

SELECTION GUIDE 2025



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INNODISK: ARCHITECTS OF INTELLIGENCE

Innodisk is a global leader in intelligent industrial solutions, pioneering the seamless integration of industry-leading components with AI computing platforms.

As the architects of intelligence, we leverage our deep expertise and strategic worldwide partnerships to develop versatile solutions that transform industrial and enterprise applications.



FOUNDED and headquartered in Taiwan in 2005, we proudly celebrate our 20th anniversary in 2025. With engineering experts and sales teams across 20 global locations, we deliver unparalleled service quality and reliability, successfully implementing AI solutions in real-world scenarios across diverse markets.

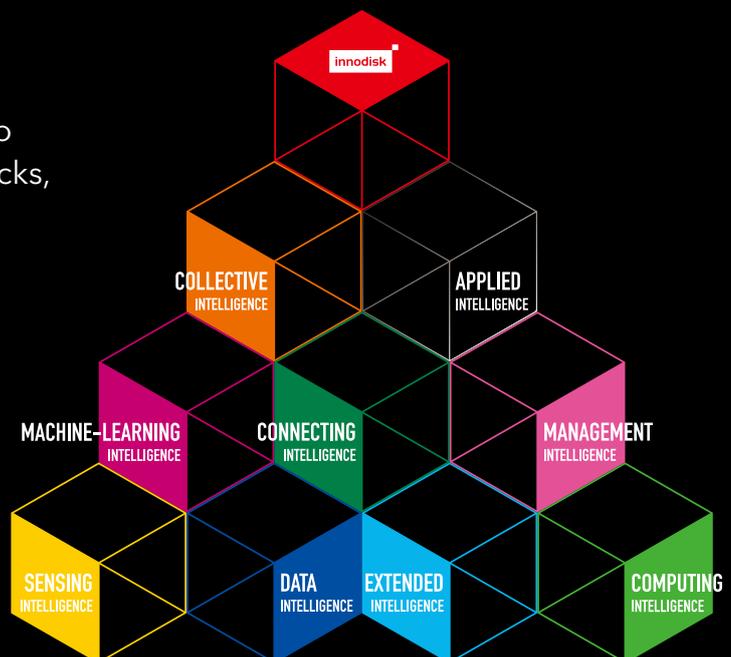
OUR FLEXIBLE COLLABORATION APPROACH

integrates software, hardware, and firmware technologies into comprehensive intelligence building blocks, ensuring tailored solutions that precisely meet each client's unique requirements.

Through this holistic approach, we continue to architect the future of industrial intelligence, turning possibilities into reality.



LEARN MORE



SOLUTIONS ACROSS INDUSTRIES

We bridge the gap between industry insights and tangible outcomes.



MANUFACTURING

AI solutions boost efficiency, safety, and factory output with precise, instant decisions.

- Autonomous Mobile Robot (AMR)
- Automated Optical Inspection (AOI) ▪ Smart Factory



COMMUNICATION

Our solutions ensure high, stable performance for critical telecom infrastructure under heavy loads.

- 5G Base Stations ▪ Recording and Broadcasting Systems



TRANSPORTATION

Our solutions enhance operations, management, and security for EVs, buses, subways, and more.

- Electric Vehicle (EV) Charging ▪ Autonomous Vehicles



HEALTHCARE

We integrate AI into healthcare with advanced solutions, meeting strict medical demands.

- Smart Nursing System ▪ Packing and Inspection



SURVEILLANCE & SAFETY

Our solutions deliver advanced analytics and instant response for modern surveillance needs.

- Smart Street Lights ▪ PPE Detection



ENTERTAINMENT

We offer solutions that extend device lifespan, protect data, and meet entertainment standards.

- Casinos



DATA CENTERS

We tackle growing data, extend product lifespan, and reduce power for servers and data centers.

- Cloud Storage Systems ▪ Edge Computing Servers
- AI Training Servers



AEROSPACE

We create cutting-edge solutions tailored to the aerospace industry's unique challenges.

- Mission Critical ▪ Rugged Systems



RETAIL & LOGISTICS

We drive smart retail, enhancing shopping, ordering, and delivery with efficiency and security.

- Smart Vending Machine ▪ Self-checkout Systems

TECHNOLOGY AND INNOVATION

Innodisk develops industrial-grade technologies that focus on reliability, durability, and performance. Through comprehensive hardware, firmware, and software integration, we deliver intelligent solutions designed to work in challenging environments. Our customization capabilities ensure each solution precisely meets your industrial application demands.

DATA OPTIMIZATION



iDATA GUARD

Ensures efficient power cycling and data integrity.



iPOWER GUARD

Safeguards your SSD and prevents power instability.



iRETENTION

Utilizes an intelligent algorithm to monitor temperature and P/E cycle data.



END-TO-END DATA PATH PROTECTION (ETEP)

Ensures data integrity at every single step.

SECURITY



PLP (iCELL)

Ensures SSD can protect mission-critical data and prevent data loss.



AES

AES encryption protects confidential data.



WRITE PROTECT

Safeguards the data stored on your flash storage.

ENVIRONMENTAL PROTECTION



WIDE TEMPERATURE

Supports operating temperature from -40°C ~ 85°C.



ANTI-SULFURATION

Resists sulfur corrosion in harsh environments.



CONFORMAL COATING

Protects your DRAM PCB from acid, dust, and other harmful materials.



RUGGED CLIPS

Enhances module stability and high-impact strength.



HEAT SPREADER

Prevents overheating and extends product lifespan.



SIDE FILL

Strengthens the connection between the chips and the board.

LONGEVITY



iSLC / ULTRA iSLC

Extends the device's lifespan and enhances overall performance.



WEAR LEVELING

Ensures the even usage of blocks across the device lifespan.



GARBAGE COLLECTION AND TRIM

Removes unneeded data and extends the lifespan of your storage.

RECOVERY



InnoOSR

InnoOSR's patented firmware technology enables recovery with just a single click.



CLOUD RECOVERY

Enables operators to recover devices remotely through the cloud.



LOCAL RECOVERY

Enables on-site device recovery.

innodisk

APPLIED INTELLIGENCE



MODULAR SOLUTIONS READY FOR ANY SCENARIO

Our intelligence solutions are designed to offer flexibility and customization for your specific needs. Explore real-world application stories for insights and inspiration to craft your own success narrative.

OPTIMIZED AI SYSTEMS

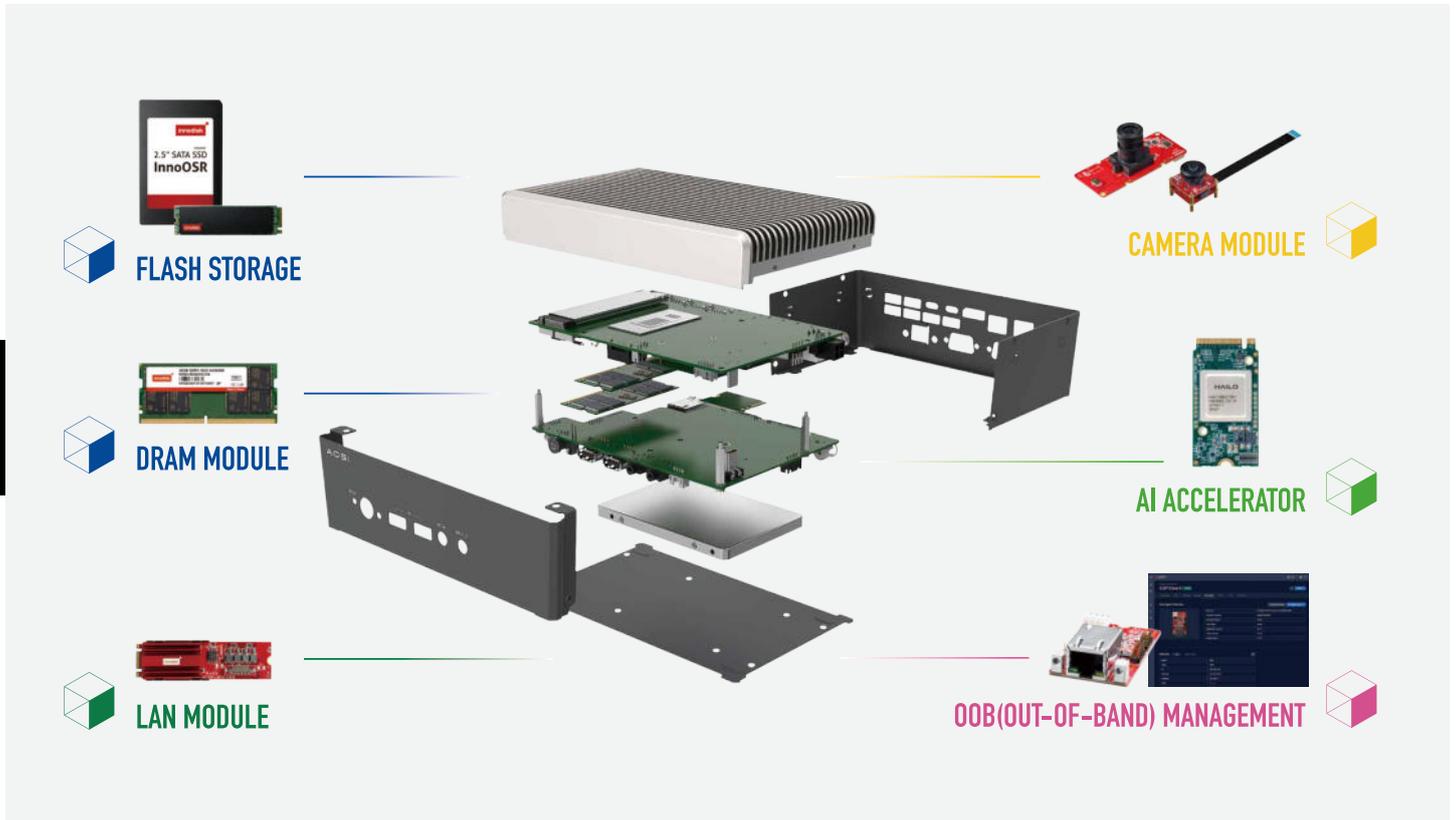
Optimized AI systems for edge AI training and inference.

APPLICATION SCENARIOS

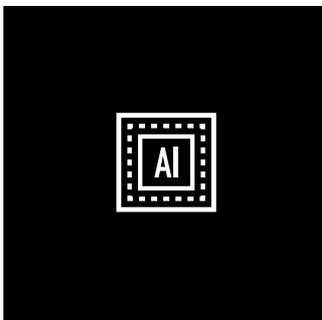
Integrated solutions for real-world applications and scenarios.

OPTIMIZED AI SYSTEMS

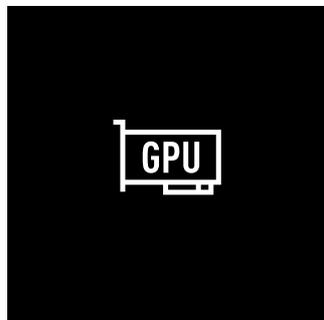
By leveraging the **Intelligence Building Blocks**, our Optimized AI Systems combine various elements, from components to computing platforms, software to firmware technologies.



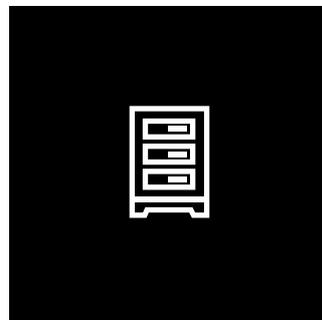
With the core of AI, the Optimized AI Systems provide diverse options and allow customization to develop a ready-to-use solution for all client's unique needs.



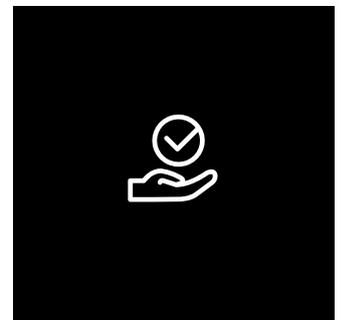
**Customizable
AI Solutions**



**Optimized
Computational
Power**



**Seamless
Hardware
Compatibility**



**Value-added &
Expert Support**

APEX-X100

NVIDIA GPU x Intel Solution



Intel-Based AI System with NVIDIA RTX 6000 Ada Accelerator

- Supports 18,176 CUDA Cores, 568 Tensor Cores, and 142 RT Cores with 48GB GDDR6 memory for AI LLM/SLM applications.
- Intel 13th Gen Core i7/i9 CPU, with up to 128GB DDR5 DRAM and 1TB NVMe SSD pre-installed.

Platform	Intel CPU	Core i9-13900E	Core i7-13700E
	Cores (P+E+LPE)	24C (8P + 16E)	16C (8P + 8E)
	Max. Frequency	5.2GHz	5.1GHz
AI Accelerator	AI Engine	NVIDIA RTX 6000 Ada	
	Form Factor (Interface)	11.2cm H x 26.7cm L, dual slot, full height (PCIe Gen 4 x16)	
	Cores	18,176 x NVIDIA Ada Lovelace architecture-based CUDA Cores 568 x NVIDIA fourth-generation Tensor Cores 142 x NVIDIA third-generation RT Cores	
	GPU memory	48GB GDDR6 (w/ECC)	
Memory	Technology / Socket	DDR5 4400MHz ¹ / 4 x 288pin DDR5 U-DIMM	
	Max. Capacity	up to 128GB (4 x 32GB, total 128GB pre-installed)	up to 128GB (2 x 32GB, total 64GB pre-installed)
Displays	HDMI 2.0 (4K@30Hz)	1	
	DP++ 1.4 (4K@60Hz)	2	
	VGA	1 (optional, share the same connector with GPIO/DIO)	
Ethernet	LAN (Marvell AQC113 10Gbps)	1	
	LAN (Intel I226 2.5Gbps)	3 x (LAN2/3 support 802.at with 30W PoE)	
Expansion Slots	M.2 2280 M Key	1 x (PCIe Gen 4 x4), 1TB M.2 SSD pre-installed	1 x (PCIe Gen 4 x4), 512GB M.2 SSD pre-installed
	M.2 2230 E Key	1 x (PCIe Gen 3 x1/USB 2.0)	
	M.2 3052 B Key	1 x (USB 3.2), with Nano SIM socket	
	PCIe x16	2 x (Gen 4*2 x16 signal), RTX 6000 Ada pre-installed or 2 x (Gen4 ² x8 signal)	
	PCIe x16	1 x (Gen 3 x4 signal)	
	PCIe x4	1 x (Gen 3 x4 signal)	
	PCIe x1	1 x (Gen 3 x1 signal)	
External I/O	COM1	RS232/422/485	
	COM2	RS232/422/485	
	COM3	RS485 (RJ45)	
	USB 3.2 Gen 2x2 (20Gbps) Type C	1	
	USB 3.2 Gen 2 (10Gbps)	8	
	Buttons	1 x Power	
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1	
	GPIO/DIO	8-bit (4 in/ 4 out)	
Power	Power Input Voltage	DC 24~48V	
	Power Consumption	24V@25A (with i9-13900E/ 1TB SSD/ 128GB DRAM/ NVIDIA RTX6000 Ada)	
Environment	Operating Temperature	0°C~40°C (with NVIDIA RTX 6000 Ada)	
Miscellaneous	LED Indicator	2 x Power LED, 2 x Fan LED, 2 x Temp LED	
Physical Characteristics	Dimension L x W x H (mm)	340 x 279 x 215	
	Net Weight / Gross Weight (KG)	11 / 17	
	Mount	Wall Mount / Desk mount	
	Antenna Holes	6	
Regulation	Safety	CE/FCC/UKCA	

¹ by Intel CPU limitation ² by PCIe ReDriver IC limitation

APEX-P100

NVIDIA GPU x Intel Solution



Intel-Based AI System with NVIDIA RTX 5000 Ada Accelerator

- Supports 9,728 CUDA Cores, 304 Tensor Cores, and 76 RT Cores with 16GB GDDR6 memory for factory AOI and AI medical imaging recognition.
- Intel 13th Gen Core i7 CPU, 32GB DDR5 DRAM and 512GB NVMe SSD are pre-installed.

Platform	Intel CPU	Core i7-13700E
	Cores (P+E+LPE)	16C (8P + 8E)
	Max. Frequency	5.1GHz
AI Accelerator	AI Engine	NVIDIA RTX 5000 Ada
	Form Factor (Interface)	MXM graphics module version 3.1, Type B (PCIe Gen 4 x 16)
	Cores	9,728 x NVIDIA Ada Lovelace architecture-based CUDA Cores 304 x NVIDIA fourth-generation Tensor Cores 76 x NVIDIA third-generation RT Cores
	GPU memory	16GB GDDR6 (w/ECC)
Memory	Technology / Socket	DDR5 5200MHz / 2 x 262pin DDR5 SO-DIMM
	Max. Capacity	up to 64GB (2 x 16GB, total 32GB pre-installed)
Displays	DP++ 1.4 (4K@60Hz)	5
Ethernet	LAN (Intel I226 2.5Gbps)	5
Expansion Slots	M.2 2280 M Key	2 x (PCIe Gen 4 x4 / SATAIII), 512GB M.2 SSD pre-installed
	MXM Type B / B+	1 x (PCIe Gen4 x16), NVIDIA RTX 5000 Ada pre-installed
External I/O	COM1	RS232/422/485
	COM2	RS232/422/485
	COM3	RS232/422/485
	COM4	RS232/422/485
	USB 3.2 Gen 2x2 (20Gbps) Type C	1
	USB 3.2 Gen 2 (10Gbps)	6
	USB 2.0	2
	Buttons	1 x Power (with LED)
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1
GPIO/ DIO	7-bit (by BIOS selection)	
Power	Power Input Voltage	DC 24V
	Power Consumption	24V@19.8A (with i7-13700E/ 512GB SSD/ 32GB DRAM/ NVIDIA RTX 5000 Ada)
Environment	Operating Temperature	0°C~50°C (with NVIDIA RTX 5000 Ada)
Physical Characteristics	Dimension L x W x H (mm)	280 x 270 x 148.2
	Net Weight / Gross Weight (KG)	5.7 / 8
	Mount	Wall Mount
Regulation	Safety	CE/FCC

APEX-P200

NVIDIA GPU x Intel Solution



Intel-Based AI System with NVIDIA RTX 2000 Ada Accelerator

- Supports 3,072 CUDA Cores, 96 Tensor Cores, and 24 RT Cores with 8GB GDDR6 memory for AI medical imaging diagnostics and object detection.
- Intel 13th Gen Core i7 CPU, 32GB DDR5 DRAM and 512GB NVMe SSD are pre-installed.
- Compact design with dimensions of 182mm x 158.6mm x 90mm for efficient space usage.

Platform	Intel CPU	Core i7-13800HE
	Cores (P+E+LPE)	14C (6P + 8E)
	Max. Frequency	5GHz
AI Accelerator	AI Engine	NVIDIA RTX 2000 Ada
	Form Factor (Interface)	MXM graphics module version 3.1, Type A (PCIe Gen 4 x 8)
	Cores	3,072 x NVIDIA Ada Lovelace architecture-based CUDA Cores 96 x NVIDIA fourth-generation Tensor Cores 24 x NVIDIA third-generation RT Cores
	GPU memory	8GB GDDR6 (w/ECC)
Memory	Technology / Socket	DDR5 5200MHz / 2 x 262pin DDR5 SO-DIMM
	Max. Capacity	up to 64GB (2 x 16GB, total 32GB pre-installed)
Displays	HDMI 2.1 (8K@60Hz)	1
Ethernet	LAN (Intel I226 2.5Gbps)	3x (LAN 2/3 support 802.at with 30W PoE)
Expansion Slots	M.2 2280 M Key	1 x (PCIe Gen 4 x4), 512GB M.2 SSD pre-installed
	M.2 2230 E Key	1 x (PCIe Gen 3 x1/USB 2.0)
	MXM Type A	1 x (PCIe Gen 4 x8), RTX 2000 Ada pre-installed
External I/O	COM1	RS232/422/485 (5V/12V)
	COM2	RS232/422/485
	USB 3.2 Gen 2 (10Gbps)	2
	USB 2.0	2
	Buttons	1 x Power (with LED)
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1
Power	Power Input Voltage	DC 19V
	Power Consumption	19V@10.5A (with i7-13800HE/ 512GB SSD/ 32GB DRAM/ NVIDIA RTX 2000 Ada)
Environment	Operating Temperature	-20°C~60°C
Miscellaneous	LED Indicator	1 x HDD LED
Physical Characteristics	Dimension L x W x H (mm)	182 x 158.6 x 90
	Net Weight / Gross Weight (KG)	3 / 3.7
	Mount	Wall Mount
	Antenna Holes	2
Regulation	Safety	CE/FCC/UKCA

APEX-E100

Intel x AI solution



Intel AI Box PC with Integrated NPU

- Equipped with a built-in NPU delivering up to 36 TOPS, with GPU and CPU support for AMR/AGV, AI surveillance, and visual inspection.
- Intel Core Ultra CPU, 16GB DDR5 DRAM, and 512GB NVMe SSD are pre-installed
- Supports Innodisk dual MIPI over Type-C cameras.

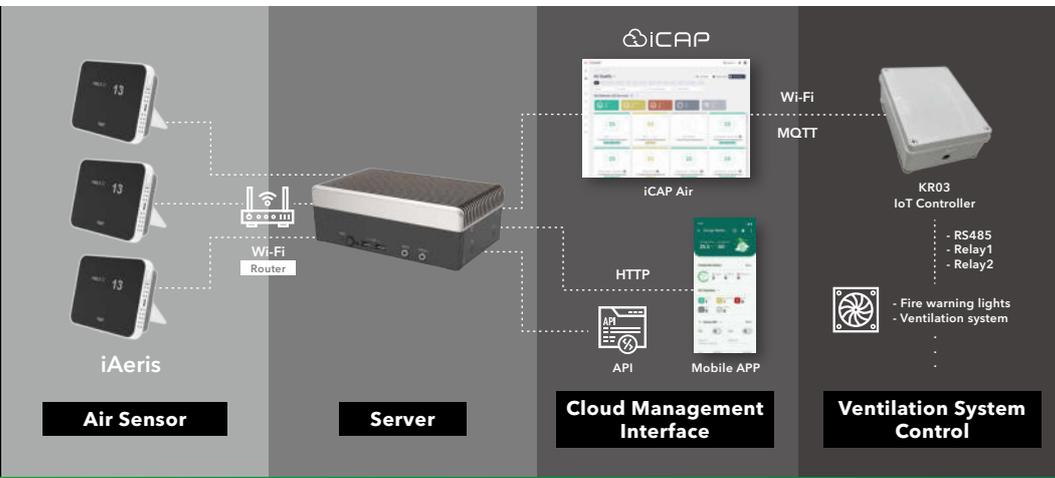
	Intel CPU	Core Ultra 7 165HL	Core Ultra 5 135HL	Core Ultra 3 105UL
Platform	Cores (P+E+LPE)	16C (6P + 8E + 2LPE)	14C (4P + 8E + 2LPE)	8C (2P + 4E + 2LPE)
	Max. Frequency	5.0GHz	4.6GHz	4.2GHz
	AI Accelerator	AI Engine	Intel AI Boost up to 36 TOPS via (CPU+GPU+NPU)	
Memory	Technology / Socket	DDR5 5600MHz / 2 x 262pin DDR5 SO-DIMM		
	Max. Capacity	up to 96GB (2 x 8GB, total 16GB pre-installed)		
Displays	HDMI 2.1 (8K@30Hz)	2		
Ethernet	LAN (Intel I226 2.5Gbps)	2		
Expansion Slots	M.2 2230 E Key	1 x (PCIe Gen 3 x1 / USB 2.0)		
	M.2 2280 M Key	1 x (PCIe Gen 4 x4 / SATAIII); 512GB M.2 SSD pre-installed		
External I/O	COM1	RS232/422/485		
	USB 3.2 Gen2 (10Gbps)	2		
	USB 3.2 Gen1 (5Gbps)	2		
	USB 2.0	2		
	Buttons	1 x Power		
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1		
	MIPI over Type-C	2		
Power	Power Input Voltage	DC 12V		
	Power Consumption	12V@12.5A (with Ultra 7 165HL/ 1T SSD/ 32GB DRAM)		
Environment	Operating Temperature	-20°C~60°C		
Miscellaneous	LED Indicator	1 x Power LED		
Physical Characteristics	Dimension L x W x H (mm)	188 x 140 x 56		
	Net Weight / Gross Weight (KG)	1.6 / 2.1		
	Mount	Wall Mount		
	Antenna Holes	2		
Regulation	Safety	CE/FCC		

APPLICATION SCENARIOS

iCAP AIR

AIR QUALITY MANAGEMENT SOLUTION

Comprehensive Intelligent Air Quality Management Solution



High Sensitivity

Certified by SHS, FCC, CE, RoHS, NCC, BSMI, and other international standards.



Group Management

Conduct categorized management for various locations and devices.



Personalized Floor Plan

Upload floor plans to manage devices in various places.



Thresholds and Alarms

Customize thresholds for different air factors and issue instant alerts.



Automatic Trigger

Activate ventilation equipment based on real-time air quality or trigger by scheduling.



Air Sensor

iCAP Air Specification Table

Air Sensor Model	Temperature	Humidity	PM2.5	PM10	CO2	TVOC	HCHO*	NO2*	O3*	SO2*	CO*	NH3*	H2S*
iAeris74	•	•	•		•								
iAeris76	•	•	•	•	•	•							

Customizable

iAeris

Air Sensor



ABOX-5120

Air Quality Server



Operating Environment	-10°C ~ 50°C, below 90% RH
Storage Temperature	-20°C ~ 70°C, below 90% RH
Screen	2.23" OLED
Control interface	modbus-RTU or DO (Dry Contact)
Communication Protocol	RS485 (Modbus-RTU) / Wi-Fi (Modbus-TCP, HTTP, MQTT) (Optional) / BLE4.0(Optional)
Power Supply	DC 5V/1.0A or DC12-24V/0.5A
Power Consumption	Max 5W
Safety Standards	CE / FCC / NCC / BSMI
Dimension	114mm(L) x 96mm(W) x 36mm(H)
Weight	142g

CPU	Intel® Celeron® Processor 7305E
Memory	32GB - DDR5 4800MT/s
Storage	512GB
OS	Linux / Ubuntu 22.04.3 LTS
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-40°C ~ 85°C
Operating Humidity	Relative humidity: 5% to 95%, non-condensing
Vibration During Operation	With SSD: 3G, IEC 60068-2-64, random, 5~500Hz, 1hr/axis
Shock During Operation	With SSD: 30G, IEC 60068-2-27, half sine, 11ms duration
Dimension	182.17mm x 108.64mm x 63.16mm

*The air quality server is bundled with iCAP Air and is not available for separate purchase.

Highly Flexible, Intelligent Solution

Centered around the edge AI host, front-end IP cameras and back-end management platforms can be seamlessly connected to implement AI PPE recognition solutions easily.



Flexible Architecture

Utilizes existing IP cameras to detect PPE accurately.



Efficient Deployment

An independent edge AI host supports multiple IP cameras, reducing setup costs.



Real-time Event Alerts

Records violations in real-time and can integrate with on-site alert systems for immediate notifications.



Smart Fence Warning

Provides zone detection capabilities, enabling real-time alerts in response to unauthorized intrusion or loitering.



High-Flexibility ODM Services

Exclusive customized AI models are offered for practical application environments to ensure optimal AI recognition performance.



Third-Party Software Integration

The Nx Witness VMS is integrated to receive event notifications and record key video segments.

InnoPPE Hardware / Software Specifications

HARDWARE



CPU	i5-1245UE
AI Accelerator	Hailo-8
Memory	16GB DDR5 SO-DIMM
Storage	512GB
Power Requirement	9~36V DC Power supply
Temperature	Operation: -20°C ~ 60°C (Ta) Storage: -40°C ~ 85°C (Ta)
Certification	CE/FCC class A
Dimension (L x W x H)	182.17mm x 108.64mm x 63.16mm
Regulation	CE/FCC Class B/RoHS/UKCA
Warranty	1 Year

SOFTWARE

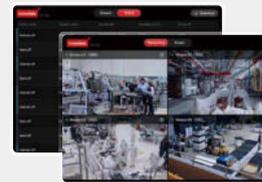
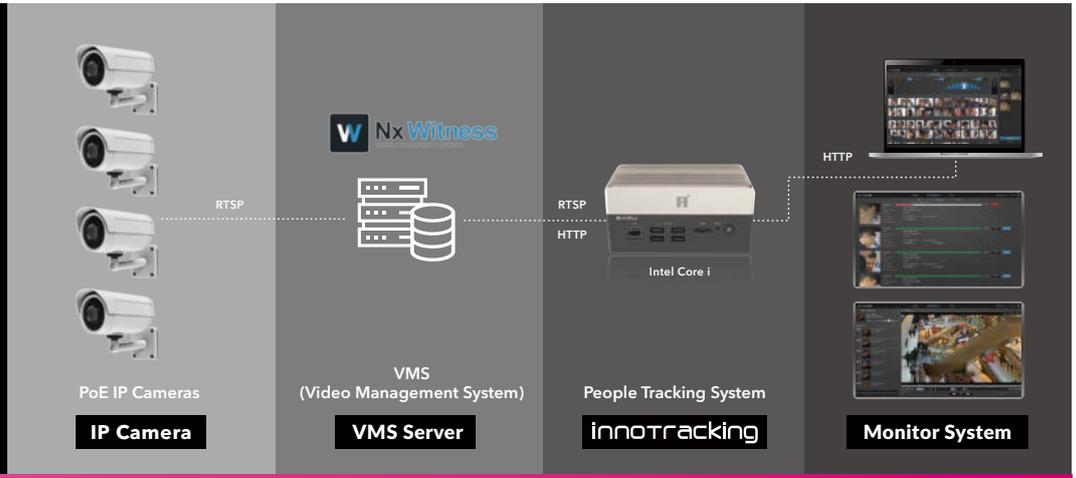


Image Sources	Supports RTSP-compatible network cameras / VMS / DVR / NVR systems
Video Format	H.264
Image Resolution	1080P / 720P / 640P
Recognition Objects	Human / Hard Helmet / Reflective Vest
FPS per Channel	5~10 fps (Varies based on channel numbers or resolution)
Support Max. Channel Number	4
Data Output Type	.csv / .db / .html
Support Browser	Chrome / Firefox / Edge
Smart Fence	Supports multiple polygonal ROIs
Web API	MQTT Protocol
OS Support	Linux (Kernel 5.15 and later)

* Customized adjustment services for related hardware and software are also available.

Solution at a Glance



Accurate AI Facial Comparison and Search



No Pre-registration Required



Easy Way to Track a Suspect



Utilize Existing On-Site Cameras



Energy-Saving and Cost Saving



Built to Endure: High-Temp & Vibration-Resistant Industrial PCs

InnoTracking Hardware Specifications



ABOX-5120

Edge Server

CPU	Intel® Celeron® Processor 7305E
Memory	32GB - DDR5 4800MT/s
Storage	512GB
Display	1 x USB 3.2 Gen1 Type C 1 x mini DP 1 x HDMI
Power	Input: Single 9 ~ 36 V Power Consumption: Max. 90W
OS	Linux / Ubuntu 22.04.3 LTS
Operating Temperature	-20°C ~ 60°C
Storage Temperature	-40°C ~ 85°C
Operating Humidity	5% to 95% Relative humidity, non-condensing
Vibration During Operation	With SSD: 3G, IEC 60068-2-64, random, 5~500Hz, 1hr/axis
Shock During Operation	With SSD: 30G, IEC 60068-2-27, half sine, 11ms duration
Dimension	182.17 x 108.64 x 63.16/mm
Others	Support InnoAgent out-of-band remote management (Optional)

* This edge server is bundled with the InnoTracking solution and is not available for separate purchase.

innodisk

DATA INTELLIGENCE



DATA INTELLIGENCE

Robust and reliable memory and storage solutions. Our industrial-grade products are designed to empower high-performance computing and secure data storage.

DRAM MODULE PRODUCT LINE

IC Grade IC Hierarchy

Original IC	Original IC (Innodisk) - Fully tested by major IC suppliers
eTT	Effectively Tested DRAM - Effectively tested but test patterns can vary by suppliers - Logo unmarked and only marked with the serial number or manufacturer information
uTT	Untested DRAM - Did not pass the complete test - Logo unmarked and only marked with the serial number or manufacturer information
Downgrade	Downgrade - DRAM IC is made with a poor yield rate wafer and die and has serious compatibility and functional issues

Value Added Features

▲: Available

	Wide Temperature	Anti-sulfuration	30μ"Gold Finger	Mounting Hole	Connector	iRAM	iSMART / iCAP	Conformal Coating	Side Fill
CXL Memory Module									
DDR5	MRDIMM		•				▲	▲	▲
	LPDDR5X CAMM2		•				▲	▲	▲
	CAMM2		•				▲	▲	▲
	CUDIMM	•	•	•			▲	▲	▲
	CSODIMM	•	•	•			▲	▲	▲
	UDIMM	•	•	•			▲	▲	▲
	SODIMM	•	•	•			▲	▲	▲
	ECC UDIMM	•	•	•			▲	▲	▲
	ECC SODIMM	•	•	•			▲	▲	▲
	RDIMM	•	•	•			▲	▲	▲
	UDIMM ULP	•	•	•			▲	▲	▲
	ECC UDIMM VLP	•	•	•			▲	▲	▲
	RDIMM VLP	•	•	•			▲	▲	▲
	UDIMM Ultra Temperature	•	•	• (45μ")			▲	▲	•
	SODIMM Ultra Temperature	•	•	• (45μ")			▲	▲	•
	DDR4	UDIMM	•	•				▲	▲
SODIMM		•	•				▲	▲	▲
ECC UDIMM		•	•	•		•	▲	▲	▲
ECC SODIMM		•	•	•		•	▲	▲	▲
RDIMM		•	•	•		•	▲	▲	▲
UDIMM VLP		•	•	•			▲	▲	▲
SODIMM VLP		•	•	•			▲	▲	▲
ECC UDIMM VLP		•	•	•		•	▲	▲	▲
ECC SODIMM VLP		•	•	•		•	▲	▲	▲
Mini ECC VLP			•	•		•	▲	▲	▲
RDIMM VLP		•	•	•		•	▲	▲	▲
Mini RDIMM VLP			•	•		•	▲	▲	▲
XR-DIMM			•		•	•	▲	▲	▲
Rugged DIMM		•	•		•		▲	▲	▲
SODIMM Ultra Temperature		•	•	• (45μ")			▲	▲	•
ECC SODIMM Ultra Temperature		•	•	• (45μ")			▲	▲	•
DDR3	UDIMM	•					▲	▲	▲
	SODIMM	•					▲	▲	▲
	ECC UDIMM	•		•		•	▲	▲	▲
	ECC SODIMM	•		•		•	▲	▲	▲
	RDIMM			•		•	▲	▲	▲
DDR2	UDIMM						▲	▲	▲
	SODIMM	•					▲	▲	▲
	ECC UDIMM			•		•	▲	▲	▲
DDR1	UDIMM						▲	▲	▲
	SODIMM						▲	▲	▲
SDRAM							▲	▲	

DRAM MODULE



CXL Memory Module

Model Name	CXL Memory Module
CXL Compliance	CXL 1.1 & CXL 2.0
CXL Protocol	Type 3 (CXL.mem & CXL.io)
Interface	PCIe Gen 5 x8
DRAM IC Generation	DDR5
Form Factor	E3.S 2T
Connector	EDSFF 2C (84 pin)
Density	64GB
Operation Temperature	0°C ~ 70°C



DDR5 DRAM Module

Module Type	DDR5 MRDIMM	LPDDR5X CMM2	DDR5 CMM2	DDR5 CUDIMM
Speed	8800MT/s	8533 MT/s	6400 MT/s	6400 MT/s
Density	32GB, 64GB, 96GB	32GB, 64GB	32GB, 64GB	8GB, 16GB, 24GB, 32GB, 48GB, 64GB
Function	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	287pin	644pin	644pin	288pin
Bus Width	x80	x128	x128	x64
Voltage	1.1V	1.05V	1.1V	1.1V
PCB Height	1.23 Inches	1.30 Inches	1.57 Inches	1.23 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 85°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)

Module Type	DDR5 CSODIMM	DDR5 UDIMM	DDR5 SODIMM	DDR5 ECC UDIMM
Speed	6400MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	8GB, 16GB, 24GB, 32GB, 48GB, 64GB	8GB, 16GB, 24GB, 32GB, 48GB	8GB, 16GB, 24GB, 32GB, 48GB	16GB, 24GB, 32GB, 48GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	262pin	288pin	262pin	288pin
Bus Width	x64	x64	x64	x72
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	1.18 Inches	1.23 Inches	1.18 Inches	1.23 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)

Module Type	DDR5 ECC SODIMM	DDR5 RDIMM	DDR5 UDIMM ULP	DDR5 ECC UDIMM VLP
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 24GB, 32GB, 48GB	16GB, 32GB, 64GB, 96GB, 128GB	16GB, 32GB	16GB, 32GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	262pin	288pin	288pin	288pin
Bus Width	x72	x80	x64	x72
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	1.18 Inches	1.23 Inches	0.7 Inches	0.738 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)

Module Type	DDR5 RDIMM VLP	DDR5 UDIMM WT	DDR5 SODIMM WT	DDR5 ECC SODIMM WT
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 32GB	8GB, 16GB, 24GB, 32GB, 48GB	8GB, 16GB, 24GB, 32GB, 48GB	16GB, 24GB, 32GB, 48GB
Function	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	288pin	288pin	262pin	262pin
Bus Width	x80	x64	x64	x72
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	0.738 Inches	1.23 Inches	1.18 Inches	1.18 Inches
Operating Temperature	0°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR5 ECC UDIMM WT	DDR5 RDIMM WT	DDR5 UDIMM ULP WT	DDR5 ECC UDIMM VLP WT
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600MT/s	4800 MT/s, 5600MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 24GB, 32GB, 48GB	16GB, 32GB, 64GB, 96GB, 128GB	16GB, 32GB	16GB, 32GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	288pin	288pin	288pin	288pin
Bus Width	x72	x80	x64	x72
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	1.23 Inches	1.23 Inches	0.7 Inches	0.738 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR5 RDIMM VLP WT	DDR5 SODIMM Ultra Temperature	DDR5 UDIMM Ultra Temperature
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	32GB	8GB, 16GB, 32GB	16GB, 32GB
Function	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	288pin	262pin	288pin
Bus Width	x80	x64	x64
Voltage	1.1V	1.1V	1.1V
PCB Height	0.738 Inches	1.18 Inches	1.23 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 105°C	-40°C ~ 105°C



DDR4 DRAM Module

Module Type	DDR4 UDIMM	DDR4 SODIMM	DDR4 ECC UDIMM	DDR4 ECC SODIMM
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s
Density	4GB, 8GB, 16GB, 32GB	2GB, 4GB, 8GB, 16GB, 32GB	4GB, 8GB, 16GB, 32GB	2GB, 4GB, 8GB, 16GB, 32GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	288pin	260pin	288pin	260pin
Bus Width	x64	x64	x72	x72
Voltage	1.2V	1.2V	1.2V	1.2V
PCB Height	1.23 Inches	1.18 Inches	1.23 Inches	1.18 Inches
Operating Temperature	0°C ~ 95°C (Tc)			

Module Type	DDR4 RDIMM	DDR4 UDIMM VLP	DDR4 SODIMM VLP	DDR4 ECC UDIMM VLP
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s
Density	4GB, 8GB, 16GB, 32GB, 64GB, 128GB	4GB, 8GB, 16GB	4GB, 8GB	4GB, 8GB, 16GB, 32GB
Function	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	288pin	288pin	260pin	288pin
Bus Width	x72	x64	x64	x72
Voltage	1.2V	1.2V	1.2V	1.2V
PCB Height	1.23 Inches	0.738 Inches	0.7 Inches	0.738 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)

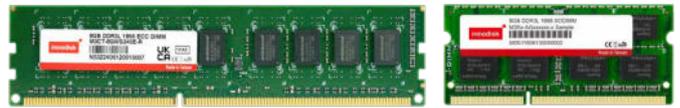
Module Type	DDR4 ECC SODIMM VLP	DDR4 Mini ECC VLP	DDR4 RDIMM VLP	DDR4 Mini RDIMM VLP
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133MT/s,2400 MT/s,2666MT/s
Density	4GB, 8GB	4GB, 8GB, 16GB, 32GB	4GB, 8GB, 16GB, 32GB	4GB, 8GB,16GB
Function	ECC Unbuffered Memory	ECC Unbuffered Memory	Registered Memory with ECC	Registered Memory with ECC
Pin Number	260pin	288pin	288pin	288pin
Bus Width	x72	x72	x72	x72
Voltage	1.2V	1.2V	1.2V	1.2V
PCB Height	0.7 Inches	0.738 Inches	0.738 Inches	0.738 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)

Module Type	DDR4 XR-DIMM	DDR4 UDIMM WT	DDR4 SODIMM WT	DDR4 ECC UDIMM WT
Speed	2400 MT/s,2666 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s
Density	8GB, 16GB	4GB, 8GB, 16GB, 32GB	4GB, 8GB, 16GB, 32GB	4GB, 8GB, 16GB, 32GB
Function	ECC Unbuffered Memory	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	300pin	288pin	260pin	288pin
Bus Width	x72	x64	x64	x72
Voltage	1.2V	1.2V	1.2V	1.2V
PCB Height	1.18 Inches	1.23 Inches	1.18 Inches	1.23 Inches
Operating Temperature	0°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR4 ECC SODIMM WT	DDR4 RDIMM WT	DDR4 UDIMM VLP WT	DDR4 ECC UDIMM VLP
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2400 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s
Density	4GB, 8GB, 16GB, 32GB	4GB, 8GB, 16GB, 32GB, 64GB, 128GB	8GB, 16GB	8GB, 16GB, 32GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	260pin	288pin	288pin	288pin
Bus Width	x72	x72	x64	x72
Voltage	1.2V	1.2V	1.2V	1.2V
PCB Height	1.18 Inches	1.23 Inches	0.738 Inches	0.738 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR4 ECC SODIMM VLP WT	DDR4 RDIMM VLP WT	DDR4 Rugged DIMM
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 3200 MT/s	2400 MT/s
Density	8GB	4GB, 8GB, 16GB, 32GB	16GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory
Pin Number	260pin	288pin	260pin
Bus Width	x72	x72	x64
Voltage	1.2V	1.2V	1.2V
PCB Height	0.7 Inches	0.738 Inches	1.18 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR4 SODIMM Ultra Temperature	DDR4 ECC SODIMM Ultra Temperature
Speed	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s	2133 MT/s, 2400 MT/s, 2666 MT/s, 2933 MT/s, 3200 MT/s
Density	16GB, 32GB	16GB, 32GB
Function	Non-ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	260pin	260pin
Bus Width	x64	x72
Voltage	1.2V	1.2V
PCB Height	1.18 Inches	1.18 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)



DDR3 DRAM Module

Module Type	DDR3 UDIMM	DDR3 SODIMM	DDR3 ECC UDIMM	DDR3 ECC SODIMM	DDR3 RDIMM
Speed	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1333 MT/s, 1600 MT/s, 1866 MT/s
Density	2GB, 4GB, 8GB	1GB, 2GB, 4GB, 8GB	2GB, 4GB, 8GB	2GB, 4GB, 8GB	2GB, 4GB, 8GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory	ECC Unbuffered Memory	Registered Memory with ECC
Pin Number	240pin	204pin	240pin	204pin	240pin
Bus Width	x64	x64	x72	x72	x72
Voltage	1.5V, 1.35V	1.5V, 1.35V	1.5V, 1.35V	1.5V, 1.35V	1.5V, 1.35V
PCB Height	1.18 Inches	1.18 Inches	1.18 Inches	1.18 Inches	1.18 Inches
Operating Temperature	0°C ~ 85°C	0°C ~ 85°C	0°C ~ 85°C	0°C ~ 85°C	0°C ~ 85°C

Module Type	DDR3 UDIMM WT	DDR3 SODIMM WT	DDR3 ECC UDIMM WT	DDR3 ECC SODIMM WT
Speed	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s	1066 MT/s, 1333 MT/s, 1600 MT/s, 1866 MT/s
Density	2GB, 4GB, 8GB	2GB, 4GB, 8GB	2GB, 4GB, 8GB	2GB, 4GB, 8GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory	ECC Unbuffered Memory
Pin Number	240pin	204pin	240pin	204pin
Bus Width	x64	x64	x72	x72
Voltage	1.5V, 1.35V	1.5V, 1.35V	1.5V, 1.35V	1.5V, 1.35V
PCB Height	1.18 Inches	1.18 Inches	1.18 Inches	1.18 Inches
Operating Temperature	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C	-40°C ~ 85°C

DDR2 DRAM Module

Module Type	DDR2 UDIMM	DDR2 SODIMM	DDR2 ECC UDIMM	DDR2 SODIMM WT
Speed	533 MT/s, 667 MT/s, 800 MT/s	533 MT/s, 667 MT/s, 800 MT/s	667 MT/s, 800 MT/s	533 MT/s, 667 MT/s, 800 MT/s
Density	1GB, 2GB, 4GB	512MB, 1GB, 2GB, 4GB	1GB, 2GB	1GB, 2GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory	ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	240pin	200pin	240pin	200pin
Bus Width	x64	x64	x72	x64
Voltage	1.8V	1.8V	1.8V	1.8V
PCB Height	1.18 Inches	1.18 Inches	1.18 Inches	1.18 Inches
Operating Temperature	0°C ~ 85°C	0°C ~ 85°C	0°C ~ 85°C	-40°C ~ 85°C

DDR1 DRAM Module

Module Type	DDR1 UDIMM	DDR1 SODIMM
Speed	333 MT/s, 400 MT/s	333 MT/s, 400 MT/s
Density	512MB, 1GB	256MB, 512MB, 1GB
Function	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	184pin	200pin
Bus Width	x64	x64
Voltage	2.6V	2.6V
PCB Height	1.16 inches	1.25 Inches
Operating Temperature	0°C ~ 70°C	0°C ~ 70°C

SDRAM DRAM Module

Module Type	SDRAM SODIMM
Speed	100 MT/s, 133 MT/s
Density	128MB, 256MB, 512MB
Function	Non-ECC Unbuffered Memory
Pin Number	144pin
Bus Width	x64
Voltage	3.3V
PCB Height	1.25 Inches
Operating Temperature	0°C ~ 70°C

FLASH STORAGE



PCIe - M.2

Model name	M.2 (P30) 4TE2	M.2 (P30) 4TE3	M.2 (P30) 4IE3	M.2 (P42) 3TE4		M.2 (P42) 3TE8
Connector	M Key	M Key	M Key	M Key	B+M Key	M Key
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 3 x4	PCIe Gen 3 x2	PCIe Gen 3 x4
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC		3D TLC
Capacity	128GB ~ 1TB	128GB ~ 1TB	40GB ~ 160GB	128GB ~ 1TB		128GB ~ 1TB
Max. Channel	2	2	2	4		4
Sequential R/W (MB/sec, max.)	1700/1500	1800/1450	1800/1450	2600/1800	1750/1500	3350/2600
Max. Power consumption	3.1W	3.1W	3.3W	4.0W	3.3W	4.2W
External DRAM Buffer	N	N	N	N		N
iData Guard	Y	Y	Y	N		Y
iPower Guard	Y	N	N	Y		Y
PLP (iCell)	N	N	N	N		N
AES	Y	Y	Y	Y		Y
TCG Opal	Y	Y	Y	Y		Y
S.M.A.R.T	Y	Y	Y	Y		Y
Dimension (WxLxH/mm)	ST: 22.0 x 30.0 x 3.5 WT: 25.0 x 30.0 x 15	ST: 22.0 x 30.0 x 3.5 WT: 25.0 x 30.0 x 15	ST: 22.0 x 30.0 x 3.5 WT: 25.0 x 30.0 x 15	ST: 22.0 x 42.0 x 3.0 WT: 22.0 x 42.0 x 3.6		ST: 22.0 x 42.0 x 2.8 WT: 25.0 x 42.0 x 14.5

Model name	M.2 (P42) 3IE8	M.2 (P42) 4TE2	M.2 (P42) 4IE2	M.2 (P42) 4TE3	M.2 (P42) 4IE3
Connector	M Key				
Interface	PCIe Gen 3 x4	PCIe Gen 4 x4			
Flash Type	iSLC (3D TLC)	3D TLC	iSLC (3D TLC)	3D TLC	iSLC (3D TLC)
Capacity	40GB ~ 320GB	128GB ~ 2TB	40GB ~ 640GB	128GB ~ 2TB	40GB ~ 640GB
Max. Channel	4	4	4	4	4
Sequential R/W (MB/sec, max.)	3350/2600	3550/2950	3550/2950	3600/3150	3500/3000
Max. Power consumption	4.2W	5.0W	4.8W	4.8W	4.8W
External DRAM Buffer	N	N	N	N	N
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	Y	Y	Y	Y	Y
TCG Opal	Y	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	ST: 22.0 x 42.0 x 2.8 WT: 25.0 x 42.0 x 14.5	ST: 22.0 x 42.0 x 3.5 WT: 25.0 x 42.0 x 14.5	ST: 22.0 x 42.0 x 3.5 WT: 25.0 x 42.0 x 14.5	ST: 22.0 x 42.0 x 3.5 WT: 25.0 x 42.0 x 14.5	ST: 22.0 x 42.0 x 3.5 WT: 25.0 x 42.0 x 14.5

Model name	M.2 (P80) 3TE4		M.2 (P80) 3TE8	M.2 (P80) 3IE8	InnoOSR M.2 (P80) 3TO8	M.2 (P80) 3TG3-P
Connector	M Key	B+M Key	M Key	M Key	M Key	M Key
Interface	PCIe Gen 3 x4	PCIe Gen 3 x2	PCIe Gen 3 x4	PCIe Gen 3 x4	PCIe Gen 3 x4	PCIe Gen 3 x4
Flash Type	3D TLC		3D TLC	3D TLC	3D TLC	3D TLC
Capacity	128GB ~ 2TB		128GB ~ 2TB	40GB ~ 640GB	128GB ~ 2TB	128GB ~ 2TB
Max. Channel	4		4	4	4	8
Sequential R/W (MB/sec, max.)	2600/1800	1750/1500	3400/2750	3400/2750	3400/2750	3400/2800
Max. Power consumption	4.0W	3.4W	4.3W	4.3W	5.8W	6.3W
External DRAM Buffer	N		N	N	N	Y
iData Guard	N		Y	Y	Y	Y
iPower Guard	Y		Y	Y	Y	Y
PLP (iCell)	N		N	N	N	N
AES	Y		Y	Y	Y	Y
TCG Opal	Y		Y	Y	N	Y
S.M.A.R.T	Y		Y	Y	Y	Y
Dimension (WxLxH/mm)	ST: 22.0 x 80.0 x 3.0 WT: 22.0 x 80.0 x 3.6		ST: 22.0 x 80.0 x 2.15 WT: 25.0 x 80.0 x 14.5	ST: 22.0 x 80.0 x 2.15 WT: 25.0 x 80.0 x 14.5	22.0 x 80.0 x 3.5	ST: 22.0 x 80.0 x 3.95 WT: 23.6 x 80.0 x 14.65

Model name	M.2 (P80) 4TE2	M.2 (P80) 4IE2	M.2 (P80) 4TE3	M.2 (P80) 4IE3	M.2 (P80) 4TG2-P
Connector	M Key	M Key	M Key	M Key	M Key
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	128GB ~ 2TB	40GB ~ 640GB	128GB ~ 2TB	40GB ~ 640GB	256GB ~ 4TB
Max. Channel	4	4	4	4	8
Sequential R/W (MB/sec, max.)	3550/3300	3550/3300	3650/3300	3550/3200	7150/5800
Max. Power consumption	5.4W	5.1W	4.8W	4.8W	7.9W
External DRAM Buffer	N	N	N	N	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	Y	Y	Y	Y	Y
AES	Y	Y	Y	Y	Y
TCG Opal	Y	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	ST: 22.0 x 80.0 x 3.8 WT: 25.0 x 80.0 x 14.45	ST: 22.0 x 80.0 x 3.8 WT: 25.0 x 80.0 x 14.45	ST: 22.0 x 80.0 x 3.5 WT: 25 x 80.0 x 14.45	ST: 22.0 x 80.0 x 3.5 WT: 25 x 80.0 x 14.45	ST: 22.0 x 80.0 x 4.0 WT: 25 x 80.0 x 14.45

Model name	M.2 (P80) 4TS2-P	M.2 (P80) 4IG2-P	M.2 (P110) 4TG2-P	M.2 (P110) 4TS2-P	M.2 (P110) 4IG2-P
Connector	M Key	M Key	M Key	M Key	M Key
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	3D TLC	iSLC (3D TLC)
Capacity	200GB ~ 3.2TB	160GB ~ 1.28TB	512GB ~ 8TB	400GB ~ 6.4TB	160GB ~ 2.56TB
Max. Channel	8	8	8	8	8
Sequential R/W (MB/sec, max.)	7150/5250	7100/5250	7100 /5300	7000/5450	7000/5450
Max. Power consumption	6.2W	10.2W	10.6W	10.5W	10.5W
External DRAM Buffer	Y	Y	Y	Y	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	Y	N	Y	Y	Y
AES	Y	Y	Y	Y	Y
TCG Opal	Y	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	ST: 22.0 x 80.0 x 4.0 WT: 25 x 80.0 x 14.45	ST: 22.0 x 80.0 x 4.0 WT: 25 x 80.0 x 14.45	ST: 22.0 x 110.0 x 4.0 WT: 25 x 110.0 x 14.45	ST: 22.0 x 110.0 x 4.0 WT: 25 x 110.0 x 14.45	ST: 22.0 x 110.0 x 4.0 WT: 25 x 110.0 x 14.45



PCIe - U.2

Model name	U.2 SSD 4TG2-P	U.2 SSD 4TS2-P	U.2 SSD 4IG2-P	U.2 SSD 5TS-P
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 5 x4
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	512GB ~ 16TB	400GB ~ 12.8TB	160GB ~ 1.28TB	1.92TB ~ 7.68TB
Max. Channel	8	8	8	16
Sequential R/W (MB/sec, max.)	7150/6150	7150/6100	7050/5200	14000/10000
Max. Power consumption	13.5W	12.6W	12.1W	22W
External DRAM Buffer	Y	Y	Y	Y
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	Y	Y	Y	Y
AES	Y	Y	Y	N
TCG Opal	Y	Y	Y	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	100.0 x 69.85 x 6.9	100.0 x 69.85 x 6.9	100.0 x 69.85 x 6.9	100 x 69.85 x 14.8



PCIe - CFexpress

Model name	CFexpress 4TE2	CFexpress 4TE3	CFexpress 4IE3
Interface	PCIe Gen 3 ×2	PCIe Gen 3 ×2	PCIe Gen 3 ×2
Connector	21pin	21pin	21pin
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)
Capacity	128GB ~ 1TB	128GB ~ 2TB	40GB ~ 640GB
Max. Channel	4	4	4
Sequential R/W (MB/sec, max.)	1750/1650	1750/1500	1750/1650
Max. Power consumption	3.4W	3W	2.9W
iData Guard	Y	Y	Y
iPower Guard	Y	Y	Y
AES	Y	Y	Y
TCG Opal	Y	Y	Y
S.M.A.R.T	Y	Y	Y
H/W Write Protect	Y	Y	Y
Dimension (WxLxH/mm)	29.6 × 38.5 × 3.8	29.6 × 38.5 × 3.8	29.6 × 38.5 × 3.8

Model name	CFexpress 3TE8	CFexpress 3IE8
Interface	PCIe Gen 3 ×2	PCIe Gen 3 ×2
Connector	21pin	21pin
Flash Type	3D TLC	iSLC (3D TLC)
Capacity	128GB ~ 2TB	40GB ~ 640GB
Max. Channel	4	4
Sequential R/W (MB/sec, max.)	3400/2750	3400/2750
Max. Power consumption	5.9W	5.9W
iData Guard	Y	Y
iPower Guard	Y	Y
AES	Y	Y
TCG Opal	Y	Y
S.M.A.R.T	Y	Y
H/W Write Protect	Y	Y
Dimension (WxLxH/mm)	29.6 × 38.5 × 3.8	29.6 × 38.5 × 3.8



PCIe - EDSFF

Model name	E1.S 4TG2-P	E1.S 4TS2-P	E3.S 4TS2-P	E1.S 5TS-P	E3.S 5TS-P
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 5	PCIe Gen 5
Flash Type	3D TLC	3D TLC	3D TLC	3D TLC	3D TLC
Capacity	512GB ~ 8TB	400GB ~ 6.4TB	400GB ~ 12.8TB	1.92TB ~ 7.68TB	1.92TB ~ 7.68TB
Max. Channel	8	8	8	16	16
Sequential R/W (MB/sec, max.)	6900/4700	6900/4700	5050/4750	14000/10000	14000/10000
Max. Power consumption	12W	12W	12W	<25W	<25W
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
AES	Y	Y	Y	N	N
TCG Opal	Y	Y	Y	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	5.9mm: 31.5 x 111.5 x 5.9 9.5mm: 33.75 x 118.75 x 9.5 15mm: 33.75 x 118.75 x 15	5.9mm: 31.5 x 111.5 x 5.9 9.5mm: 33.75 x 118.75 x 9.5 15mm: 33.75 x 118.75 x 15	76 x 112.75 x 7.5	5.9mm: 31.5 x 111.5 x 5.9 9.5mm: 33.75 x 118.75 x 9.5 15mm: 33.75 x 118.75 x 15	76 x 112.75 x 7.5



PCIe - nanoSSD

Model name	nanoSSD PCIe 4TE3
Interface	ST: PCIe Gen 4 x2 WT: PCIe Gen 3 x1
Flash Type	3D TLC
Capacity	128GB ~ 1TB
Max. Channel	4
Sequential R/W (MB/sec, max.)	3500/3300
Max. Power consumption	4.5W
External DRAM Buffer	N
iData Guard	Y
iPower Guard	Y
PLP (iCell)	N
S.M.A.R.T	Y
Dimension (WxLxH/mm)	16.0 x 20.0 x 2.0



SATA PATA - M.2

Model name	InnoOSR M.2 (S42) 3TO7	M.2 (S42) 3TE7	M.2 (S42) 3IE7	M.2 (S42) 3TEB	M.2 (S42) 3TG6-P
Connector	B+M Key	B+M Key	B+M Key	B+M Key	B+M Key
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC	3D TLC
Capacity	32GB ~ 512GB	32GB ~ 512GB	20GB ~ 320GB	64GB ~ 2TB	128GB ~ 512GB
Max. Channel	4	4	4	2	4
Sequential R/W (MB/sec, max.)	560/330	560/330	560/530	550/510	560/510
Max. Power consumption	1.6W	1.6W	2.8W	1.2W	2.4W
External DRAM Buffer	N	N	N	N	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	N	N	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.5

Model name	M.2 (S42) 3SE4	M.2 (S42) 3ME4	M.2 (S42) 3IE4	M.2 (S42) 3SE3	M.2 (S42) 3ME3
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	SLC	MLC	iSLC (MLC)	SLC	MLC
Capacity	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB	4GB ~ 32GB	8GB ~ 128GB
Max. Channel	2	2	2	4	2
Sequential R/W (MB/sec, max.)	520/360	530/210	530/380	210/110	220/80
Max. Power consumption	0.6W	1.4W	1.5W	1.2W	1.3W
External DRAM Buffer	N	N	N	N	N
iData Guard	N	N	N	Y	Y
iPower Guard	Y	Y	Y	N	N
PLP (iCell)	N	N	N	N	N
AES	N	N	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.2	22.0 x 42.0 x 3.2	22.0 x 42.0 x 3.5	22.0 x 42.0 x 3.5

Model name	M.2 (S42) 3IE3	M.2 (S42) 3SE2-P	M.2 (S42) 3MG2-P	M.2 (S42) 3IE2-P	InnoOSR M.2 (S80) 3TO7
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	iSLC (MLC)	SLC	MLC	iSLC (MLC)	3D TLC
Capacity	8GB ~ 64GB	8GB ~ 64GB	32GB ~ 256GB	16GB ~ 128GB	64GB ~ 2TB
Max. Channel	2	4	4	4	4
Sequential R/W (MB/sec, max.)	240/160	520/330	560/360	560/450	560/470
Max. Power consumption	1.3W	1.6W	1.1W	1.1W	2.6W
External DRAM Buffer	N	Y	Y	Y	N
iData Guard	Y	Y	Y	Y	Y
iPower Guard	N	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	N	Y	Y	Y	N
TCG Opal	N	Y	Y	Y	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 42.0 x 3.5	22.0 x 80.0 x 3.5			

Model name	M.2 (S80) 3TE7	M.2 (S80) 3IE7	M.2 (S80) 3TEB	M.2 (S80) 3TG9-P	M.2 (S80) 3TG6-P
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	3D TLC	3D TLC
Capacity	32GB ~ 1TB	20GB ~ 640GB	64GB ~ 1TB	512GB ~ 4TB	128GB ~ 2TB
Max. Channel	4	4	2	4	4
Sequential R/W (MB/sec, max.)	550/370	550/490	550/500	540/520	560/510
Max. Power consumption	2.0W	2.0W	1.2W	2.6W	2.6W
External DRAM Buffer	N	N	N	Y	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	Y	Y
AES	Y	Y	N	Y	Y
TCG Opal	N	N	N	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 80.0 x 3.5				

Model name	M.2 (S80) 3SE4	M.2 (S80) 3ME4	M.2 (S80) 3IE4	M.2 (S80) 3SE3	M.2 (S80) 3SE2-P
Connector	B+M Key	B+M Key	B+M Key	B+M Key	B+M Key
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	SLC	MLC	iSLC (MLC)	SLC	SLC
Capacity	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB	8GB ~ 128GB	8GB ~ 256GB
Max. Channel	2	2	2	4	4
Sequential R/W (MB/sec, max.)	520/360	530/210	530/360	380/220	520/340
Max. Power consumption	1.6W	0.9W	0.9W	2.0W	2.2W
External DRAM Buffer	N	N	N	N	Y
iData Guard	N	N	N	Y	Y
iPower Guard	Y	Y	Y	N	Y
PLP (iCell)	N	N	N	N	Y
AES	N	N	N	N	Y
TCG Opal	N	N	N	N	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 80.0 x 2.15	22.0 x 80.0 x 3.2	22.0 x 80.0 x 3.2	22.0 x 80.0 x 3.5	22.0 x 80.0 x 3.5

Model name	M.2 (S80) 3MG2-P	M.2 (S80) 3IE2-P	M.2 (S30) 3ME4	M.2 (S60) 3ME3
Connector	B+M Key	B+M Key	B+M Key	B+M Key
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	iSLC (MLC)	MLC	MLC
Capacity	16GB ~ 1TB	32GB ~ 512GB	8GB ~ 128GB	32GB ~ 512GB
Max. Channel	4	4	2	4
Sequential R/W (MB/sec, max.)	530/450	560/450	520/120	380/200
Max. Power consumption	3.7W	3.7W	1.6W	1.3W
External DRAM Buffer	Y	Y	N	N
iData Guard	Y	Y	N	Y
iPower Guard	Y	Y	Y	N
PLP (iCell)	Y	Y	N	N
AES	Y	Y	N	N
TCG Opal	Y	Y	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	22.0 x 80.0 x 3.5	22.0 x 80.0 x 3.5	22.0 x 30.0 x 3.2	22.0 x 60.0 x 3.5



SATA PATA - 2.5"SSD

Model name	2.5" SATA SSD 3TE7	2.5" SATA SSD 3IE7	2.5" SATA SSD 3TEB	2.5" SATA SSD 3TG9-P	2.5" SATA SSD 3TS9-P
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	3D TLC	3D TLC
Capacity	32GB ~ 1TB	20GB ~ 320GB	128GB ~ 1TB	256GB ~ 8TB	256GB ~ 4TB
Max. Channel	4	4	2	4	4
Sequential R/W (MB/sec, max.)	560/525	560/525	550/500	540/520	540/520
Max. Power consumption	3.6W	3.6W	4.4W	4.0W	4.0W
External DRAM Buffer	N	N	N	Y	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	Y	Y
AES	Y	Y	N	Y	Y
TCG Opal	N	N	N	Y	Y
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	69.8 x 100.10 x 6.9	69.8 x 100.10 x 6.9	69.8 x 100.1 x 6.9	69.8 x 100.10 x 6.9	69.8 x 100.10 x 6.9

Model name	2.5" SATA SSD 3TG6-P	2.5" SATA SSD 3TS6-P	2.5" SATA SSD 3IE6-P	2.5" SATA SSD 3TV6-P
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	128GB ~ 4TB	200GB ~ 3.2TB	80GB ~ 640GB	128GB ~ 4TB
Max. Channel	4	4	4	4
Sequential R/W (MB/sec, max.)	540 /470	540 /470	540 /470	500/460
Max. Power consumption	6.0W	4.1W	6.0W	3.5W
External DRAM Buffer	Y	Y	Y	Y
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	Y	Y	Y	Y
AES	Y	Y	Y	Y
TCG Opal	Y	Y	Y	Y
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	69.8 x 100.10 x 6.9			

Model name	2.5" SATA SSD 3TR6-P	2.5" SATA SSD 3SE4	2.5" SATA SSD 3ME4	2.5" SATA SSD 3IE4
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	3D TLC	SLC	MLC	iSLC (MLC)
Capacity	128GB ~ 2TB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB
Max. Channel	4	2	2	2
Sequential R/W (MB/sec, max.)	560/510	520/360	530/210	530/380
Max. Power consumption	4.2W	1.1W	0.8W	0.8W
External DRAM Buffer	Y	N	N	N
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	Y	N	N	N
AES	Y	N	N	N
TCG Opal	Y	N	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	69.8 x 100.10 x 9.5	69.85 x 100.10 x 6.9	69.8 x 100.10 x 6.9	69.8 x 100.10 x 6.9

Model name	2.5" SATA SSD 3SE2-P	2.5" SATA SSD 3MG2-P	2.5" SATA SSD 3MR2-P	InnoOSR 2.5" SATA SSD 3TO7
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	SLC	MLC	MLC	3D TLC
Capacity	8GB ~ 512GB	8GB ~ 2TB	8GB ~ 1TB	32GB ~ 2TB
Max. Channel	4	4	4	4
Sequential R/W (MB/sec, max.)	520/420	520/480	520/450	560/525
Max. Power consumption	2.2W	6.0W	6.0W	3.6 W
External DRAM Buffer	Y	Y	Y	N
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	Y	Y	Y	N
AES	Y	Y	Y	N
TCG Opal	Y	Y	Y	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	8GB ~ 256GB: 69.8 x 99.8 x 9.2 512GB: 69.8 x 99.8 x 9.5	8GB ~ 1TB: 69.8 x 100.1 x 6.9 2TB: 69.8 x 100.0 x 9.5	69.8 x 99.8 x 9.5	69.8 x 100.1 x 6.9



SATA PATA - SATA Slim

Model name	SATA Slim 3TE7	SATA Slim 3IE7	SATA Slim 3TG6-P	SATA Slim 3SE4	SATA Slim 3ME4	SATA Slim 3IE4	SATA Slim 3MG2-P
Interface	SATA III 6.0Gb/s						
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	SLC	MLC	iSLC (MLC)	MLC
Capacity	32GB ~ 1TB	40GB ~ 640GB	128GB ~ 1TB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB	8GB ~ 256GB
Max. Channel	4	4	4	2	2	2	4
Sequential R/W (MB/sec, max.)	550/490	550/490	560/520	520/360	530/210	530/360	520/290
Max. Power consumption	0.8W	0.8W	3.1W	1.1 W	0.8W	0.8W	2.6W
External DRAM Buffer	N	N	Y	N	N	N	Y
iData Guard	Y	Y	Y	N	N	N	Y
iPower Guard	Y	Y	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N	N	N
AES	Y	Y	Y	N	N	N	Y
TCG Opal	N	N	Y	N	N	N	Y
S.M.A.R.T	Y	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	54.0 x 39.0 x 4.0						



SATA PATA - SATADOM

Form Factor	SATADOM-SV/SH	SATADOM-SV/SH	SATADOM-SV/SH	SATADOM-SV/SH	SATADOM-SV/SH
Model name	SATADOM 3TE7	SATADOM 3IE7	SATADOM 3ME4	SATADOM 3IE4	SATADOM 3SE4
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	3D TLC	iSLC (3D TLC)	MLC	iSLC (MLC)	SLC
Capacity	32GB ~ 256GB	20GB ~ 80GB	8GB ~ 128GB	8GB ~ 64GB	8GB ~ 32GB
Max. Channel	2	2	2	2	2
Sequential R/W (MB/sec, max.)	510/140	550/485	530/120	530/350	520/260
Max. Power consumption	1.14W	1.3W	1.27W	0.95W	1.58W
External DRAM Buffer	N	N	N	N	N
iData Guard	Y	Y	N	N	N
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	Y	Y	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	SV: 40.4 x 21.03 x 10.4 SH: 32.7 x 18 x 14.15	SV: 40.4 x 21.03 x 10.4 SH: 32.7 x 18 x 14.15	SV: 40.4 x 21.03 x 10.4 SH: 32.7 x 18 x 15.15	SV: 40.4 x 21.03 x 10.4	SV: 40.4 x 21.03 x 10.4 SH: 32.7 x 18 x 14.15

Form Factor	SATADOM-SL/SH type D	SATADOM-SL/SH type D	SATADOM-SL/SH type D	SATADOM-SL/SH type D	SATADOM-SL/SH type D
Model name	SATADOM 3TE7	SATADOM 3IE7	SATADOM 3ME4	SATADOM 3IE4	SATADOM 3SE4
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6Gb/s
Flash Type	3D TLC	iSLC (3D TLC)	MLC	iSLC (MLC)	SLC
Capacity	32GB ~ 256GB	20GB ~ 80GB	8GB ~ 128GB	8GB ~ 64GB	8GB ~ 32GB
Max. Channel	2	2	2	2	2
Sequential R/W (MB/sec, max.)	510/140	550/485	530/120	530/350	520/260
Max. Power consumption	1.5W	1.85W	1.02W	1.02W	0.95W
External DRAM Buffer	N	N	N	N	N
iData Guard	Y	Y	N	N	N
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	Y	Y	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	SL: 29.6 x 33.06 x 10.5 SH(D):30 x 20.79 x 15.20	SL: 29.6 x 33.06 x 10.5 SH(D):30 x 20.79 x 15.20	SL: 29.6 x 33.06 x 10.5 SH(D): 30 x 20.79 x 15.15	SL: 29.6 x 33.06 x 10.5	SL: 29.6 x 33.06 x 10.5 SH(D):30 x 20.79 x 15.20

Form Factor	SATADOM-SH type C	SATADOM-SH type C	SATADOM-MV	SATADOM-MV	SATADOM-ML/MH
Model name	SATADOM 3ME4	SATADOM 3SE4	SATADOM 3IE4	SATADOM 3ME4	SATADOM 3TG6-P
Interface	SATA III 6Gb/s	SATA III 6.0Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	SLC	iSLC (MLC)	MLC	3D TLC
Capacity	8GB ~ 128GB	8GB ~ 32GB	8GB ~ 64GB	8GB ~ 128GB	128GB ~ 256GB
Max. Channel	2	2	2	2	4
Sequential R/W (MB/sec, max.)	530/120	520/260	530/340	530/120	560/290
Max. Power consumption	1.02W	1.49W	1.72W	1.08W	2.14W
External DRAM Buffer	N	N	N	N	Y
iData Guard	N	N	N	N	Y
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	N	N	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	32.7 x 18 x 14.5	32.7 x 18 x 14.5	41.55 x 25.26 x 10.4	41.55 x 25.26 x 10.4	ML: 37.17 x 31.5 x 12.6

Form Factor	SATADOM-ML/MH	SATADOM-ML/MH	SATADOM-ML/MH	SATADOM-ML/MH
Model name	SATADOM 3MG2-P	SATADOM 3IE4	SATADOM 3ME4	SATADOM 3SE4
Interface	SATA III 6.0Gb/s	SATA III 6Gb/s	SATA III 6Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	iSLC (MLC)	MLC	SLC
Capacity	32GB-256GB	16GB ~ 128GB	32GB ~ 256GB	8GB ~ 64GB
Max. Channel	4	2	2	2
Sequential R/W (MB/sec, max.)	560/180	530/360	530/210	520/360
Max. Power consumption	2.68W	0.815W	0.815W	1.58W
External DRAM Buffer	Y	N	N	N
iData Guard	Y	Y	N	N
iPower Guard	Y	Y	Y	Y
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	ML: 37.17 x 31.5 x 12.6	ML: 31.2 x 36.7 x 10.7 MH: 23.5 x 33.6 x 14.8	ML: 31.2 x 36.7 x 10.7 MH: 23.5 x 33.6 x 14.8	ML: 36.7 x 31.2 x 10.7



SATA PATA - mSATA

Model name	mSATA 3TE7	mSATA 3IE7	mSATA 3TG6-P	mSATA 3SE4	mSATA 3ME4	mSATA 3IE4
Interface	SATA III 6.0Gb/s					
Flash Type	3D TLC	iSLC (3D TLC)	3D TLC	SLC	MLC	iSLC (MLC)
Capacity	32GB ~ 1TB	20GB ~ 640GB	128GB ~ 1TB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB
Max. Channel	4	4	4	2	2	2
Sequential R/W (MB/sec, max.)	560/525	550 / 490	560/510	525/350	535/210	530/365
Max. Power consumption	2.2W	2.7W	2.8W	1.4W	0.6W	0.6W
External DRAM Buffer	N	N	Y	N	N	N
iData Guard	Y	Y	Y	N	N	N
iPower Guard	Y	Y	Y	Y	Y	Y
PLP (iCell)	Y	N	N	N	N	N
AES	Y	Y	Y	N	N	N
TCG Opal	N	N	Y	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	29.8 x 50.8 x 3.7					

Model name	mSATA 3MG2-P	mSATA mini 3TE7	mSATA mini 3IE7	mSATA mini 3SE4	mSATA mini 3ME4	mSATA mini 3IE4
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	3D TLC	iSLC (3D TLC)	SLC	MLC	iSLC (MLC)
Capacity	8GB ~ 512GB	32GB ~ 256GB	20GB ~ 320GB	8GB ~ 64GB	8GB ~ 128GB	8GB ~ 64GB
Max. Channel	4	4	4	2	2	2
Sequential R/W (MB/sec, max.)	520/450	560/520	560/520	525/360	430/125	530/340
Max. Power consumption	2.2W	0.6W	2.8W	1.3W	0.6W	0.6W
External DRAM Buffer	Y	N	N	N	N	N
iData Guard	Y	Y	Y	N	N	N
iPower Guard	Y	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N	N
AES	Y	Y	Y	N	N	N
TCG Opal	Y	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	29.85 x 50.8 x 3.6	30 x 26.8 x 3.6	30 x 26.8 x 3.6	30 x 26.8 x 3.6	30 x 26.8 x 3.4	30 x 26.8 x 3.4



SATA PATA - CFast

Model name	CFast 3TE7	CFast 3IE7	CFast 3SE4	CFast 3ME4	CFast 3IE4	CFast 3MG2-P
Interface	SATA III 6.0Gb/s					
Flash Type	3D TLC	iSLC (3D TLC)	SLC	MLC	iSLC	MLC
Capacity	32GB ~ 512GB	20GB ~ 320GB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB	32GB ~ 256GB
Max. Channel	4	4	2	2	2	4
Sequential R/W (MB/sec, max.)	560/520	550/490	520/360	530/210	530/360	560/350
Max. Power consumption	1.8W	1.8W	1.6W	0.9W	0.8W	2.5W
External DRAM Buffer	N	N	N	N	N	Y
iData Guard	Y	Y	N	N	N	Y
iPower Guard	Y	Y	Y	Y	Y	Y
PLP (iCell)	N	N	N	N	N	N
AES	Y	Y	N	N	N	N
TCG Opal	N	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	42.8 x 36.4 x 3.6					



SATA PATA - nanoSSD

Model name	nanoSSD 3ME3	nanoSSD 3IE3	nanoSSD 3TE7
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	iSLC (MLC)	3D TLC
Capacity	16GB	16GB	32GB ~ 256GB
Max . Channel	4	4	4
Sequential R/W (MB/sec, max .)	410/140	440/260	540/260
Max . Power consumption	2.3W	2.3W	1.9W
External DRAM Buffer	N	N	N
iData Guard	Y	Y	N
iPower Guard	Y	Y	N
PLP (iCell)	N	N	N
S.M.A.R.T	Y	Y	Y
Dimension (WxLxH/mm)	16.0 x 20.0 x 1.7	16.0 x 20.0 x 1.7	16.0 x 20.0 x 1.7



SATA PATA - CF

Model name	iCF 9000	iCF 1SE	iCF 1ME	iCF 1ME2	iCF 1SE2	iCF 1SE3
Interface	PATA	PATA	PATA	PATA	PATA	PATA
Connector	50pin CF connector	50pin CF connector	50pin CF connector	50pin CF connector	50pin CF connector	50pin CF connector
Flash Type	SLC	SLC	MLC	MLC	SLC	SLC
Capacity	1GB ~ 64GB	512MB ~ 8GB	8GB ~ 256GB	8GB ~ 256GB	1GB ~ 64GB	128MB ~ 64GB
Max. Channel	4	2	2	2	2	2
Sequential R/W (MB/sec, max.)	110/100	40/30	110/110	85/55	75/65	63/55
Max. Power consumption	0.95W(5V x 190mA) 0.63W(3.3V x 190mA)	0.75W(5V x 150mA) 0.5W(3.3V x 150mA)	0.76w(5V x 155mA) 0.52W(3.3V x 155 mA)	0.85W(5Vx170mA)	1.4W(5V x 280mA)	0.7W (5V x 140mA)
External DRAM Buffer	N	N	N	N	N	N
iData Guard	N	N	N	N	N	N
iPower Guard	N	N	N	N	N	N
PLP (iCell)	N	N	N	N	N	N
AES	N	N	N	N	N	N
TCG Opal	N	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	42.8 x 36.4 x 3.3	42.8 x 36.4 x 3.3	42.8 x 36.4 x 3.3	42.8 x 36.4 x 3.3	42.8 x 36.4 x 3.3	42.8 x 36.4 x 3.3



SATA PATA - EDC

Form Factor	EDC Vertical	EDC Vertical	EDC Horizontal	EDC Horizontal
Model name	EDC 1ME Vertical Type	EDC 1SE Vertical Type	EDC 1SE Horizontal Type	EDC 1ME Horizontal Type
Interface	PATA	PATA	PATA	PATA
Connector	44 pin	40/44 pin	40/44 pin A~F type	44 pin A~F type
Flash Type	MLC	SLC	SLC	MLC
Capacity	8GB ~ 128GB	512MB ~ 4GB	512MB ~ 8GB	8GB ~ 256GB
Max. Channel	2	2	2	2
Sequential R/W (MB/sec, max.)	110/75	40/28	40/28	110/75
Max. Power consumption	1.05W(5V x 150mA) 0.69W(3.3V x 150mA)	0.75W(5V x 150mA) 0.5W(3.3V x 150mA)	0.75W(5V x 150mA) 0.5W(3.3V x 150mA)	1.05W(5V x 150mA) 0.69W(3.3V x 150mA)
External DRAM Buffer	N	N	N	N
iData Guard	N	N	N	N
iPower Guard	N	N	N	N
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	50.3 x 27.3 x 7.5	40 pin: 60.2 x 27.3 x 6.4 44 pin: 50.3 x 27.3 x 5.8	40 pin: 55 x 32.4 x 18.3 44 pin: 48 x 32.6 x 12.9 (for different connectors, the dimensions may have slight differences)	48 x 32.6 x 7.3 (for different connectors, the dimensions may have slight differences)



Others - USB

Form Factor	USB Drive	USB Drive	USB Drive	USB Drive
Model name	USB Drive 2SE2	USB Drive 2ME2	USB Drive 3SE	USB Drive 3ME
Interface	USB 2.0	USB 2.0	USB 3.0	USB 3.0
Connector	Type A	Type A	Type A	Type A
Flash Type	SLC	MLC	SLC	MLC
Capacity	512MB ~ 16GB	8GB ~ 64GB	4GB ~ 32GB	8GB ~ 64GB
Ma x . Channel	1	1	1	1
Sequential R/W (MB/sec, ma x .)	30/30	40/30	100/85	100/50
Ma x . Power consumption	0.35 W	0.43W	0.70 W	0.70W
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	N	N
iPower Guard	Y	Y	Y	N
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	N	N	Y	Y
Dimension (WxLxH/mm)	16.60 x 61.45 x 7.60	16.60 x 61.45 x 7.60	16.6 x 48.55 x 7.6	16.6 x 48.55 x 7.6

Form Factor	USB Drive	USB EDC Horizontal	USB EDC Horizontal	USB EDC Horizontal
Model name	USB Drive 3IE4	USB EDC H 2SE2	USB EDC H 2ME2	USB EDC H 2ME3
Interface	USB 3.0	USB 2.0	USB 2.0	USB 2.0
Connector	Type A	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm
Flash Type	iSLC (3D TLC)	SLC	MLC	MLC
Capacity	16GB ~ 128GB	512MB ~ 32GB	4GB ~ 64GB	8GB ~ 32GB
Ma x . Channel	2	1	1	1
Sequential R/W (MB/sec, ma x .)	330/125	30/20	40/25	35/35
Ma x . Power consumption	1.3W	0.51W	0.45W	0.66W
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	N	N	N
Dimension (WxLxH/mm)	16.6 x 48.55 x 7.6	26.6 x 36.9 x 6.75 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.85 (Pin Pitch 2.54mm)	26.6 x 36.9 x 6.75 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.85 (Pin Pitch 2.54mm)	26.6 x 36.9 x 6.36 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.85 (Pin Pitch 2.54mm)

Form Factor	USB EDC Horizontal	USB EDC Vertical	USB EDC Vertical	USB EDC Vertical
Model name	USB EDC H 3IE4	USB EDC V 2SE2	USB EDC V 3SE	USB EDC V 3ME
Interface	USB 3.0	USB 2.0	USB 3.0	USB 3.0
Connector	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm	Standard, 9pin	Standard, 20pin, 2.00mm	Standard, 20pin, 2.00mm
Flash Type	iSLC (3D TLC)	SLC	SLC	MLC
Capacity	16GB ~ 128GB	512MB ~ 16GB	4GB ~ 32GB	8GB ~ 64GB
Max. Channel	2	1	1	1
Sequential R/W (MB/sec, max.)	330/125	30/30	110/85	100/50
Max. Power consumption	1.3W	0.54W	0.79W	0.79W
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	N	N
iPower Guard	Y	Y	N	Y
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	N	Y	Y
Dimension (WxLxH/mm)	26.6 x 36.9 x 6.36 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.85 (Pin Pitch 2.54mm)	14.0 x 41.5 x 6.0	24.0 x 22.0 x 5.0	24.0 x 22.0 x 5.0



Others - SD

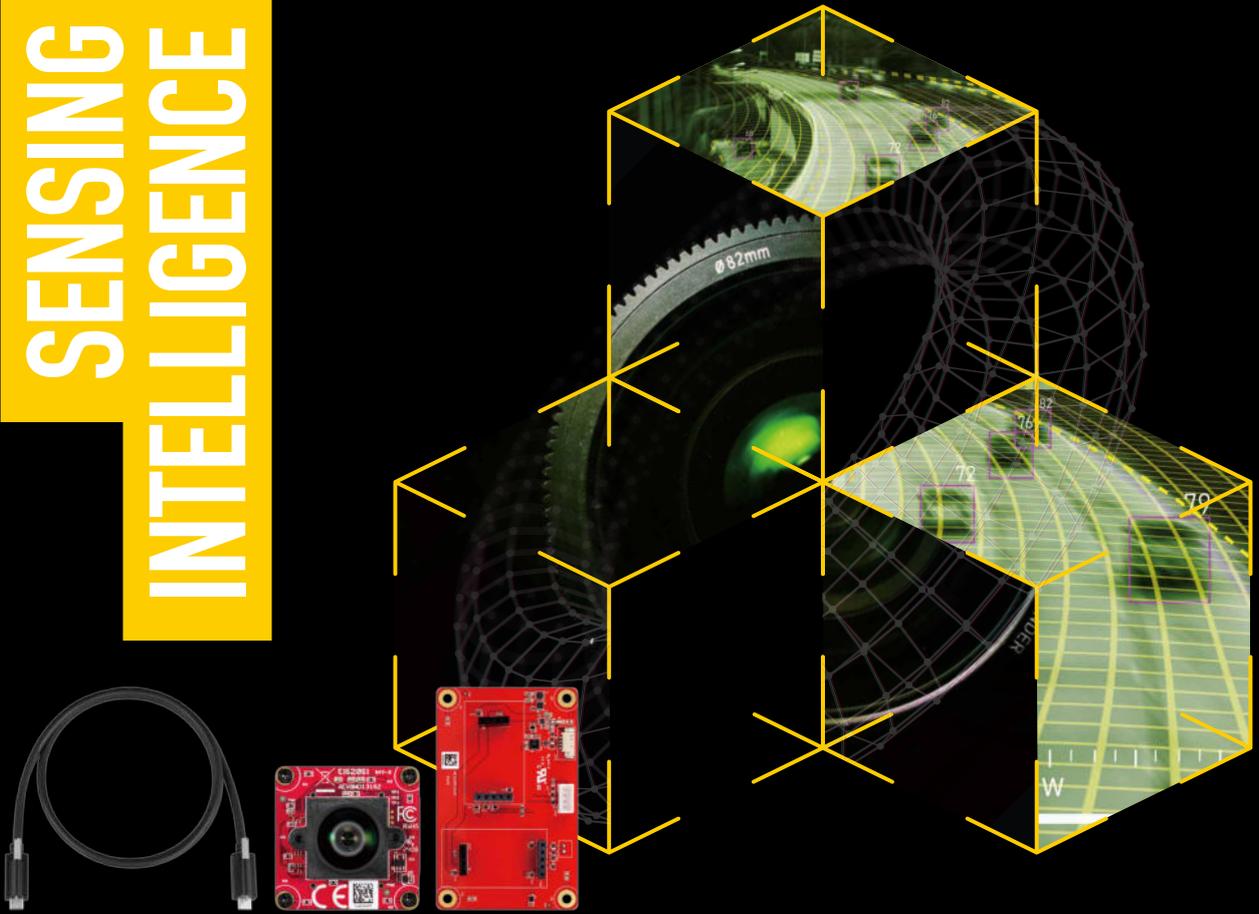
Model name	MicroSD 3TE4	MicroSD 3IE4	MicroSD 3SE3	MicroSD 3ME3	MicroSD 3ME2
Interface	SD 3.0/6.1	SD 3.0/6.1	SD 3.0	SD 3.0	SD 3.0
Flash Type	3D TLC	iSLC (3D TLC)	SLC	MLC	MLC
Capacity	32GB ~ 512GB	8GB ~ 128GB	4GB ~ 8GB	8GB ~ 64GB	8GB ~ 64GB
Max. Channel	1	1	1	1	1
Sequential R/W (MB/sec, max.)	95/85	95/85	30/23	76/52	76/32
Max. Power consumption	0.6W	0.4W	0.2W	0.5W	0.7W
External DRAM Buffer	N	N	N	N	N
iData Guard	N	N	N	N	N
iPower Guard	N	N	N	N	N
PLP (iCell)	N	N	N	N	N
AES	N	N	N	N	N
TCG Opal	N	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	11.0 x 15.0 x 1.0				

Model name	MicroSD 3IE2	Industrial MicroSD Card	SD Card 3TE4	SD Card 3IE4
Interface	SD 3.0	SD 1.0/2.0	SD 3.0/6.1	SD 3.0/6.1
Flash Type	iSLC (MLC)	SLC	3D TLC	iSLC (3D TLC)
Capacity	4GB ~ 32GB	1GB ~ 8GB	32GB ~ 256GB	8GB ~ 64GB
Max. Channel	1	1	1	1
Sequential R/W (MB/sec, max.)	79/45	20/16	95/85	95/85
Max. Power consumption	0.7W	0.2W	0.5W	0.4W
External DRAM Buffer	N	N	N	N
iData Guard	N	N	N	N
iPower Guard	N	N	N	N
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	11.0 x 15.0 x 1.0	11.0 x 15.0 x 1.0	24.0 x 32.0 x 2.1	24.0 x 32.0 x 2.1

Model name	SD Card 3SE6	SD Card 3SE3	SD Card 3ME3	SD Card 3IE3
Interface	SD 2.0	SD 3.0	SD 3.0	SD 3.0
Flash Type	SLC	SLC	MLC	iSLC (MLC)
Capacity	512MB ~ 2GB	4GB ~ 32GB	8GB ~ 128GB	4GB ~ 64GB
Max. Channel	1	1	1	1
Sequential R/W (MB/sec, max.)	23/20	37/31	80/46	79/70
Max. Power consumption	0.3W	0.4W	0.5W	0.5W
External DRAM Buffer	N	N	N	N
iData Guard	N	N	N	N
iPower Guard	N	N	N	N
PLP (iCell)	N	N	N	N
AES	N	N	N	N
TCG Opal	N	N	N	N
S.M.A.R.T	Y	Y	Y	Y
Dimension (WxLxH/mm)	24.0 x 32.0 x 2.1	24.0 x 32.0 x 2.1	24 x 32.0 x 2.1	24.0 x 32.0 x 2.1

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SENSING INTELLIGENCE

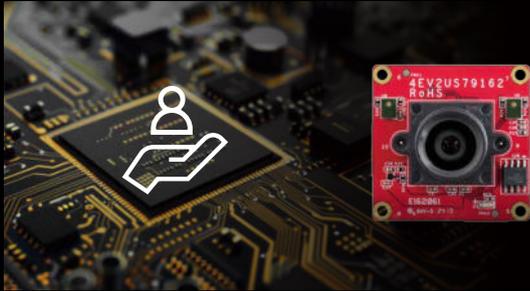


SENSING INTELLIGENCE

Capture precise and dependable images and data from physical environments. Our modules initiate intelligence applications at the edge.

CAMERA MODULE

CAMERA DESIGN SERVICE



Hardware (PCBA, Size)



Versatile Lens Selection



Image Quality Tuning



Platform Integration



USB2.0

Model Name	EV2U-SGR1-MMC1	EV2U-RMR1-UMCB	EV2U-RMR2-MMC1	EV2U-SSM1-RLCF
Module Type	USB 2.0 2MP Fixed Focus Camera Module			
Resolution (Max.)	2MP	2MP	2MP	2MP
Frame Rate (Max. Resolution)	30fps	30fps	30fps	30fps
Output I/F	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Sensor	GalaxyCore GC2053	OmniVision OV2740	OmniVision OV2732	Sony IMX307
Shutter	Rolling	Rolling	Rolling	Rolling
Video Format	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG
Power Consumption	Approximate 1W (MJPEG @Max. Resolution)			
Operating Temperature	-20°C ~ 70°C	-20°C ~ 70°C	-20°C ~ 70°C	-20°C ~ 70°C
Sensor Size	1/2.9"	1/6"	1/6"	1/2.8"
Pixel Size	2.8µm	1.4µm	1.4µm	2.9µm
Chroma Type	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M5)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	38 x 38 x 26.6	60 x 8 x 3.85	58 x 25 x 27	38 x 38 x 26.6 41.4 x 41.4 x TBC (Housing)
Lens FOV(D/H/V)	121° / 102° / 54°	77.3° / 69.8° / 42.7°	86° / 72° / 38°	121° / 102° / 54°
OS Support	Windows/ Linux/ Android/ macOS			
Housing	Board Level	Board Level	Board Level	Board Level, Housing
Features	Low Light, DMIC	DMIC	DMIC	Low Light, DMIC, External Trigger
Warranty	3 Years	3 Years	3 Years	3 Years

For detailed resolution and frame rate combined application, please refer to product datasheet.

Model Name	EV2U-LOM1-RHCF	EV8U-LSM1-RLCF	EV8U-LSM1-RLCN	EV8U-LSM1-RLCA
Module Type	USB 2.0 2MP Fixed Focus Camera Module	USB 2.0 8MP Fixed Focus Camera Module	USB 2.0 8MP Fixed Focus Camera Module	USB 2.0 8MP Auto Focus Camera Module
Resolution (Max.)	2MP	8MP	8MP	8MP
Frame Rate (Max. Resolution)	30fps	30fps	30fps	30fps
Output I/F	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Sensor	onsemi AR0246	Sony IMX415	Sony IMX415	Sony IMX415
Shutter	Rolling	Rolling	Rolling	Rolling
Video Format	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG
Power Consumption	Approximate 1W (MJPEG @Max. Resolution)			
Operating Temperature	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C	0°C ~ 70°C
Sensor Size	1/4"	1/2.8"	1/2.8"	1/2.8"
Pixel Size	2.0µm	1.45µm	1.45µm	1.45µm
Chroma Type	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)
Lens FOV(D/H/V)	TBC	89° / 81° / 51°	106° / 89.5° / 48.4°	TBC
OS Support	Windows/ Linux/ Android/ macOS			
Housing	Board Level, Housing	Board Level, Housing	Board Level, Housing	Board Level, Housing
Features	HDR, DMIC	Low Light, DMIC	Low Light, Night Vision	Low Light, DMIC
Warranty	3 Years	3 Years	3 Years	3 Years

For detailed resolution and frame rate combined application, please refer to product datasheet.



MIPI CSI-2

Model Name	EV2M-GOM1-MUCA	EV2M-ZOM1-GSCV	EV2M-OOM1-UHCA	EV2M-OOM2-RLCF	EV2M-OOM3-RHCF
Module Type	MIPI CSI-2 2MP Fixed Focus Camera Module	MIPI CSI-2 2.3MP Varifocal Focus Camera Module	MIPI CSI-2 2.3MP Fixed Focus Camera Module	MIPI CSI-2 2MP Fixed Focus Camera Module	MIPI CSI-2 2MP Fixed Focus Camera Module
Resolution (Max.)	2MP	2.3MP	2.3MP	2MP	2MP
Frame Rate (Max. Resolution)	30fps	60fps	60fps	60fps	30fps
Output I/F	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2
Sensor	onsemi AR0330	onsemi AR0234	onsemi AR0234	onsemi AR0221	onsemi AR0246
Shutter	Rolling	Global	Global	Rolling	Rolling
Video Format	YUV422	YUV422	YUV422	YUV422	YUV422
Power Consumption	Approximate 1.6W (YUV422 @Max. Resolution)	Approximate 2W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)
Operating Temperature	-30°C ~ 70°C	-20°C ~ 65°C	-30°C ~ 70°C	-30°C ~ 70°C	-30°C ~ 70°C
Sensor Size	1/3"	1/2.6"	1/2.6"	1/1.7"	1/4"
Pixel Size	2.2µm	3.0µm	3.0µm	4.2µm	2.0µm
Chroma Type	Color	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Varifocal	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	38 x 38 x 45 46 x 46 x 45 (Open Front Housing)	42 x 42 x 77.7	38 x 38 x 26.75 46 x 46 x 26.75 (Open Front Housing)	30 x 30 x 48.27 39 x 39 x 48.27 (Open Front Housing)	30 x 30 x TBC 39 x 39 x TBC (Open Front Housing)
Lens FOV(D/H/V)	230°	W: 128.1° / 103.1° / 60.6° T: 39.9° / 33.8° / 21.1°	104° / 86° / 46°	122° / 113° / 75°	96° / 88° / 57°
OS Support	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel
Housing	Board Level, Open Front Housing	Board Level	Board Level, Open Front Housing	Board Level, Open Front Housing	Board Level, Open Front Housing
Features	Fisheye Dewarping			Low light, External Trigger	HDR, External Trigger
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

For detailed resolution and frame rate combined application, please refer to product datasheet.
For more platform support, please contact our local sales.

Model Name	EV2M-CSM1-RHCF	EV5M-CSM1-RTCF	EV8M-CSM1-RTCF	EV8M-OOM1-RHCF	EVDM-OOM1-RHCF
Module Type	MIPI CSI-2 2MP Fixed Focus Camera Module	MIPI CSI-2 5MP Fixed Focus Camera Module	MIPI CSI-2 8MP Fixed Focus Camera Module	MIPI CSI-2 8MP Fixed Focus Camera Module	MIPI CSI-2 13MP Fixed Focus Camera Module
Resolution (Max.)	2MP	5MP	8MP	8MP	13MP
Frame Rate (Max. Resolution)	120fps	30fps	30fps	30fps	20fps
Output I/F	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2
Sensor	Sony IMX290	Sony IMX335	Sony IMX415	onsemi AR0822	onsemi AR1335
Shutter	Rolling	Rolling	Rolling	Rolling	Rolling
Video Format	YUV422	YUV422	YUV422	YUV422	YUV422
Power Consumption	Approximate 1.5W (YUV422 @Max. Resolution)	Approximate 1.6W (YUV422 @Max. Resolution)	Approximate 1.9W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)
Operating Temperature	-20°C ~ 65°C	-20°C ~ 65°C	-20°C ~ 65°C	-30°C ~ 70°C	-30°C ~ 70°C
Sensor Size	1/2.8"	1/2.8"	1/2.8"	1/1.8"	1/3.2"
Pixel Size	2.9µm	2.0µm	1.45µm	2.0µm	1.1µm
Chroma Type	Color	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	46 x 46 x 40.6 (Open Front Housing)	46 x 46 x 40.6 (Open Front Housing)	46 x 46 x 40.6 (Open Front Housing)	30 x 30 x 41.2 39 x 39 x 41.2 (Open Front Housing)	30 x 30 x 40.5 39 x 39 x 40.5 (Open Front Housing)
Lens FOV(D/H/V)	107° / 93° / 52°	126° / 97° / 73°	148° / 125° / 67°	107° / 100° / 67°	91° / 71° / 52°
OS Support	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel
Housing	Open Front Housing	Open Front Housing	Open Front Housing	Board Level, Open Front Housing	Board Level, Open Front Housing
Features	HDR, Low light	HDR, Low light	HDR, Low light	HDR, External Trigger	HDR
Warranty	3 Years	3 Years	3 Years	3 Years	3 Years

For detailed resolution and frame rate combined application, please refer to product datasheet.
For more platform support, please contact our local sales.



MIPI over Type-C

Model Name	EV2C-GOM1-RSCO	EV2C-OOM2-RLCF	EV2C-OOM3-RHCF	EV8C-OOM1-RHCF
Module Type	MIPI over Type-C 2MP Fixed Focus Camera Module	MIPI over Type-C 2MP Fixed Focus Camera Module	MIPI over Type-C 2MP Fixed Focus Camera Module	MIPI over Type-C 8MP Fixed Focus Camera Module
Resolution (Max.)	2MP	2MP	2MP	8MP
Frame Rate (Max. Resolution)	30fps	60fps	30fps	30fps
Output I/F	MIPI over Type-C	MIPI over Type-C	MIPI over Type-C	MIPI over Type-C
Sensor	onsemi AR0330	onsemi AR0221	onsemi AR0246	onsemi AR0822
Shutter	Rolling	Rolling	Rolling	Rolling
Video Format	YUV422	YUV422	YUV422	YUV422
Power Consumption	Approximate 1.6W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)	Approximate 1W (YUV422 @Max. Resolution)
Operating Temperature	-30°C ~ 70°C	-30°C ~ 70°C	-30°C ~ 70°C	-30°C ~ 70°C
Sensor Size	1/3"	1/1.7"	1/4"	1/1.8"
Pixel Size	2.2µm	4.2µm	2.0µm	2.0µm
Chroma Type	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)	30 x 30 x TBC 41.4 x 41.4 x TBC (Housing)	30 x 30 x TBC 41.4 x 41.4 x TBC (Housing)	30 x 30 x TBC 41.4 x 41.4 x TBC (Housing)
Lens FOV(D/H/V)	230°	122° / 113° / 75°	96°/88°/57°	107°/100°/67°
OS Support	NVIDIA Jetson Orin, Intel			
Housing	Board Level, Housing	Board Level, Housing	Board Level, Housing	Board Level, Housing
Features	Fisheye Dewarping	Low Light	HDR	HDR
Warranty	3 Years	3 Years	3 Years	3 Years

For detailed resolution and frame rate combined application, please refer to product datasheet.
For more platform support, please contact our local sales.



GMSL2

Model Name	EVDM-OOM1-RHCF
Module Type	GMSL2 13MP Fixed Focus Camera Module
Resolution (Max.)	13MP
Frame Rate (Max. Resolution)	20fps
Output I/F	FAKRA Z
Sensor	onsemi AR1335
Serializer	MAX9295A
Shutter	Rolling
Video Format	YUV422
Power Consumption	Approximate 1W (YUV422 @Max. Resolution)
Operating Temperature	-30°C ~ 70°C
Sensor Size	1/3.2"
Pixel Size	1.1µm
Chroma Type	Color
Lens Type	Fixed Focus (M12)
Dimension (WxLxH/mm)	42 x 41 x 53.3
Lens FOV (D / H / V)	91° / 71° / 52°
Platform Support	NVIDIA Jetson Orin
Housing	IP67 Housing
Features	HDR
Warranty	3 Years

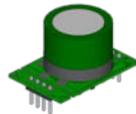
For detailed resolution and frame rate combined application, please refer to product datasheet.
For more platform support, please contact our local sales.

AIR SENSOR MODULE



Air Sensor

Model	IAGM2	IAGCO2	IAGM1	IAGNO2
Detection	PM2.5 , PM10	Carbon dioxide (CO2)	Formaldehyde (HCHO)	Nitrogen dioxide (NO2)
Principle	Optical scattering(Laser)	Non-dispersive infrared (NDIR)	Electrochemical	Electrochemical
Measurement range	0 ~ 1000 μ g/m ³	0 ~ 5000 ppm	0.01 ~ 5 ppm	0 ~ 20 ppm
Resolution	1 μ g/m ³	1 ppm	0.01 ppm	0.1 ppm
Accuracy	$\pm 10 \pm 10\%$ of reading μ g/m ³	$\pm 30 \pm 3\%$ of reading ppm	$\pm 0.02 \pm 10\%$ of reading ppm	$\pm 2\%$ FS ppm
Response Time(T90) (sec)	<10 sec	<120 sec	<30 sec	<30 sec
Operation Temperature(°C)	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C
Operation Humidity (% RH)	15 to 90 %RH	15 to 90 %RH	15 to 90 %RH	15 to 90 %RH
Expected Operating Fife(year)	3 Years	3 Years	3 Years	2 Years
Power Supply(V)	4.75 ~ 5.25 V	VDD : 4.8 ~ 5.2 V VDDIO : 3.1 ~ 3.5 V	3.1 ~ 3.5V	3.1 ~ 3.5V
Power Consumption(mW)	110 mW	150 mW	<100 mW	<100 mW
Interface	I ² C	I ² C	I ² C	I ² C
Dimension(mm)	58(L) 48(W) 15.5(H)	37(L) 21(W) 14(H)	32(L) 25(W) 10(H)	32(L) 21(W) 21(H)

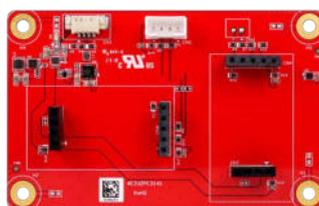


Model	IAGO3	IAGSO2	IAGVOC	IAGCO
Detection	Ozone (O3)	Sulfur dioxide (SO2)	Total volatile organic compounds (TVOC)	carbon monoxide (CO)
Principle	Electrochemical	Electrochemical	MEMS	Electrochemical
Measurement range	0 ~ 5 ppm	0 ~ 20 ppm	0 ~ 60 ppm	0 ~ 1000 ppm
Resolution	0.01 ppm	0.1 ppm	0.01 ppm	0.1 ppm
Accuracy	$\pm 0.1 \pm 10\%$ of reading ppm	$\pm 5\%$ FS ppm	$\pm 0.1 \pm 10\%$ of reading ppm	$\pm 5 \pm 5\%$ of reading ppm
Response Time(T90) (sec)	<60 sec	<30 sec	<10 sec	<30 sec
Operation Temperature(°C)	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C	-10 ~ 50 °C
Operation Humidity (% RH)	15 to 90 %RH	15 to 90 %RH	15 to 90 %RH	15 to 90 %RH
Expected Operating Fife(year)	3 Years	2 Years	1 Year	3 Years
Power Supply(V)	3.1 ~ 3.5V	3.1 ~ 3.5V	3.1 ~ 3.5V	3.1 ~ 3.5V
Power Consumption(mW)	<100 mW	<100	<100	<100
Interface	I ² C	I ² C	I ² C	I ² C
Dimension(mm)	32(L) 21(W) 8(H)	32(L) 21(W) 21(H)	32(L) 21(W) 7(H)	32(L) 21(W) 11(H)

Specification

Measurement Index	Operating Range	Resolution	Accuracy (*)	Detection Method	Response Time	Warmup Time
Temperature	-40°C ~ 125°C	0.1°C	±0.5°C	MEMS	30sec	60sec
Humidity	0~100% RH	1% RH	±5%RH	MEMS	30sec	60sec
CO2	0~5,000 ppm	1 ppm	±30 ppm±3% of reading	NDIR	120sec	60sec
PM2.5	0~1000 µg/m3	1 µg/m3	±10 µg/m3±10% of reading	Optical	10sec	300sec
PM10	0~1000 µg/m3	1 µg/m3	±10 µg/m3±10% of reading	Optical	10sec	300sec
TVOC	0~60 ppm	0.01 ppm	±0.1 ppm±10% of reading	MEMS	10sec	300sec
CO	0~1,000 ppm	0.1 ppm	±5 ppm±5% of reading	Electrochemical	30sec	60sec
HCHO	0.01~5 ppm	0.01 ppm	±0.02 ppm±10% of reading	Electrochemical	30sec	300sec
O3	0~5 ppm	0.01 ppm	±0.1 ppm±10% of reading	Electrochemical	60sec	600sec
NO2	0~20 ppm	0.1 ppm	±2% FS	Electrochemical	30sec	600sec
SO2	0~20 ppm	0.1 ppm	±5% FS	Electrochemical	30sec	600sec

(*) Testing conditions at 25°C environment

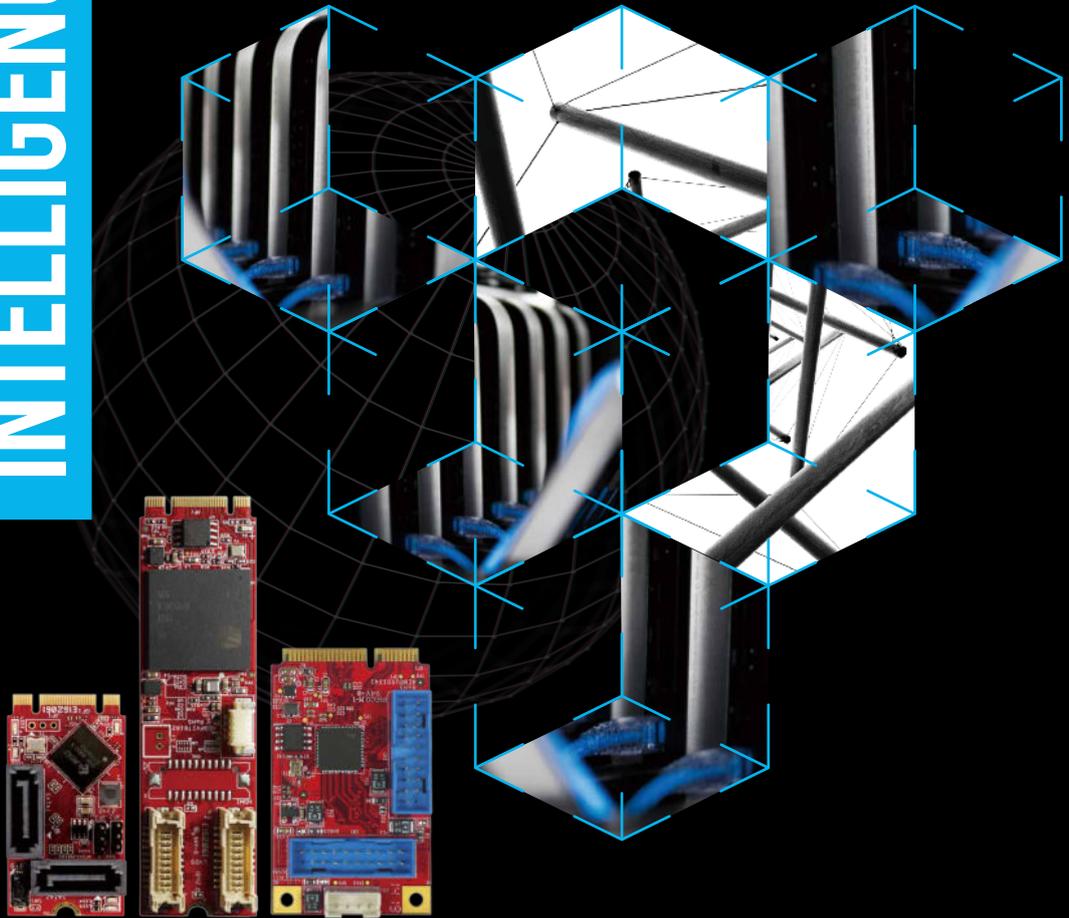


Sensor Carrier Board

Model	EZU2-I301	
Key Features	USB to I2C Sensor Carrier Board	
Form-Factor	Other	
Input I/F	USB 2.0 Full Speed	
Output I/F	I2C (3.3V)	
Output connector	P2.54mm Pin Header x4 (CN4+CN5, CN6+CN7) P2.0mm Connector x1 (CN2)	
Power Consumption	MAX: 0.695W (3.3V, 139mA)	
Dimension (WxLxH/mm)	50 x 80 x 8.82	
Temperature	Operation: STD: -40°C ~ +85°C Storage: -55°C ~ +95°C	
Order info.	EZU2-I301-W1	
Detection	Temperature	Humidity
Principle	MEMS	MEMS
Measurement range	-40°C ~ +125°C	0 ~ 100% RH
Resolution	0.1°C	1% RH
Accuracy	±0.5°C	±5% RH
Response time(T90) (sec)	<30 sec	<30 sec

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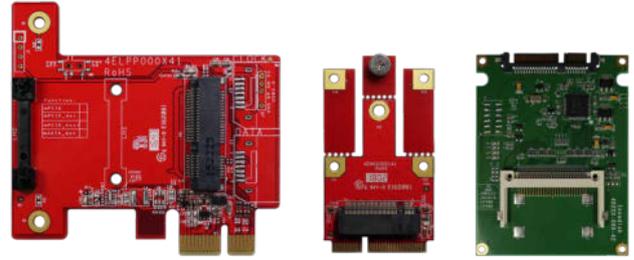


Storage & Disk Array

Model	EMPS-3401	EGPS-3401	EMPU-3201	EMPU-3401
	mPCIe to four SATA III module	M.2 to four SATA module	mPCIe to dual USB 3.0 Module	mPCIe to four USB 3.0 module
Form Factor	mPCIe	M.2 3042	mPCIe	mPCIe
Input I/F	PCI Express 2.0	PCI Express 2.0 x1	PCI Express 2.0	PCI Express 2.0
Input Connector	mPCIe	M.2 B+M Key	mPCIe	mPCIe
Output I/F	SATA III x4	SATA III x4	USB 3.0 x2	USB 3.0 x4
Output Connector	SATA 7 Pin x 4	SATA 7 Pin x 4	19 Pin box header x 1	19 Pin box header x 2
Dimension (WxLxH/mm)	30 x 50.9 x 10.9	30 x 42 x 10.4	30.0 x 50.9 x 8.45	30.0 x 50.9 x 8.45
Temperature	Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPS-3401-W1	EGPS-3401-C1	EMPU-3201-C1 EMPU-3201-W1	EMPU-3401-C1 EMPU-3401-W1

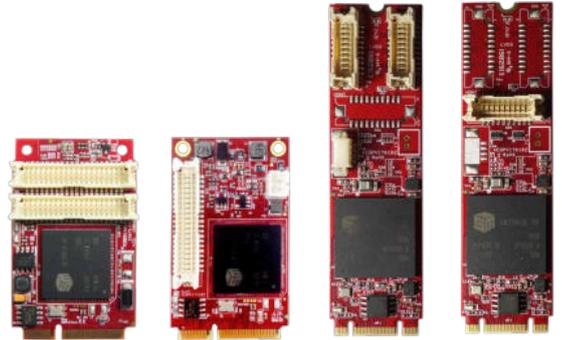
Model	EGPU-3201	EMPS-32R1	E2SS-32R1	E2SS-32R2
	M.2 to dual USB 3.0 Module	mPCIe to dual SATA III RAID module	2.5" SSD to dual mSATA RAID Module	2.5" SSD to dual M.2 RAID Module
Form Factor	M.2 2260/2280	mPCIe	2.5" SSD	2.5" SSD
Input I/F	PCI Express 2.0	PCI Express 2.0	SATA III	SATA III
Input Connector	M.2 B+M Key	mPCIe	SATA 7+15 Pin	SATA 7+15 Pin
Output I/F	USB 3.0 x2	SATA III x2	SATA III x2	SATA III x2
Output Connector	19 Pin box header x 1	SATA 7 Pin x 2	mSATA x 2	M.2 2242/2260/2280 x 2
Dimension (WxLxH/mm)	22.0 x 60.0 x 8.4 22.0 x 80.0 x 8.4	30 x 50.9 x 10.7	69.85 x 100.1 x 11	69.85 x 100.1 x 11
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C	STD temp: 0°C ~ 70°C	STD temp: 0°C ~ 70°C
Order info.	EGPU-3201-C1 / EGPU-3201-C2 EGPU-3201-W1 / EGPU-3201-W2	EMPS-32R1-C1	E2SS-32R1-C1	E2SS-32R2-C1

Model	EGSS-32R2	EGPS-32R1	EGPU-3401
	M.2 2242/2280 to Dual SATA III RAID Module	M.2 2242/2280 to dual SATA III RAID Module	M.2 to four USB 3.0 Module
Form Factor	M.2 2242/2280	M.2 2242/2280	M.2 2280 B+M Key
Input I/F	SATA III	PCI Express 2.0	PCI Express 2.0
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	SATA III	SATA III	USB 3.0
Output Connector	SATA 7pin x 2	SATA 7pin x 2	2 x 19 pin header
Dimension (WxLxH/mm)	C1: 22 x 42 x 11 C2: 22 x 80 x 11	22 x 42(80) x 10.85	22 x 80 x 8.45
Temperature	Operation: 0°C ~ 70°C Storage: -55°C ~ 95°C	Operation: 0°C ~ 70°C Storage: -55°C ~ 95°C Controller Tc: 25°C ~ 85°C	STD temp: 0°C ~ 70°C
Order info.	EGSS-32R2-C1 EGSS-32R2-C2	EGPS-32R1-C1 EGPS-32R1-C2	EGPU-3401-C1 EGPU-3401-W1



Testing Tool

Model	ELPP-0101	EMXX-0101	EMXX-0102	E2S4-2101
	PCIe x1 to mPCIe Module	mPCIe to M.2 A-E key module	mPCIe to M.2 B key module	mPCIe to M.2 B key module
Form Factor	Low profile PCIe	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 2.0	PCI Express , USB 2.0	PCI Express , USB 2.0, SATA	PCI Express , USB 2.0, SATA
Input Connector	PCIe x1	mPCIe	mPCIe	mPCIe
Output I/F	PCI Express 2.0	PCI Express , USB 2.0	PCI Express , USB 2.0, SATA	PCI Express , USB 2.0, SATA
Output Connector	mPCIe x1	M.2 Key-A-E	M.2 Key B	M.2 Key B
Dimension (WxLxH/mm)	72.1 x 68.9 x 10.2	30 x 54.4 x 8.15	30 x 54.4 x 6.4	30 x 54.4 x 6.4
Temperature	STD temp: 0°C ~ 70°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	ELPP-0101-C2	EMXX-0101-W1 (M.2 Key-A) EMXX-0101-W2 (M.2 Key-E)	EMXX-0102-W1	EMXX-0102-W1

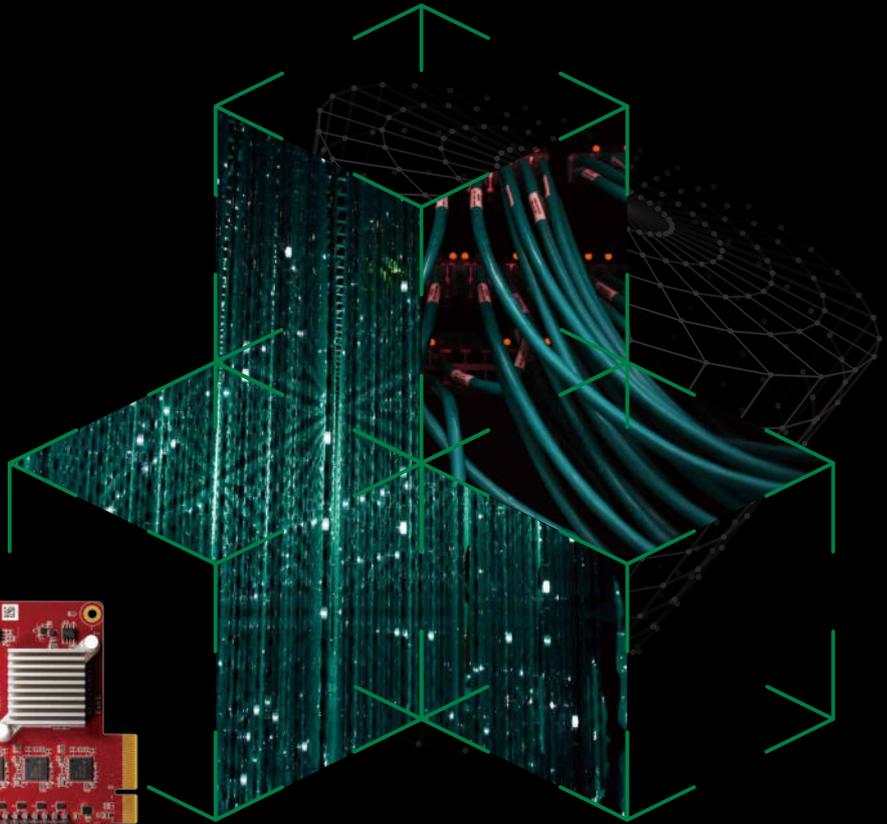
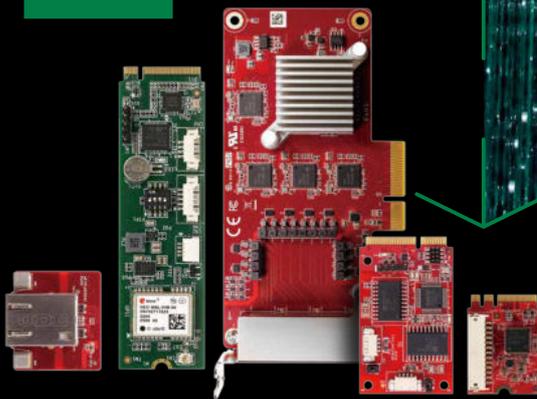


Display

Model	EMPV-1201	EMPV-1202	EGPV-1101
	mPCIe to dual VGA and HDMI(DVI) module	mPCIe to VGA and 18/24 bit LVDS module	M.2 to HDMI or DVI and Single/Dual Channel LVDS Module
Form Factor	mPCIe	mPCIe	M.2 2280
Input I/F	PCI Express 1.0	PCI Express 1.0	PCI Express 2.0 x2
Input Connector	mPCIe	mPCIe	M.2 B+M Key
Output I/F	VGA x 2, HDMI x 1(Optional DVI x 1)	VGA, 18/24 bit LVDS	HDMI or DVI-D x 1 , Single & Dual LVDS
Output Connector	40pin 1.25mm x 2 (40DP-1.25)	40pin 1.25mm x 1 (40DP-1.25)	20 pin x 1(HDMI) 20 pin x 2 (LVDS)
Dimension (WxLxH/mm)	31.5 x 50.9 x 8.2	30 x 50.9 x 8.2	22 x 80 x 7.1
Temperature	STD temp: 0°C ~ 70°C	STD temp: 0°C ~ 70°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPV-1201-C1	EMPV-1202-C1 EMPV-1202-C2	EGPV-1101-C1 (HDMI, Standard Temp.) EGPV-1101-W1 (HDMI, Wide Temp.) EGPV-1101-C2 (LVDS, Standard Temp.) EGPV-1101-W2 (LVDS, Wide Temp.) EGPV-1101-C3 (with HDMI Cable, Standard Temp.) EGPV-1101-W3 (with HDMI Cable, Wide Temp.) EGPV-1101-C4 (with DVI Cable, Standard Temp.) EGPV-1101-W4 (with DVI Cable, Wide Temp.)

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CAN Bus Modules

Model	EMUC-B202	EGPC-B201	EGPC-B4S1	EGPC-B1S1
	USB to dual isolated CAN Bus 2.0B/J1939 Module	M.2 to dual isolated CAN Bus 2.0B/J1939 Module	M.2 to four isolated CAN bus 2.0B Module	M.2 to single isolated CAN bus 2.0B Module
Form Factor	mPCIe	M.2 2260/2280	M.2 2280	M.2 2242
Input I/F	USB 2.0	PCI Express 2.0 x1	PCI Express 1.1 x1	PCI Express 1.1 x1
Input Connector	mPCIe or 5 Pin Header	M.2 B-M	M.2 B+M Key	M.2 B+M Key
Output I/F	CAN Bus 2.0B/J1939 /CANopen x2	CAN Bus 2.0B/J1939 /CANopen x2	CAN Bus 2.0B/J1939 /CANopen x4	CAN Bus 2.0B/J1939 /CANopen x1
Output Connector	DB-9 x 2	DB-9 x 2	DB-9 x 4	DB-9 x 1
Dimension (WxLxH/mm)	30 x 50.9 x 8.35	22 x 60 x 8.05 22 x 80 x 8.05	22 x 80 x 12.9	22 x 42 x 4.8
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	EMUC-B202-W1 (CAN 2.0B) EMUC-B202-W2 (J1939) EMUC-B202-W3 (CANopen)	EGPC-B201-W1 (2260, CAN2.0B) EGPC-B201-W2 (2280, CAN2.0B) EGPC-B201-W3 (2260, J1939) EGPC-B201-W4 (2280, J1939) EGPC-B201-W5 (2260, CANopen) EGPC-B201-W6 (2280, CANopen)	EGPC-B4S1-W1 EGPC-B4S1-W2 (J1939, CANopen)	EGPC-B1S1-W1 EGPC-B1S1-W2 (J1939, CANopen)

Model	EGPC-B2S1	EMPC-B2S1	EMUC-B2S3	EMUC-F2S3
	M.2 to dual isolated CAN Bus 2.0B/J1939/CANopen Module	mPCIe to dual isolated CAN Bus 2.0B/J1939/CANopen Module	mPCIe to dual isolated CAN 2.0B/J1939/CANopen	mPCIe to dual isolated CAN FD
Form Factor	M.2 2280	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 1.1 x1	PCI Express 1.1 x1	USB 2.0 High Speed (480Mbps)	USB 2.0 High Speed (480Mbps)
Input Connector	M.2 B+M Key	mPCIe	USB 2.0	USB 2.0
Output I/F	CAN Bus 2.0B/J1939 /CANopen x2	CAN Bus 2.0B/J1939 /CANopen x2	CAN Bus 2.0B/J1939 /CANopen x2	CAN FD
Output Connector	DB-9 x 2	DB-9 x 2	DB-9 x 2	DB-9 x 2
Dimension (WxLxH/mm)	22 x 80 x 4.85	30 x 50.9 x 8.25	30 x 50.9 x 8.35	30 x 50.9 x 8.35
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	EGPC-B2S1-W1 EGPC-B2S1-W2 (J1939, CANopen)	MPC-B2S1-W1 EMPC-B2S1-W2 (J1939, CANopen)	EMUC-B2S3-W1 EMUC-B2S3-2 (J1939, CANopen)	EMUC-B2S3-W1

Model	EGUC-F2S3	EGUC-F4S3	ESPC-F2S3	ESPC-F4S3
	M.2 2280 to dual isolated CAN FD	M.2 2280 to four isolated CAN FD	PCIe to dual isolated CAN FD	PCIe to dual isolated CAN FD
Form Factor	M.2 2280	M.2 2280	PCIe x 4	PCIe x 4
Input I/F	USB 2.0 High Speed (480Mbps)	USB 2.0 High Speed (480Mbps)	PCI Express 2.0 x1	PCI Express 2.0 x1
Input Connector	M.2 B+M Key	M.2 B+M Key	PCIe x 4	PCIe x 4
Output I/F	CAN FD	CAN FD	CAN FD	CAN FD
Output Connector	DB-9 x 2	DB-9 x 4	DB-9 x 2	DB-9 x 4
Dimension (WxLxH/mm)	22 x 80 x 5.55	22 x 80 x 12.65	111.5 x 110 x 16.79	111.5 x 110 x 16.79
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	EGUC-F2S3-W1	EGUC-F4S3-W1	ESPC-F2S3-W1 ESPC-F2S3-W2 (with M.2 slot)	ESPC-F4S3-W1 ESPC-F4S3-W2 (with M.2 slot)

1G LAN



Model	EMPL-G101	EMPL-G201	EMPL-G102	EMPL-G202
	mPCIe to single isolated GbE LAN Module	mPCIe to dual isolated GbE LAN mod+C3ule	mPCIe to single isolated GbE LAN horizontal Module	mPCIe to dual isolated GbE LAN horizontal Module
Form Factor	mPCIe	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 2.1 x1			
Input Connector	mPCIe	mPCIe	mPCIe	mPCIe
Output I/F	GbE LAN x 1	GbE LAN x 2	GbE LAN x 1	GbE LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	30 x 50.9 x 9.2	30 x 50.9 x 9.2	30 x 50.9 x 5.8	30 x 50.9 x 5.8
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPL-G101-C1 EMPL-G101-W1 EMPL-G101-C2 (with bracket) EMPL-G101-W2 (with bracket)	EMPL-G201-C1 EMPL-G201-W1 EMPL-G201-C2 (with bracket) EMPL-G201-W2 (with bracket)	EMPL-G102-C1 EMPL-G102-W1 EMPL-G102-C2 (with bracket) EMPL-G102-W2 (with bracket)	EMPL-G202-C1 EMPL-G202-W1 EMPL-G202-C2 (with bracket) EMPL-G202-W2 (with bracket)

Model	EGPL-G101	EGPL-G201	EGPL-G102	EGPL-G202
	M.2 to single isolated GbE LAN Module	M.2 to dual isolated GbE LAN Module	M.2 to single isolated GbE LAN Module	M.2 to dual isolated GbE LAN Module
Form Factor	M.2 2280	M.2 2280	M.2 2242	M.2 2242
Input I/F	PCI Express 2.1 x2			
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	Gbe LAN x 1	Gbe LAN x 2	Gbe LAN x 1	Gbe LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	22 x 80 x 9.3	22 x 80 x 9.3	22 x 42 x 9.15	22 x 42 x 9.15
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-G101-C1 EGPL-G101-W1 EGPL-G101-C2 (with bracket) EGPL-G101-W2 (with bracket)	EGPL-G201-C1 EGPL-G201-W1 EGPL-G201-C2 (with bracket) EGPL-G201-W2 (with bracket)	EGPL-G102-C1 EGPL-G102-W1 EGPL-G102-C2 (with bracket) EGPL-G102-W2 (with bracket)	EGPL-G202-C1 EGPL-G202-W1 EGPL-G202-C2 (with bracket) EGPL-G202-W2 (with bracket)

Model	EMPL-G103	EMPL-G203	EGPL-G1N3	EMPL-G2N3
	mPCIe to single GbE LAN Module	mPCIe to dual GbE LAN Module	M.2 to single GbE LAN Module	M.2 to dual GbE LAN Module
Form Factor	mPCIe	mPCIe	M.2 2280	M.2 2280
Input I/F	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x2	PCI Express 2.1 x1
Input Connector	mPCIe	mPCIe	M.2 B+M Key	M.2 B+M Key
Output I/F	GbE LAN x 1	GbE LAN x 2	GbE LAN x 1	GbE LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	30 x 50.9 x 9.3	30 x 50.9 x 9.3	22 x 80 x 9	30 x 50.9 x 7.6
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPL-G103-C1 EMPL-G103-W1	EMPL-G203-C1 EMPL-G203-W1	EGPL-G1N3-C1 EGPL-G1N3-W1	EGPL-G2N3-C1 EGPL-G2N3-W1

Model	EGPL-T101	EMPL-G1S1	EMPL-G2S1	EMPL-G1S2
	M.2 2280 to single 10GbE LAN Module	mPCIe to single isolated GbE LAN module	mPCIe to dual isolated GbE LAN module	mPCIe to single isolated GbE LAN horizontal Module
Form Factor	M.2 2280	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 3.0 x2	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x1
Input Connector	M.2 B+M Key	mPCIe	mPCIe	mPCIe
Output I/F	10 GbE LAN x1	GbE LAN x 1	GbE LAN x 2	GbE LAN x 1
Output Connector	RJ45 x 1	RJ45 x 1	RJ45 x 2	RJ45 x 1
Dimension (WxLxH/mm)	M.2 Board: 22 x 80 x 14.5 Daughter Board: 31.75 x 28 x 17.7	Main Board: 30 x 50.9 x 9.2 Daughter Board: 59.5 x 30 x 17.32	Main Board: 30 x 50.9 x 9.2 Daughter Board: 59.5 x 30 x 17.32	Main board: 30 x 50.95 x 6.15 Daughter board: 59.5 x 30 x 17.4
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-T101-C1	EMPL-G1S1-V1 (i225-V) EMPL-G1S1-C1 (i225-LM) EMPL-G1S1-W1 (i225-IT) EMPL-G1S1-V2 (i225-V, with bracket) EMPL-G1S1-C2 (i225-LM, with bracket) EMPL-G1S1-W2 (i225-IT, with bracket)	EMPL-G2S1-V1 (i225-V) EMPL-G2S1-C1 (i225-LM) EMPL-G2S1-W1 (i225-IT) EMPL-G2S1-V2 (i225-V, with bracket) EMPL-G2S1-C2 (i225-LM, with bracket) EMPL-G2S1-W2 (i225-IT, with bracket)	EMPL-G1S2-C1 (i225-LM) EMPL-G1S2-W1 (i225-IT) EMPL-G1S2-C2 (i225-LM, with bracket) EMPL-G1S2-W2 (i225-IT, with bracket)

Model	EMPL-G2S2	EMPL-G1N1	EMPL-G2N1	EGPL-G1S1
	mPCIe to dual isolated GbE LAN horizontal Module	mPCIe to single GbE LAN Module	mPCIe to dual GbE LAN Module	M.2 2280 to single isolated GbE LAN Module
Form Factor	mPCIe	mPCIe	mPCIe	M.2 2280
Input I/F	PCI Express 2.1 x 1	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x2
Input Connector	mPCIe	mPCIe	mPCIe	M.2 B+M Key
Output I/F	GbE LAN x 2	GbE LAN x 1	GbE LAN x 2	Gbe LAN x 1
Output Connector	RJ45 x 2	RJ45 x 1	RJ45 x 2	RJ45 x 1
Dimension (WxLxH/mm)	Main board: 30 x 50.95 x 6.15 Daughter board: 59.5 x 30 x 17.4	30 x 50.9 x 9.3	30 x 50.9 x 9.3	Main Board: 22 x 80 x 9 Daughter Board: 59.5 x 30 x 17.32
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPL-G2S2-C1 (i225-LM) EMPL-G2S2-W1 (i225-IT) EMPL-G2S2-C2 (i225-LM, with bracket) EMPL-G2S2-W2 (i225-IT, with bracket)	EMPL-G1N1-C1 (i225-LM) EMPL-G1N1-W1 (i225-IT)	EMPL-G2N1-C1 (i225-LM) EMPL-G2N1-W1 (i225-IT)	EGPL-G1S1-C1 (i225-LM) EGPL-G1S1-W1 (i225-IT) EGPL-G1S1-C2 (i225-LM, with bracket) EGPL-G1S1-W2 (i225-IT, with bracket)

Model	EGPL-G2S1	EGPL-G1S2	EGPL-G2S2	EGPL-G1S4
	M.2 2280 to dual isolated GbE LAN Module	M.2 to single isolated GbE LAN Module	M.2 to dual isolated GbE LAN Module	M.2 to single isolated GbE LAN horizontal Module
Form Factor	M.2 2280	M.2 2242	M.2 2242	M.2 2242
Input I/F	PCI Express 2.1 x2			
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	Gbe LAN x 2	Gbe LAN x 1	Gbe LAN x 2	Gbe LAN x 1
Output Connector	RJ45 x 2	RJ45 x 1	RJ45 x 2	RJ45 x 1
Dimension (WxLxH/mm)	Main Board: 22 x 80 x 9 Daughter Board: 59.5 x 30 x 17.32	Main board: 22 x 42 x 9.01 Daughter board: 50 x 28 x 19.37	Main board: 22 x 42 x 9.01 Daughter board: 50 x 28 x 19.37	Main board: 22 x 42 x 5.95 Daughter board: 50 x 28 x 19.75
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-G2S1-C1 (i225-LM) EGPL-G2S1-W1 (i225-IT) EGPL-G2S1-C2 (i225-LM, with bracket) EGPL-G2S1-W2 (i225-IT, with bracket)	EGPL-G1S2-C1 (i225-LM) EGPL-G1S2-W1 (i225-IT) EGPL-G1S2-C2 (i225-LM, with bracket) EGPL-G1S2-W2 (i225-IT, with bracket)	EGPL-G2S2-C1 (i225-LM) EGPL-G2S2-W1 (i225-IT) EGPL-G2S2-C2 (i225-LM, with bracket) EGPL-G2S2-W2 (i225-IT, with bracket)	EGPL-G1S4-C1 (i225-LM) EGPL-G1S4-W1 (i225-IT) EGPL-G1S4-C2 (i225-LM, with bracket) EGPL-G1S4-W2 (i225-IT, with bracket)

Model	EGPL-G2S4	EGPL-G1N1	EGPL-G2N1	EGPL-G1S3
	M.2 to dual isolated GbE LAN horizontal Module	M.2 to single GbE LAN Module	M.2 to dual GbE LAN Module	M.2 2230 to single isolated GbE LAN module
Form Factor	M.2 2242	M.2 2280	M.2 2280	M.2 2230
Input I/F	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x2
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key	M.2 A+E Key
Output I/F	Gbe LAN x 2	GbE LAN x 1	GbE LAN x 2	GbE LAN x 1
Output Connector	RJ45 x 2	RJ45 x 1	RJ45 x 2	RJ45 x 1
Dimension (WxLxH/mm)	Main board: 22 x 42 x 5.95 Daughter board: 50 x 28 x 19.75	22 x 80 x 9	30 x 50.9 x 7.6	Main board: 22 x 30 x 5.95 Daughter board: 32 x 28 x 19.2
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-G2S4-C1 (i225-LM) EGPL-G2S4-W1 (i225-IT) EGPL-G2S4-C2 (i225-LM, with bracket) EGPL-G2S4-W2 (i225-IT, with bracket)	EGPL-G1N1-C1 (i225-LM) EGPL-G1N1-W1 (i225-IT)	EGPL-G2N1-C1 (i225-LM) EGPL-G2N1-W1 (i225-IT)	EGPL-G1S3-C1 (i225-LM) EGPL-G1S3-W1 (i225-IT)

Model	ESPL-G401	ELPL-G401	EGPL-G401
	Standard PCIe	Low-Profile PCIe	M.2 2280
Form Factor	PCI Express 2.1 x4	PCI Express 2.1 x4	PCI Express 2.1 x2
Input I/F	PCIe x 4	PCIe x 4	M.2 B+M Key
Input Connector	GbE LAN x 4	GbE LAN x 4	GbE LAN x 4
Output I/F	RJ45 x 4	RJ45 x 4	RJ45 x 4
Output Connector	169.55 x 111.15 x 19.6	131.9 x 56.02 x 19.88	Main board: 22 x 80 x 15.3 Daughter board: 41.9 x 64.27 x 21
Dimension (WxLxH/mm)	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Temperature	ESPL-G401-C1 (i225-LM) ESPL-G401-W1 (i225-IT)	ELPL-G401-C1(i210-AT) ELPL-G401-W1 (i210-IT)	EGPL-G401-C1(i350, Mounting hole) EGPL-G401-C2 (i350, PCIe low profile bracket) EGPL-G401-C3(i350, PCIe standard bracket)
Order info.	EGPL-G2S1-C1 (i225-LM) EGPL-G2S1-W1 (i225-IT) EGPL-G2S1-C2 (i225-LM, with bracket) EGPL-G2S1-W2 (i225-IT, with bracket)	EGPL-G1S2-C1 (i225-LM) EGPL-G1S2-W1 (i225-IT) EGPL-G1S2-C2 (i225-LM, with bracket) EGPL-G1S2-W2 (i225-IT, with bracket)	EGPL-G2S2-C1 (i225-LM) EGPL-G2S2-W1 (i225-IT) EGPL-G2S2-C2 (i225-LM, with bracket) EGPL-G2S2-W2 (i225-IT, with bracket)



2.5G LAN

Model	EMPL-21S1	EMPL-22S1	EMPL-21S2	EMPL-22S2
	mPCIe to single isolated 2.5GbE LAN Module	mPCIe to dual isolated 2.5GbE LAN mod+C3ule	mPCIe to single isolated 2.5GbE LAN horizontal Module	mPCIe to dual isolated 2.5GbE LAN horizontal Module
Form Factor	mPCIe	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 2.1 x1			
Input Connector	mPCIe	mPCIe	mPCIe	mPCIe
Output I/F	2.5GbE LAN x 1	2.5GbE LAN x 2	2.5GbE LAN x 1	2.5GbE LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	30 x 50.9 x 9.2	30 x 50.9 x 9.2	30 x 50.9 x 5.8	30 x 50.9 x 5.8
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EMPL-21S1-C1 EMPL-21S1-W1 EMPL-21S1-C2 (with bracket) EMPL-21S1-W2 (with bracket)	EMPL-22S1-C1 EMPL-22S1-W1 EMPL-22S1-C2 (with bracket) EMPL-22S1-W2 (with bracket)	EMPL-21S2-C1 EMPL-21S2-W1 EMPL-21S2-C2 (with bracket) EMPL-21S2-W2 (with bracket)	EMPL-22S2-C1 EMPL-22S2-W1 EMPL-22S2-C2 (with bracket) EMPL-22S2-W2 (with bracket)

Model	EGPL-21S1	EGPL-22S1	EGPL-21S2	EGPL-22S2
	M.2 to single isolated 2.5GbE LAN Module	M.2 to dual isolated 2.5GbE LAN Module	M.2 to single isolated 2.5GbE LAN Module	M.2 to dual isolated 2.5GbE LAN Module
Form Factor	M.2 2280	M.2 2280	M.2 2242	M.2 2242
Input I/F	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x2
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	2.5GbE LAN x 1	2.5GbE LAN x 2	2.5GbE LAN x 1	2.5GbE LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	22 x 80 x 9.3	22 x 80 x 9.3	22 x 42 x 9.15	22 x 42 x 9.15
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-21S1-C1 EGPL-21S1-W1 EGPL-21S1-C2 (with bracket) EGPL-21S1-W2 (with bracket)	EGPL-22S1-C1 EGPL-22S1-W1 EGPL-22S1-C2 (with bracket) EGPL-22S1-W2 (with bracket)	EGPL-21S2-C1 EGPL-21S2-W	EGPL-22S2-C1 EGPL-22S2-W1

Model	EGPL-21S4	EGPL-22S4	EMPL-21N1	EMPL-22N1
	M.2 to single isolated 2.5GbE LAN horizontal Module	M.2 to dual isolated 2.5GbE LAN horizontal Module	mPCIe to single 2.5GbE LAN Module	mPCIe to dual 2.5GbE LAN Module
Form Factor	M.2 2242	M.2 2242	mPCIe	mPCIe
Input I/F	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x1	PCI Express 2.1 x1
Input Connector	M.2 B+M Key	M.2 B+M Key	mPCIe	mPCIe
Output I/F	2.5GbE LAN x 1	2.5GbE LAN x 2	2.5GbE LAN x 1	2.5GbE LAN x 2
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	Main board: 22 x 42 x 5.95 Daughter board: 50 x 28 x 19.75	Main board: 22 x 42 x 5.95 Daughter board: 50 x 28 x 19.75	30 x 50.9 x 9.3	30 x 50.9 x 9.3
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-21S4-C1 EGPL-21S4-W1	EGPL-22S4-C1 EGPL-22S4-W1	EMPL-21N1-C1 EMPL-21N1-W1	EMPL-22N1-C1 EMPL-22N1-W1

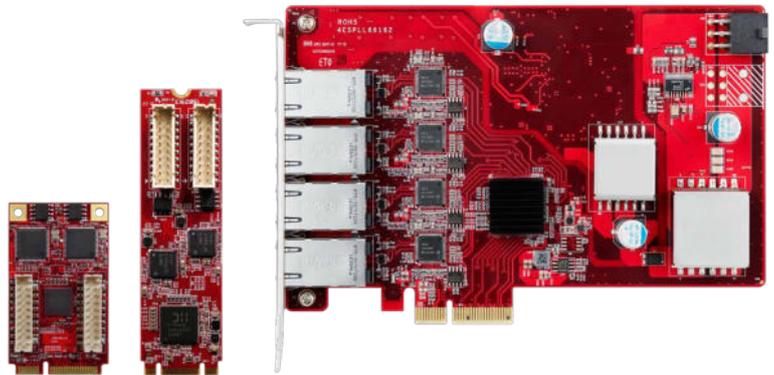
Model	EGPL-21N1	EGPL-22N1	EGPL-21S3	ESPL-2401
	M.2 to single 2.5GbE LAN Module	M.2 to dual 2.5GbE LAN Module	M.2 2230 to single isolated 2.5GbE LAN module	PCIe to four 2.5GbE LAN Module
Form Factor	M.2 2280	M.2 2280	M.2 2230	PCIe x4
Input I/F	PCI Express 2.1 x2	PCI Express 2.1 x1	PCI Express 2.1 x2	PCI Express 2.1 x4
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 A+E Key	PCIe x4
Output I/F	2.5GbE LAN x 1	2.5GbE LAN x 2	2.5GbE LAN x 1	2.5GbE LAN x 4
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 4
Dimension (WxLxH/mm)	22 x 80 x 9	30 x 50.9 x 7.6	Main board: 22 x 30 x 5.95 Daughter board: 32 x 28 x 19.2	169.55 x 111.15 x 19.6
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-21N1-C1 EGPL-21N1-W1	EGPL-22N1-C1 EGPL-22N1-W1	EGPL-21S3-C1 EGPL-21S3-W1	ESPL-2401-C1 ESPL-2401-W1

10G LAN



Model	EGPL-T102
	M.2 2280 to single 10GbE LAN Module
Form Factor	M.2 2280 B+M
Input I/F	PCI Express 3.0 x2
Input Connector	M.2 B+M Key
Output I/F	Single 10 GbE LAN
Output Connector	RJ45 x 1
Dimension (WxLxH/mm)	M.2 Board: 22 x 80 x 14.5 Daughter Board: 31.75 x 28 x 17.7
Temperature	Operation: -20°C ~ 60°C Storage: -55°C ~ 95°C
Order info.	EGPL-T102-C1 EGPL-T102-C2

PoE



Model	EMPL-G2P1	EMPL-G2P2	EGPL-G2P1
	mPCIe to dual PoE Module	mPCIe to dual PoE+ Module	M.2 to dual PoE Module
Form Factor	mPCIe	mPCIe	M.2 2280
Input I/F	PCI Express 2.1	PCI Express 2.1	PCI Express 2.1 x1
Input Connector	mPCIe	mPCIe	M.2 B+M Key
Output I/F	PoE x 2	PoE+ x 2	PoE x 2
Output Connector	RJ45 x 2	RJ45 x 2	RJ45 x 2
Dimension (WxLxH/mm)	Main Board: 30 x 50.9 x 9.2 Daughter Board: 58.2 x 72.7 x 23.8	Main Board: 30 x 50.9 x 9.2 Daughter Board: 58.2 x 72.7 x 23.8	Main Board: 30 x 50.9 x 9.2 Daughter Board: 58.2 x 72.7 x 23.8
Temperature	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C
Order info.	EMPL-G2P1-C1 (Mounting hole, 4pin header) EMPL-G2P1-W1 (Mounting hole, 4pin header) EMPL-G2P1-C2 (Bracket, 4pin header) EMPL-G2P1-W2 (Bracket, 4pin header) EMPL-G2P1-C3 (Mounting hole, DC Jack) EMPL-G2P1-W3 (Mounting hole, DC Jack) EMPL-G2P1-C4 (Bracket, DC Jack) EMPL-G2P1-W4 (Bracket, DC Jack)	EMPL-G2P2-C1 (Mounting hole, 4pin header) EMPL-G2P2-W1 (Mounting hole, 4pin header) EMPL-G2P2-C2 (Bracket, 4pin header) EMPL-G2P2-W2 (Bracket, 4pin header)	EGPL-G2P1-C1 (Mounting hole, 4pin header) EGPL-G2P1-W1 (Mounting hole, 4pin header) EGPL-G2P1-C2 (Bracket, 4pin header) EGPL-G2P1-W2 (Bracket, 4pin header) EGPL-G2P1-C3 (Mounting hole) EGPL-G2P1-W3 (Mounting hole, DC Jack) EGPL-G2P1-C4 (Bracket, DC Jack) EGPL-G2P1-W4 (Bracket, DC Jack)

Model	ESPL-G4P1	EMPL-G2P3	EMPL-G2P4
	PCIe to four PoE/PoE+ Module	mPCIe to dual PoE Module	mPCIe to dual PoE+ Module
Form Factor	Standard PCIe	mPCIe	mPCIe
Input I/F	PCI Express 2.1 x4	PCI Express 2.1	PCI Express 2.1
Input Connector	PCIe x 4	mPCIe	mPCIe
Output I/F	PoE/PoE+ x 4	PoE x 2	PoE+ x 2
Output Connector	RJ45 x 4	RJ45 x 2	RJ45 x 2
Dimension (WxLxH/mm)	169.55 x 111.15 x 19.6	Main Board: 30 x 50.9 x 9.2 Daughter Board: 72.7 x 56.3 x 22.07	Main Board: 30 x 50.9 x 9.2 Daughter Board: 72.7 x 56.3 x 22.07
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	ESPL-G4P1-C1 ESPL-G4P1-W1	EMPL-G2P3-C1 (Mounting hole, 4pin header) EMPL-G2P3-W1 (Mounting hole, 4pin header) EMPL-G2P3-C2 (Bracket, 4pin header) EMPL-G2P3-W2(Bracket, 4pin header) EMPL-G2P3-C3 (Mounting hole, DC Jack) EMPL-G2P3-W3 (Mounting hole, DC Jack) EMPL-G2P3-C4 (Bracket, DC Jack) EMPL-G2P3-W4(Bracket, DC Jack)	EMPL-G2P4-C1 (Mounting hole, 4pin header) EMPL-G2P4-W1 (Mounting hole, 4pin header) EMPL-G2P4-C2 (Bracket, 4pin header) EMPL-G2P4-W2(Bracket, 4pin header)

Model	EGPL-G2P3	EGPL-G2P4	ESPL-G4P3
	M.2 to dual PoE Module	M.2 to dual PoE Module	PCIe to four PoE/PoE+ Module
Form Factor	M.2 2280	M.2 2280	Standard PCIe
Input I/F	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x4
Input Connector	M.2 B+M Key	M.2 B+M Key	PCIe x 4
Output I/F	PoE x 2	PoE+ x 2	PoE/PoE+ x 4
Output Connector	RJ45 x 2	RJ45 x 2	RJ45 x 4
Dimension (WxLxH/mm)	Main Board: 22 x 80 x 9 Daughter Board: 72.7 x 58.2 x 23.8	Main Board: 22 x 80 x 9 Daughter Board: 72.7 x 58.2 x 23.8	169.55 x 111.15 x 19.6
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C
Order info.	EGPL-G2P3-C1 (Mounting hole, 4pin header) EGPL-G2P3-W1 (Mounting hole, 4pin header) EGPL-G2P3-C2 (Bracket, 4pin header) EGPL-G2P3-W2 (Bracket, 4pin header) EGPL-G2P3-C3 (Mounting hole) EGPL-G2P3-W3 (Mounting hole, DC Jack) EGPL-G2P3-C4 (Bracket, DC Jack) EGPL-G2P3-W4 (Bracket, DC Jack)	EGPL-G2P4-C1 (Mounting hole, 4pin header) EGPL-G2P4-W1 (Mounting hole, 4pin header) EGPL-G2P4-C2 (Bracket, 4pin header) EGPL-G2P4-W2(Bracket, 4pin header)	ESPL-G4P3-C1 ESPL-G4P3-W1

Serial



Model	EMP2-X202	EMP2-X402	EMP2-X203	EMP2-X403	EMP2-X404
	mPCIe to dual RS-422/485 Module	mPCIe to four RS-422/485 Module	mPCIe to dual RS-232 Module	mPCIe to four RS-232 Module	mPCIe to four RS-232/422/485 Module
Form Factor	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe
Input I/F	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0
Input Connector	mPCIe	mPCIe	mPCIe	mPCIe	mPCIe
Output I/F	RS-422/485 x 2	RS-422/485 x 4	RS-232 x 2	RS-232 x 4	RS-232/422/485 x 4
Output Connector	DB-9 x 2	DB-9 x 4	DB-9 x 2	DB-9 x 4	DB-9 x 4
Dimension (WxLxH/mm)	30 x 50.9 x 8.2	30 x 50.9 x 8.2	30 x 50.9 x 6.7	30 x 50.9 x 6.7	30 x 50.9 x 6.1
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	EMP2-X202-W1	EMP2-X402-W1	EMP2-X203-W1	EMP2-X403-W1	EMP2-X404-W1

Model	EMP2-X801	EMP2-X2S1	EMP2-X4S1	EMP2-X4S2	EGP2-X401
	mPCIe to eight RS-232/422/485 Module	mPCIe to two Isolated RS-232 Module	mPCIe to four Isolated RS-485 Module	mPCIe to dual Isolated RS-422 & RS-485 Module	M.2 to four RS-232/422/485 Module
Form Factor	mPCIe	mPCIe	mPCIe	mPCIe	M.2 2242
Input I/F	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0	PCI Express 2.0 x1
Input Connector	mPCIe	mPCIe	mPCIe	mPCIe	M.2 B+M Key
Output I/F	RS-232/422/485 x 8	RS-232 x 2	RS-485 x 4	RS-422 x 2, RS-485 x 2	RS-232/422/485 x 4
Output Connector	DB-9 x 8	DB-9 x 2	DB-9 x 4	DB-9 x 4	DB-9 x 4
Dimension (WxLxH/mm)	30 x 50.9 x 6.1	30 x 50.9 x 12.9	30 x 50.9 x 12.55	30 x 50.9 x 12.55	Vertical: 22 x 42 x 6.45 Horizontal: 22 x 42 x 7.65
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C
Order info.	EMP2-X801-W1	EMP2-X2S1-W1	EMP2-X4S1-W1	EMP2-X4S2-W1	EGP2-x401-W1 (Vertical connector) EGP2-x401-W2 (Horizontal connector)

Model	EGP2-X203	EGP2-X403	EGP2-X4S1	EGP2-X4S2	EGP2-X4S3
	M.2 to dual RS-232 Module	M.2 to four RS-232 Module	M.2 to four isolated RS-485 Module	M.2 to four isolated RS-422 Module	M.2 to four isolated RS-422 & RS-485 Module
Form Factor	M.2 2242	M.2 2242	M.2 2280	M.2 2280	M.2 2280
Input I/F	PCI Express 1.1	PCI Express 1.1	PCI Express 2.0 x1	PCI Express 2.0 x1	PCI Express 2.0 x1
Input Connector	M.2 B+M Key				
Output I/F	RS-232 x 2	RS-232 x 4	RS-485 x 4	RS-422 x 4	RS-422 x 2, RS-485 x 2
Output Connector	DB-9 x 2	DB-9 x 4	DB-9 x 4	DB-9 x 4	DB-9 x 4
Dimension (WxLxH/mm)	Vertical: 22 x 42 x 6.83 Horizontal: 22 x 42 x 7.93	Vertical: 22 x 42 x 6.83 Horizontal: 22 x 42 x 7.93	Vertical: 22 x 80 x 6.83 Horizontal: 22 x 80 x 7.93	Vertical: 22 x 80 x 6.83 Horizontal: 22 x 80 x 7.93	Vertical: 22 x 80 x 6.83 Horizontal: 22 x 80 x 7.93
Temperature	Wide temp: -40°C ~ 85°C				
Order info.	EGP2-X203-W1 (Vertical connector) EGP2-X203-W2 (Horizontal connector)	EGP2-X403-W1 (Vertical connector) EGP2-X403-W2 (Horizontal connector)	EGP2-X4S1-W1 (Vertical connector) EGP2-X4S1-W2 (Horizontal connector)	EGP2-X4S2-W1 (Vertical connector) EGP2-X4S2-W2 (Horizontal connector)	EGP2-X4S2-W1 (Vertical connector) EGP2-X4S2-W2 (Horizontal connector)

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MANAGEMENT INTELLIGENCE



MANAGEMENT INTELLIGENCE

Experience effortless management in real-world applications with our advanced software and services, ensuring optimal performance at every step.



iCAP, the Innodisk Cloud Administration Platform, simplifies remote device and AI model management. Accessible through any browser, it enables real-time monitoring of system health, with customizable alerts for storage life.

iCAP also supports seamless AI model deployment, providing an efficient, user-friendly cloud management solution.



iCAP Advantages



Versatile Compatibility

The iCAP agent is compatible with both Windows and Linux platforms, ensuring seamless accessibility through a variety of web browsers. Additionally, it offers support for mobile apps, allowing users to monitor and control devices remotely, including the ability for out-of-band (OOB) reboot functionality.



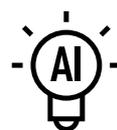
Effective Event Tracker

The event notification tracker will log all changes and keep the user up-to-speed, enabling swift resolutions to any issues that may occur.



Over-the-air (OTA) updates

This feature facilitates BIOS, storage firmware, and image upgrades, allowing for the effortless distribution of update files to managed edge devices or predefined groups.



One-stop AI model training, management and deployment

Integrate iVIT to provide a model library and easily deploy the trained AI model to the edge device through the platform.



Remote Disaster Recovery

iCAP fully supports in-band and out-of-band management with one-key recovery, bringing malfunctioning devices back to normal in no time.



Storage / DRAM monitoring

iCAP supports Storage / DRAM monitoring, providing the user remote access to iSMART Storage/DRAM information and module prediction.



OOB

Model	InnoAgent EZ2N-0XL1
	Out-of-Band Remote Management Module
Network I/F	10/100 Mbps LAN (RJ45)
Network Protocol	MQTT
Host I/F	3.3V UART, RS232 (Pitch 2.0mm Pin Header)
Remote Control I/O	3.3V GPIO x 6 (2 GPIO can be I2C) Power SW x2 (Pitch 2.0mm Pin Header)
Power Source	+5V Standby Power Input (4pin floppy male connector)
Dimensions(W*L*H/ mm)	51 x 31.3 x 19.05
Temperature	-40°C ~ 85°C
Order info.	EZ2N-0XL1-W1 (Private Cloud: SDK, iCAP 2.0) EZ2N-0XL1-W2 (Public Cloud: Allxon)

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MACHINE-LEARNING INTELLIGENCE



MACHINE-LEARNING INTELLIGENCE

Unleash the full potential of your data insight with our AI training and inference capabilities.



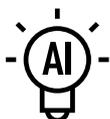
VISION INTELLIGENCE TOOLKIT



iVIT, the Innodisk Vision Intelligence Toolkit, streamlines AI model training and inference with high efficiency. By integrating mainstream Deep Learning frameworks, iVIT helps developers quickly create product prototypes and build customized AI models.



No Code



AI Mode Deployment



Camera Streaming



Event Logging



Smart Transportation



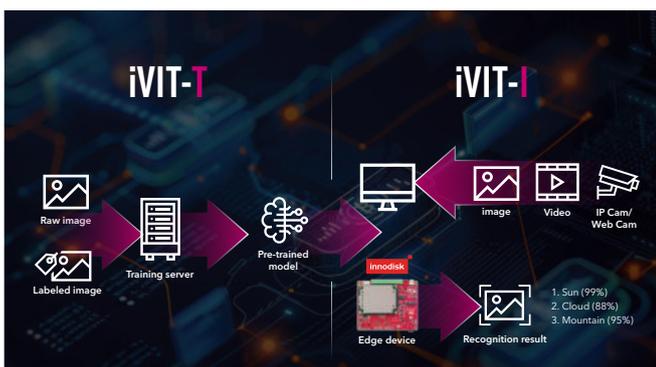
Smart Factory



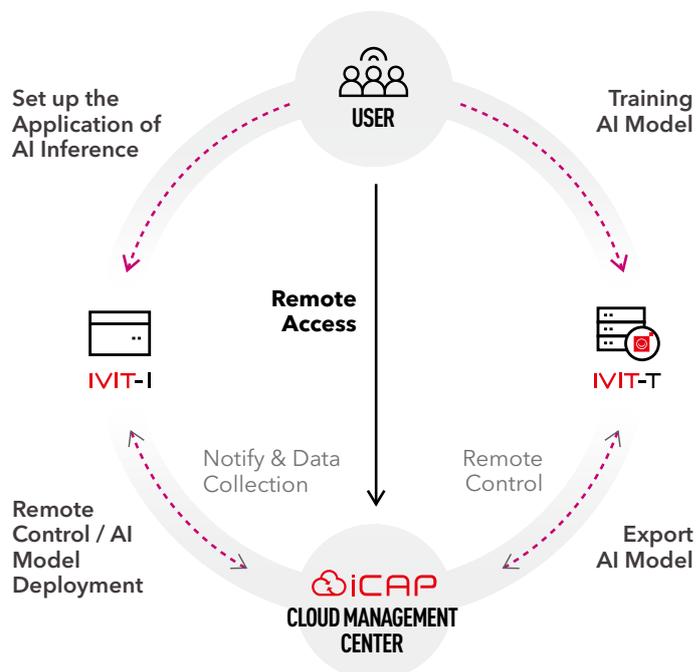
Smart Surveillance

Harmonize AI Development for Tailored Solutions

The iVIT solution includes iVIT-T for AI model training and iVIT-I for model inference. Together, they enable seamless customization of AI models to meet the precise requirements of any machine vision application.

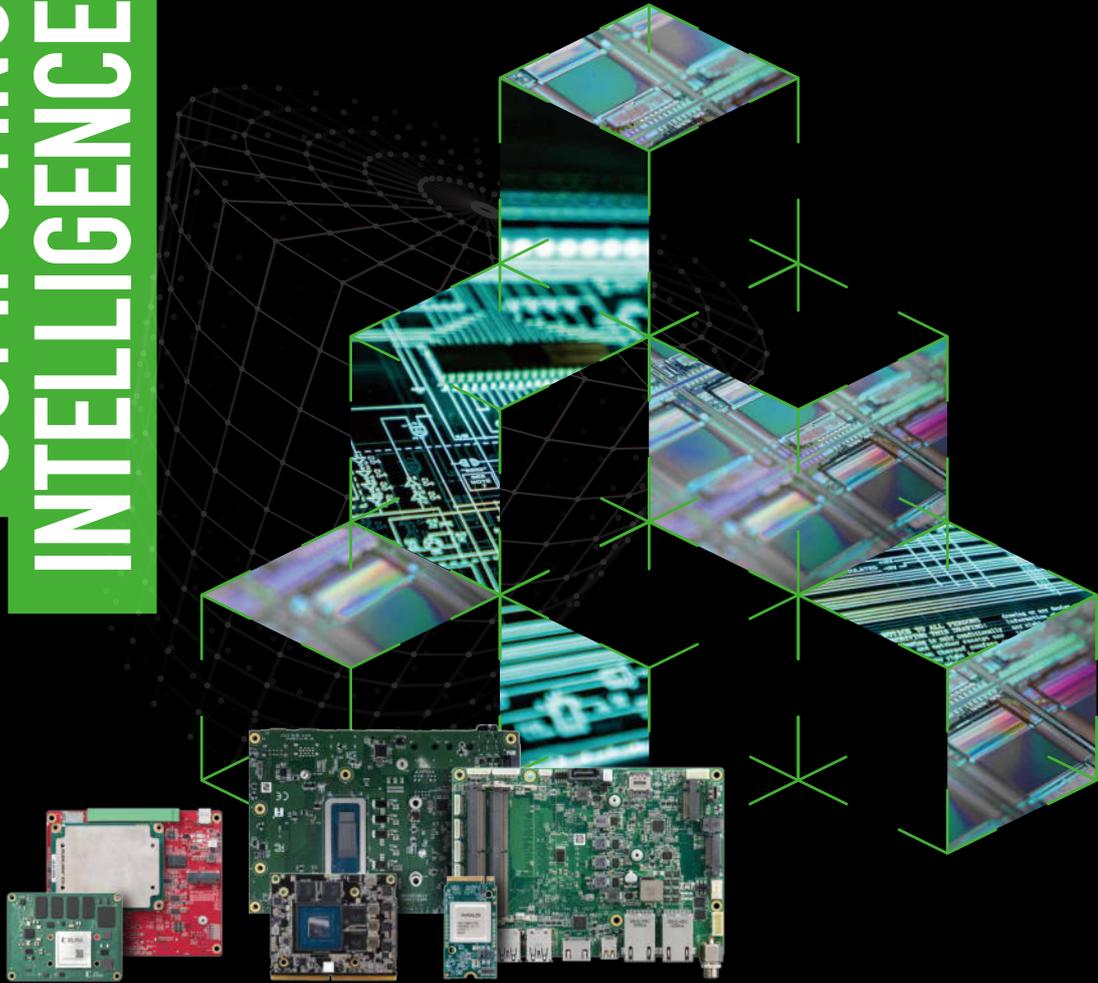


Unlock AI Potential with iVIT and iCAP Synergy



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COMPUTING INTELLIGENCE



COMPUTING INTELLIGENCE

Revolutionize your data processing and analytics at the edge with our AI-accelerated computing systems.



FPGA

Module Name	EXMU-X261	EXOU-X261
Module Type	FPGA Machine Vision Solution Kit	FPGA Machine Vision Solution Box
Form Factor	SOM and Carrier Board	SOM and Carrier Board
Controller	Kria K26 SOM	Kria K26 SOM
AI Computing power	1.4 TOPS	1.4 TOPS
Memory	4GB LPDDR4 on SOM	4GB LPDDR4 on SOM
Storage	16GB eMMC on SOM ; Micro SD ; NVME SSD (M.2 2242 M-Key PCIe Gen 3 x2)	16GB eMMC on SOM ; Micro SD ; NVME SSD (M.2 2242 M-Key PCIe Gen 3 x2)
Dimensions (WxLxH/mm)	120 x 100 x 30.37 (with K26)	142 x 104 x 70
Display Interface	1 x HDMI 1.4	1 x HDMI 1.4
Ethernet	1 x RJ45 GbE LAN	1 x RJ45 GbE LAN
I/O	4 x USB 3.1 Gen 1	4 x USB 3.1 Gen 1
	1 x 15pin terminal block (GPIO x 5, UART x 1, CAN Bus x 2, I2C x 1)	1 x 15pin terminal block (GPIO x 5, UART x 1, CAN Bus x 2, I2C x 1)
	1 x MicroSD	1 x MicroSD
	1 x USB Type-C (Debug Only)	1 x USB Type-C (Debug Only)
	1 x Power Button	1 x Power Button
	1 x Reset Button	1 x Reset Button
Expansion	M.2 2230 E-Key (PCIe Gen 2 x1, USB 2.0)	M.2 2230 E-Key (PCIe Gen 2 x1, USB 2.0)
	M.2 2242 M-Key (PCIe Gen 3 x4)	M.2 2242 M-Key (PCIe Gen 3 x4)
Power Requirement	12V +/-5% DC Power supply	12V +/-5% DC Power supply
Power Consumption	Approximately 17.64W (12V, 1.47A)	Approximately 17.64W (12V, 1.47A)
Temperature	Operation : S/T 0°C ~ 70°C (Ta) W/T -40°C ~ 85°C (Ta)	Operation : S/T 0°C ~ 70°C (Ta) W/T -40°C ~ 85°C (Ta)
	Storage : -55°C ~ 95°C (Ta)	Storage : -55°C ~ 95°C (Ta)
Storage Humidity	5% to 95%, non-condensing	5% to 95%, non-condensing
OS Support	Linux (Kernel 5.15.19)	Linux (Kernel 5.15.19)
Certification	CE / FCC class A	CE / FCC class A
Vibration	3G, IEC 60068-2-64, random vibration, 5 ~ 500Hz, 1hr/axis	3G, IEC 60068-2-64, random vibration, 5 ~ 500Hz, 1hr/axis
Shock	30G, IEC 60068-2-27, half sine, 11ms duration	30G, IEC 60068-2-27, half sine, 11ms duration
Warranty	3 Years	3 Years

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COLLECTIVE INTELLIGENCE



COLLECTIVE INTELLIGENCE

Partnering with industry leaders, we collaboratively shape an intelligence ecosystem, unlocking the endless possibilities of edge AI applications.

Additionally, we engage with suppliers, global customers, and employees to address environmental concerns, uphold social responsibilities, and drive positive impact.

