the "Global Plastic Treaty" to prepare for future developments.



BIODIVERSITY THREE-YEAR PLAN

@Wuweigang, Yilan County



Background

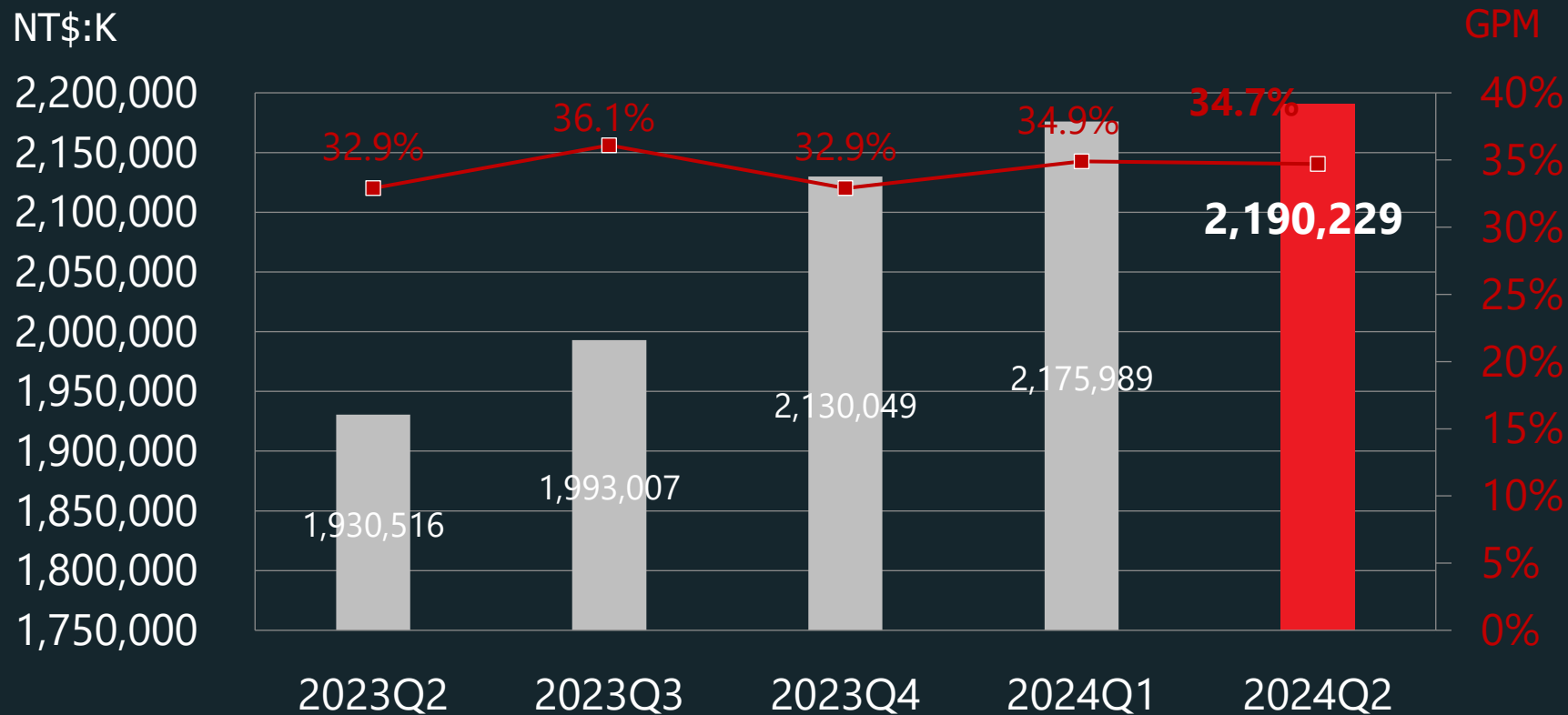
Innodisk cooperates with Innodisk Education Foundation and works with local units to support local biodiversity and ecological restoration.

Objective

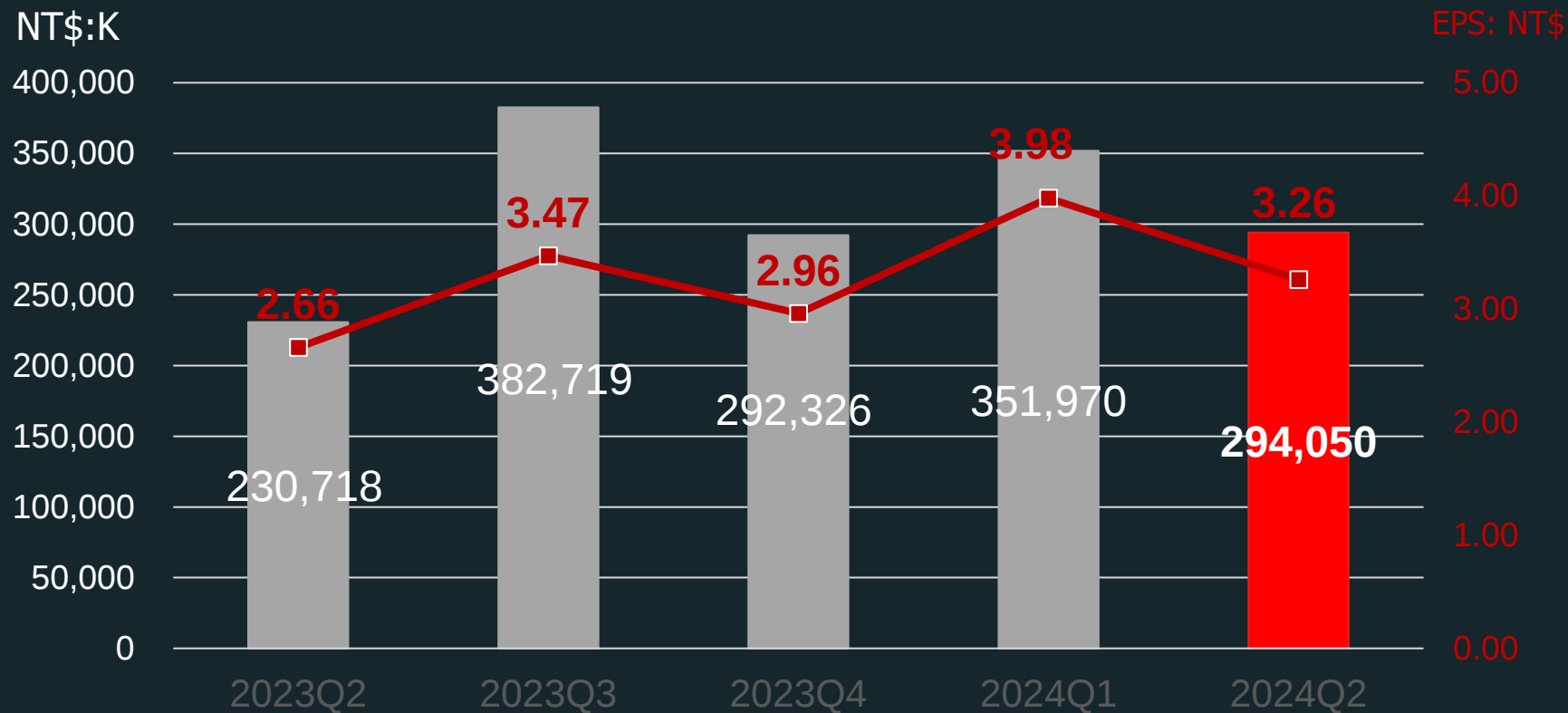
1. Align TNFD with international standards
2. Boost stakeholder awareness of biodiversity
3. Engage 500 people in biodiversity activities in 3 years

FINANCIAL INFORMATION

Revenues and GPM over last 5 quarters

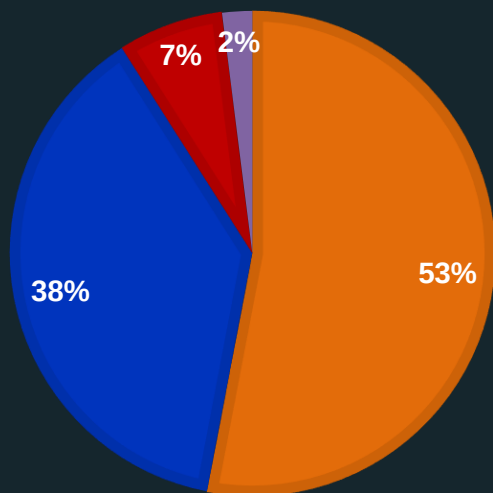


Net Profits and EPS over last 5 quarters

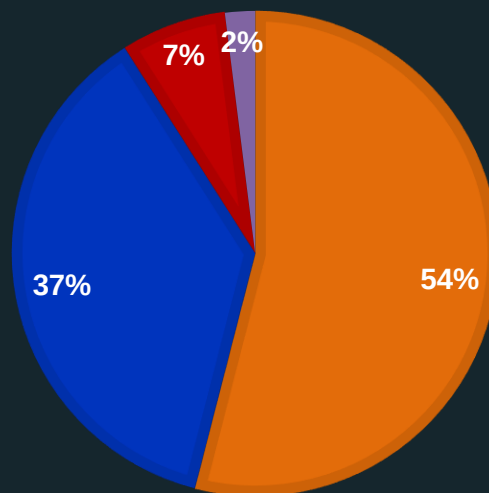


Revenue Breakdown by Product Lines

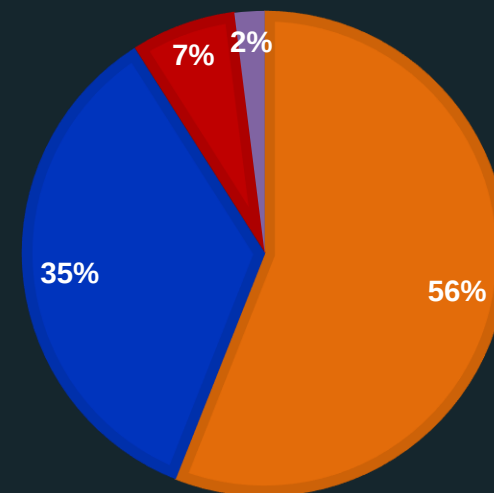
2022



2023



2024Q2



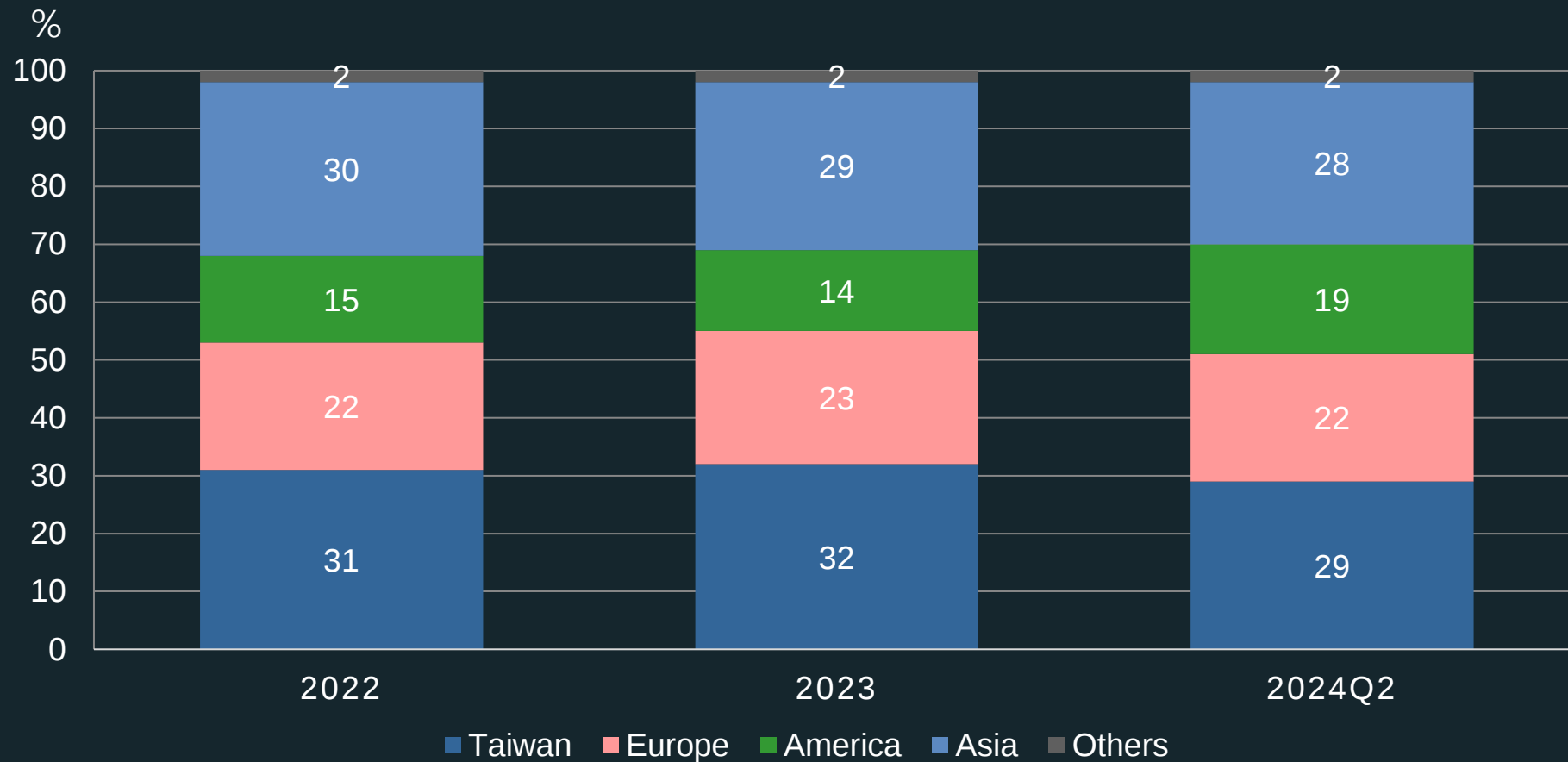
■ DRAM

■ FLASH

■ Alot Solutions

■ OTHERS

Revenue Breakdown by Regions



Quarterly Income Statement

	2024Q2	2024Q1	QoQ	2023Q2	YoY
Revenues	2,190,229	2,175,989	0.7%	1,930,516	13.5%
Cost of good sold	1,430,940	1,417,418	1.0%	1,294,411	10.5%
Gross profit	759,289	758,571	0.1%	636,105	19.4%
Operation expenses	412,629	392,967	5.0%	371,215	11.2%
Operation profits	346,660	365,604	-5.2%	264,890	30.9%
Non-operating income and expenses	37,118	78,156	-52.5%	50,245	-
Profit before tax	383,778	443,760	-13.5%	315,135	21.8%
Income tax expense	89,246	90,010	-0.8%	86,109	3.6%
Net profits	294,532	353,750	-16.7%	229,026	28.6%
Non-controlling interests	482	1,780	-72.9%	-1,692	-128.5%
Net profit attributable to parent company	294,050	351,970	-16.5%	230,718	27.4%
EPS	3.26	3.98		2.66	
Gross margin	34.7%	34.9%		32.9%	
Operating margin	15.8%	16.8%		13.7%	
Net profit rate	13.4%	16.3%		11.9%	

Q & A



innodisk

ARCHITECT INTELLIGENCE