

innodisk

ARCHITECT  
INTELLIGENCE

INNODISK 2026  
产品选型指南



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# INNODISK — 智能系统构建专家

Innodisk宜鼎国际是 **边缘AI解决方案** 的全球领先企业，融合业界领先的硬件组件与先进计算平台，致力于构建边缘智能的未来。

**总部位于台湾**，依托逾20年深厚经验，我们的研发团队、全球运营体系及合作伙伴生态，为广泛的 **工业与企业级应用** 提供可靠服务、稳定可靠的制造品质以及长期支持。



200+位专注技术创新的自主研发工程师



灵活的产品设计与协作方式



无缝集成



深耕垂直市场



4,000+  
4,000+全球客户合作经验



全球技术服务网络

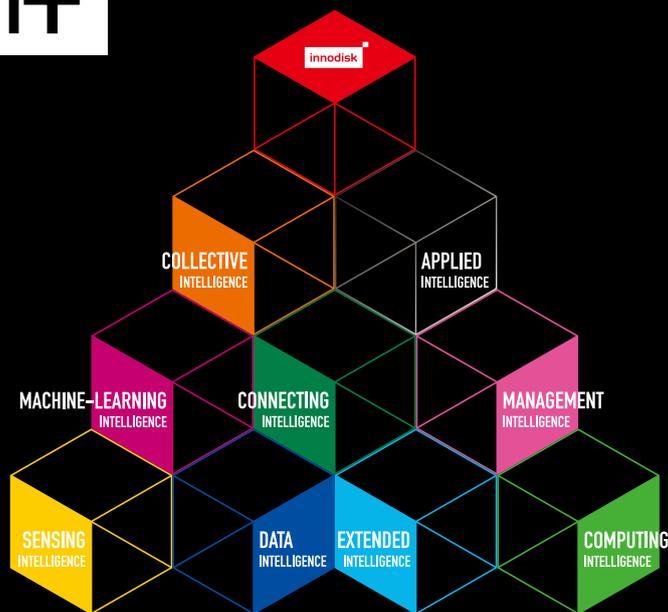


了解更多

# 宜鼎 为边缘AI提供核心组件

在宜鼎，我们通过提供边缘AI的核心组件，并依托全面的产品与解决方案组合，践行“**智构未来**” (Architect Intelligence) 的愿景。

凭借高度可定制、全面兼容的技术，我们在真实场景中落地边缘智能，轻松连接边缘AI时代下去中心化、多样且快速变化的各类应用。



## 全系列产品组合

云端管理	云端AI	iCAP (Innodisk 云端管理平台)					
软件 / 固件	iSeries 软件	iSMART / iTracker / iOPAL / iRAID					
	Innodisk AI SDK	AccelTune / AccelBrain / iVIT					
边缘 AI 计算	AI 加速卡	 <b>NVIDIA</b>		 <b>Qualcomm</b>		 <b>Intel</b>	
	边缘 AI 系统	 <b>Innodisk APEX 系列</b>					
关键组件与外设	闪存 (Flash)	内存 (DRAM)	显示模组	网络通信	存储设备	Wi-Fi	
							
传感器	相机模组				空气传感器		
							

# 跨行业 解决方案

我们连接产业洞察与实际落地成果。



## 制造

AI 解决方案通过精准、即时的决策，提升效率、安全性和工厂产能。

- 自主移动机器人 (AMR)
- 人形机器人
- 自动光学检测 (AOI)
- 智慧工厂



## 交通运输

我们的解决方案提升了电动车、公交车、地铁等交通工具的运营效率、管理能力和安全性。

- 电动汽车 (EV) 充电桩
- 自动驾驶车辆



## 安防监控

我们的解决方案为现代安防需求提供先进的视频分析与即时响应能力。

- 智慧路灯
- 个人防护装备 (PPE) 识别



## 数据中心

我们帮助服务器与数据中心应对快速增长的数据量，同时延长产品寿命并降低功耗。

- 云存储系统
- 边缘计算服务器
- AI训练服务器



## 零售物流

我们推动智慧零售，提升购物、点餐和配送的效率与安全性。

- 智能售货机
- 自助收银系统



## 网络通信

我们的解决方案确保关键通信基础设施在高负载下依然保持稳定、高性能。

- 5G基站
- 录播系统



## 医疗保健

我们通过先进的解决方案将 AI 融入医疗领域，满足严苛的医疗标准与需求。

- 智慧护理系统
- 包装与检测



## 媒体娱乐

我们提供能延长设备寿命、保护数据，并符合娱乐产业（如博彩）标准的解决方案。

- 博彩设备



## 航空航天

我们针对航空航天领域的独特挑战，量身打造前沿解决方案。

- 任务关键型设备
- 坚固型系统

# 技术与创新

宜鼎专注于开发兼具可靠性、耐用性与高性能的工业级技术。

通过全面的硬件、固件与软件整合，我们提供能在严苛环境下稳定运行的智能解决方案。我们的定制能力确保每套解决方案都能精准满足您的应用需求。

## 数据优化



### iDATA GUARD 数据守护技术

确保高效电源循环，并保障数据完整性。



### iPOWER GUARD 技术

保护 SSD 免受电源不稳影响，确保系统稳定运行。



### iRETENTION

采用智能算法监控温度与 P/E Cycle。



### 端到端数据路径 保护 (ETEP)

确保数据在传输的每一步都完整无误。

## 安全性



### PLP 掉电保护技术 (iCELL)

确保 SSD 能保护关键任务数据，防止掉电造成的数据丢失。



### AES 加密

通过 AES 硬件加密技术保护机密数据。



### 数据写入保护

通过写保护机制，确保存储数据的安全。

## 强化耐用性



### 宽温技术

支持  $-40^{\circ}\text{C}$  至  $85^{\circ}\text{C}$  的工作温度范围。



### 极宽温技术

在极端环境中，可选用支持高达  $105^{\circ}\text{C}$  /  $125^{\circ}\text{C}$  工作温度的 DRAM 模组。



### 抗硫化技术

在严苛环境中有效抵御硫化腐蚀。



### 敷形涂层技术 (三防漆) (CONFORMAL COATING)

保护您的 DRAM 电路板免受酸性物质、灰尘及其他有害物质的侵蚀。



### U 型耐震扣

提升模组稳定性与抗冲击强度。



### 散热片

防止过热，延长产品使用寿命。



### U 型强固技术 (SIDE FILL)

让芯片与电路板之间的焊点更加牢固。

## 长效运行技术



### iSLC / ULTRA iSLC

大幅延长设备寿命并提升整体性能。



### 磨损均衡技术

确保数据读写均匀分布于各存储单元，延长设备寿命。



### 垃圾数据回收与 TRIM

清除无效数据，优化并延长存储设备寿命。

## 系统还原



### InnoOSR

专利固件技术，支持一键快速还原。



### 远程还原

支持运维人员通过云端远程还原设备。

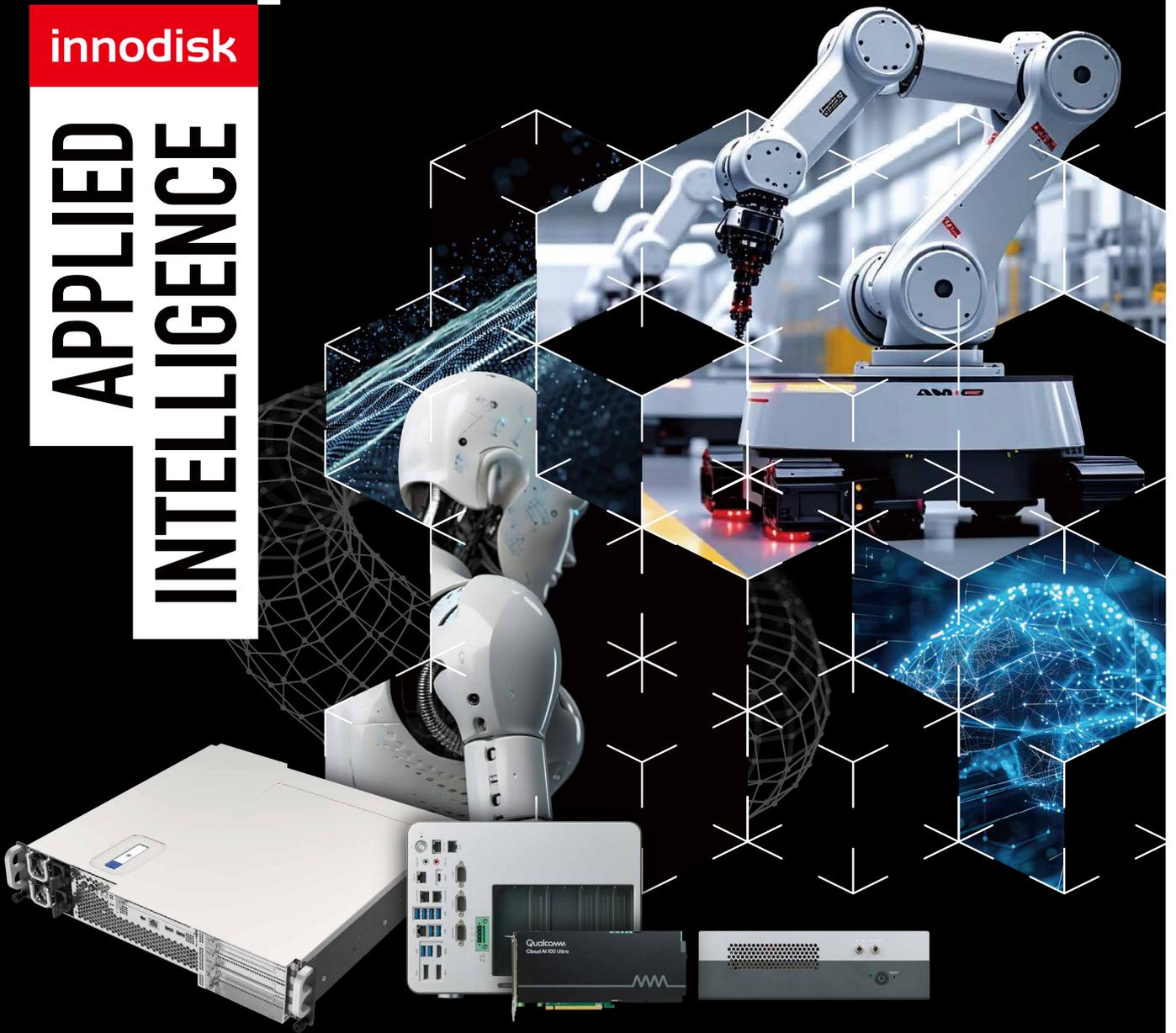


### 本地还原

支持在设备端直接进行还原。

innodisk

# APPLIED INTELLIGENCE



## APPLIED INTELLIGENCE

结合搭载 NVIDIA、Qualcomm 与 Intel 核心的 **边缘 AI 系统**，以及面向具体 **应用场景** 的一站式 AI 解决方案，充分发挥可配置、可落地的智能优势，助您打造专属的成功路径。

# 边缘 AI 系统产品布局

携手全球领先的  
边缘 AI 核心技术，持续创新

 **NVIDIA**

RTX 系列 AI 加速卡 提供高性能图形处理、长效生命周期及多用途的 AI 计算能力。

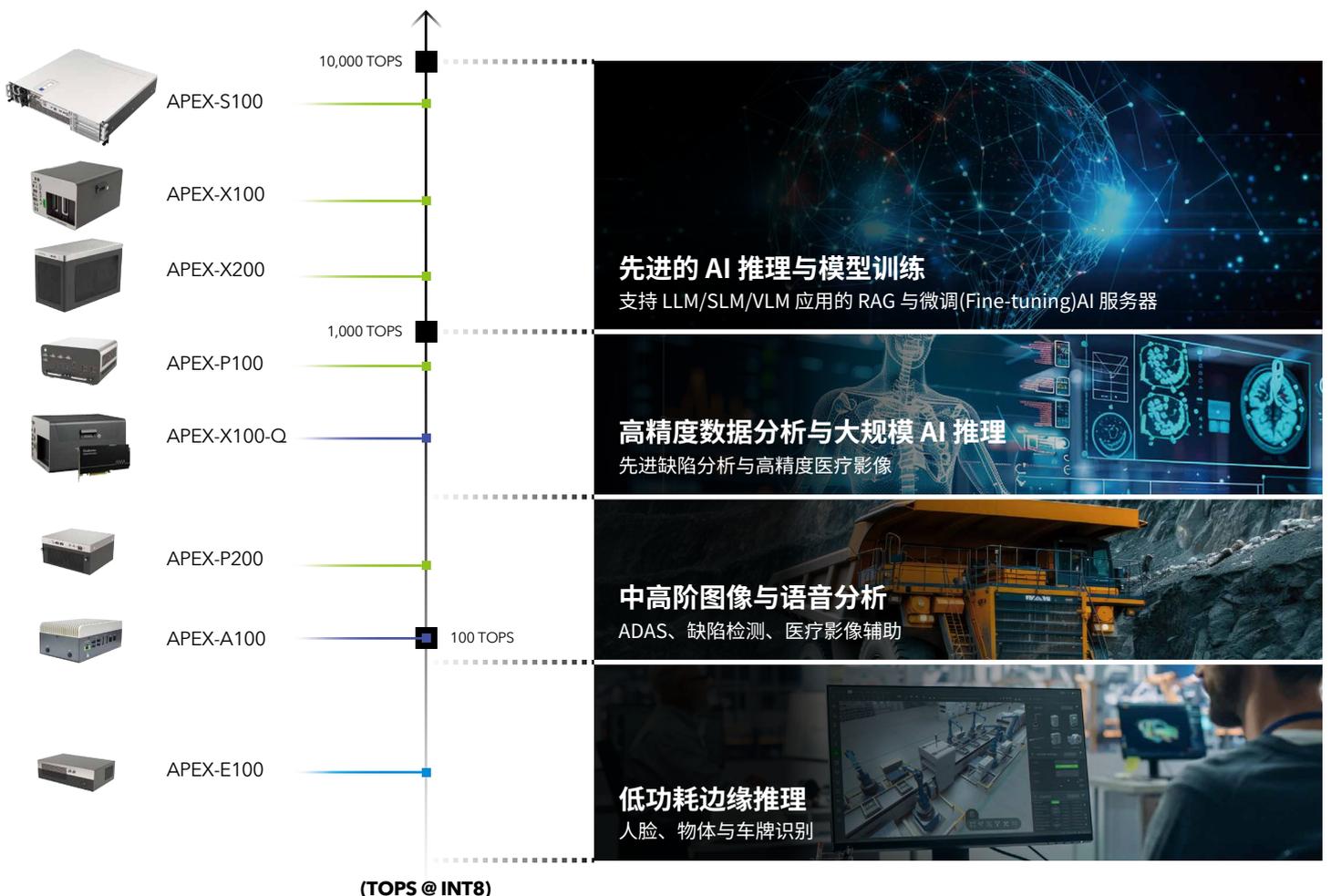
 **Qualcomm**

Cloud AI 100 Ultra 加速器 适用于本地部署的大型语言模型(LLM); Dragonwing IQ 系列 则专为可扩展的边缘 AI 应用打造。

 **Intel**

内建 NPU 的 Core Ultra 处理器 提供核心 AI 算力; Intel x86 平台 则为多元应用场景提供出色兼容性。

## 面向工业与企业级应用的全方位 AI 运算解决方案



# 边缘 AI 系统

## APEX-S100

## NVIDIA 解决方案



### 2U Short-depth Design Empowering NVIDIA MGX Modular AI Server

- Support NVIDIA H200NVL, RTX PRO 6000 Blackwell Server Edition, L40S accelerators.
- Support Intel Xeon 6 processor, up to 768GB DDR5 6400 MT/s RDIMM, 4 x 4T E1.S, 2 x 2TB M.2 SSD.
- Hot-swappable E1.S SSD and CRPS PSU; supports NVIDIA BlueField-3 DPU and NVLink Bridge.
- Optimized for edge AI training, deep learning workloads, LLM/SLM inference and fine-tuning, and RAG pipelines.

<b>Platform</b>	Intel CPU	Xeon 6731P	Xeon 6730P	Xeon 6736P
	Cores	32C	32C	36C
	Max. Frequency	4.1GHz	3.8GHz	4.1GHz
<b>AI Accelerator</b>	AI Engine	up to 2 x L40S	up to 2 x RTX PRO 6000 Blackwell Server Edition	up to 2 x H200 NVL
	Form Factor (Interface)	11.2cm H x 26.7cm L, dual slot, full height (PCIe Gen 5 x16)		
	Cores / Computational power	18,176 x Ada CUDA Cores 568 x fourth-generation Tensor Cores 142 x third-generation RT Cores	24,064 x Blackwell CUDA Cores 752 x fifth-generation Tensor Cores 188 x fourth-generation RT Cores	1,671 TFLOPS (FP16 / BFLOAT16 Tensor core)
	GPU memory	48GB GDDR6 (w/ECC)	96GB GDDR7 (w/ECC)	141GB HBM3e (w/ECC)
<b>Memory</b>	Technology / Socket	DDR5 6400 MT/s, 8 x 288-pin DDR5 RDIMM DDR5 8000 MT/s, 8 x 288-pin DDR5 MRDIMM (support ECC, 128GB per DIMM)		
	Max. Capacity	up to 1T		
<b>Displays</b>	Mini DP (Full HD@60Hz)	1		
<b>BMC</b>	BMC	1 x 1Gbps by AST2600 (BMC management only, no Internet access)		
<b>Ethernet</b>	Ethernet	2 x 10Gbps by Intel X710-T2L	2 x 10Gbps by Intel X710-T2L or 2 x 25Gbps by Intel E810-XXVDA2	2 x 200Gbps by NVIDIA BlueField-3 B3220
<b>Expansion Slots</b>	M.2 2280/22110 M Key	2 x (PCIe Gen 5 x4) support RAID 0/1		
	E1.S	4 x (PCIe Gen 5 x4) support RAID 0/1/5/10, hot-swappable, limit height 15mm		
	PCIe x16 (FHFL)	2 x (PCIe Gen 5 x16) accelerator default support NVLink Bridge		
	PCIe x16 (FHHL)	1 x (PCIe Gen 5 x16) NIC default		
	PCIe x8 (FHFL)	1 x (PCIe Gen 5 x8) <sup>1</sup>		
<b>External I/O</b>	USB 2.0	2		
<b>Power</b>	Power Input Voltage	AC 220-240V, 47-63Hz		
	Power Connector Type	IEC 60320 C13 (1+1 Redundant CRPS, 2 x 2,000W Titanium)		
<b>Environment</b>	Operating Temperature	0°C ~ 30°C (with accelerator)		
<b>Security</b>	TPM 2.0	dTPM2.0 (Hardware, Infineon:SLM9670AQ2.0)		
<b>Miscellaneous</b>	LED Indicator	1 x HDD, 1 x UID, 1 x Power, 1 x LAN, 1 x Info		
<b>Physical Characteristics</b>	Dimension L x W x H (mm)	438 x 420 x 88		
	Net Weight / Gross Weight (KG)	TBA		
	Mount	Rackmount		
<b>Operating System</b>	Operating System	Linux Ubuntu Server		
		Microsoft Windows Server 2019/2022		
<b>Regulation</b>	Safety	CE/FCC		

<sup>1</sup> Dual accelerators installed will occupy this slot

# APEX-X100

## NVIDIA 解决方案



### Intel-Based AI System with NVIDIA PRO 6000 Blackwell Max-Q / 6000 Ada Accelerator

- Supports up to 24,064 CUDA Cores, 752 Tensor Cores, and 188 RT Cores with 96GB GDDR7 memory for AI LLM/SLM applications.
- Supports up to Intel 14th Gen Core i9 CPU, with up to 192GB DDR5 DRAM and 2TB NVMe SSD pre-installed.

<b>Platform</b>	Intel CPU	Core i9-14900	Core i9-13900E	Core i7-13700E
	Cores (P + E + LPE)	24C (8P + 16E)	24C (8P + 16E)	16C (8P + 8E)
	Max. Frequency	5.8GHz	5.2GHz	5.1GHz
<b>AI Accelerator</b>	AI Engine	NVIDIA RTX 6000 Ada	NVIDIA RTX 6000 Ada	
	Form Factor (Interface)	11.2cm H x 26.7cm L, dual slot, full height (PCIe Gen 4 x16)		
	Cores	24,064 x NVIDIA Blackwell CUDA Cores 752 x NVIDIA 5th Tensor Cores 188 x NVIDIA 4th RT Cores	18,176 x NVIDIA Ada Lovelace architecture-based CUDA Cores 568 x NVIDIA 4th Tensor Cores 142 x NVIDIA 3th RT Cores	
	GPU memory	96GB GDDR7 (w/ECC)	48GB GDDR6 (w/ECC)	
<b>Memory</b>	Technology / Socket	DDR5 4400MT/s <sup>1</sup> / 4 x 288-pin DDR5 UDIMM		
	Max. Capacity	2 x (PCIe Gen 4 x4), 1 x 2TB M.2 SSD pre-installed	2 x (PCIe Gen 4 x4), 1 x 1TB M.2 SSD pre-installed	2 x (PCIe Gen 4 x4), 1 x 512GB M.2 SSD pre-installed
<b>Displays</b>	HDMI 2.0 (4K@30Hz)	1		
	DP++ 1.4 (4K@60Hz)	2		
	VGA	1 (optional, share the same connector with GPIO/DIO)		
<b>Ethernet</b>	LAN (Marvell AQC113 10Gbps)	1		
	LAN (Intel I226 2.5Gbps)	3 x (LAN2/3 support 802.at with 30W PoE)		
<b>Expansion Slots</b>	M.2 2280 M Key	2 x (PCIe Gen 4 x4), 1 x 2TB M.2 SSD pre-installed	2 x (PCIe Gen 4 x4), 1 x 1TB M.2 SSD pre-installed	2 x (PCIe Gen 4 x4), 1 x 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	1 x (Gen 4 x16 signal) accelerator pre-installed or 1 x (Gen 4 x8 signal)		
	PCIe x16	1 x (Gen 4 x8 signal) <sup>2</sup>		
	PCIe x16	1 x (Gen 3 x4 signal)		
	PCIe x4	1 x (Gen 3 x4 signal)		
	PCIe x1	1 x (Gen 3 x1 signal)		
<b>External I/O</b>	COM1	RS232/422/485		
	COM2	RS232/422/485		
	COM3	RS485 (RJ45)		
	USB 3.2 Gen 2 x2 (20Gbps) Type-C	1		
	USB 3.2 Gen 2 x1 (10Gbps)	8		
	Buttons	1 x Power (with LED)		
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1		
	GPIO/DIO	8 bits (4 in/ 4 out)		
<b>Power</b>	Power Input Voltage	DC 24~48V (±5%)		
	Power Consumption	24V@25A (with i9-13900E / 1TB SSD / 128GB DRAM / NVIDIA RTX6000 Ada)		
<b>Environment</b>	Operating Temperature	0°C ~ 40°C (with accelerator)		
<b>Miscellaneous</b>	LED Indicator	2 x Power LED, 2 x Fan LED, 2 x Temp LED		
<b>Physical Characteristics</b>	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		
<b>Regulation</b>	Safety	CE/FCC/UKCA		

<sup>1</sup> by Intel CPU limitation <sup>2</sup> When enabled, will downclock speed from Gen 4 x16 to Gen 4 x8

# APEX-X200

## NVIDIA 解决方案



### Intel-based AI system with NVIDIA GeForce RTX 5080 accelerator

- Supports 10,752 CUDA Cores, 336 Tensor Cores, and 84 RT Cores with 16GB GDDR7 memory for AI LLM/SLM applications.
- Integrated with Intel 15th Gen Ultra 9/7 CPU, up to 96GB DDR5 DRAM and 1TB SSD pre-installed.

<b>Platform</b>	Intel CPU	Core Ultra 9 285	Core Ultra 7 265
	Cores (P + E + LPE)	24C (8P + 16E)	20C (8P + 12E)
	Max. Frequency	5.6GHz	5.3GHz
<b>AI Accelerator</b>	AI Engine	NVIDIA GeForce RTX 5080	
	Form Factor (Interface)	13cm H x 316.5cm L, 3.5 slot, full height (PCIe Gen 5 x16)	
	Cores	10,752 x NVIDIA Blackwell architecture-based CUDA Cores 336 x NVIDIA fifth-generation Tensor Cores 84 x NVIDIA fourth-generation RT Cores	
	GPU memory	16GB GDDR7	
<b>Memory</b>	Technology / Socket	DDR5 6400MT/s <sup>*1</sup> / 2 x 262-pin DDR5 CSODIMM	
	Max. Capacity	up to 96GB (2 x 32GB, total 64GB pre-installed)	
<b>Displays</b>	HDMI 2.1 (8K@60Hz)	1	
	DP++ 2.1 (8K@60Hz)	1	
	LAN (Intel I226 2.5Gbps)	2	
<b>Expansion Slots</b>	M.2 2280 M Key	1 x (PCIe Gen 5 x4), 1TB M.2 SSD pre-installed 1 x (PCIe Gen 4 x4)	1 x (PCIe Gen5 x4), 512GB M.2 SSD pre-installed 1 x (PCIe Gen4 x4)
	M.2 2230 E Key	1 x (PCIe Gen 4 x1/USB 2.0)	
	PCIe x16	3 x (Gen 5 x16 signal) RTX 5080 pre-installed	
	USB 3.2 Gen 2 x1 (10Gbps)	8	
	Buttons	1 x Power	
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1	
	GPIO/DIO	8 bits (4 in/ 4 out)	
<b>Power</b>	Power Input Voltage	AC 100-240V	
	Power Consumption	TBC	
<b>Environment</b>	Operating Temperature	0°C ~ 45°C (with RTX 5080)	
<b>Miscellaneous</b>	LED Indicator	2 x Power LED, 2 x Fan LED, 2 x Temp LED	
<b>Physical Characteristics</b>	Dimension L x W x H (mm)	381 x 185 x 235	
	Net Weight / Gross Weight (KG)	TBC	
	Mount	Wall Mount / Desk mount	
	Antenna Holes	2	
<b>Regulation</b>	Safety	CE/FCC/UKCA	

<sup>\*1</sup> by Intel CPU limitation

# APEX-P100

## NVIDIA 解决方案



### 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.
- Integrated with Intel 13th Gen Core i7 CPU, and 32GB DDR5 DRAM and 512GB NVMe SSD pre-installed.

<b>Platform</b>	Intel CPU	Core i7-13700E
	Cores (P + E + LPE)	16C (8P + 8E)
	Max. Frequency	5.1GHz
<b>AI Accelerator</b>	AI Engine	NVIDIA RTX 5000 Ada
	Form Factor (Interface)	MXM graphics module version 3.1, Type B (PCIe Gen 4 x16)
	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)
<b>Memory</b>	Technology / Socket	DDR5 5200MT/s / 2 x 262-pin DDR5 SODIMM
	Max. Capacity	up to 64GB (2 x 16GB, total 32GB pre-installed)
<b>Displays</b>	DP++ 1.4 (4K@60Hz)	5
<b>Ethernet</b>	LAN (Intel I226 2.5Gbps)	5
<b>Expansion Slots</b>	M.2 2280 M Key	2 x (PCIe Gen 4 x4/SATA) 512GB M.2 SSD pre-installed
	MXM Type B / B+	1 x (PCIe Gen 4 x16) RTX 5000 Ada pre-installed
<b>External I/O</b>	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 2x1 (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	8 bits (by BIOS selection)	
<b>Power</b>	Power Input Voltage	DC 24V (±5%)
	Power Consumption	Wall Mount
<b>Environment</b>	Operating Temperature	0°C ~ 50°C (with NVIDIA RTX 5000 Ada)
<b>Physical Characteristics</b>	Dimension L x W x H (mm)	280 x 270 x 148.2
	Net Weight / Gross Weight (KG)	5.7 / 8
	Mount	Wall Mount
<b>Regulation</b>	Safety	CE/FCC

# APEX-P200

## NVIDIA 解决方案



### 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.
- Integrated with Intel 13th Gen Core i7 CPU, and 32GB DDR5 DRAM and 512GB NVMe SSD pre-installed.
- Compact design with dimensions of 182mm x 158.6mm x 90mm for efficient space usage.

<b>Platform</b>	Intel CPU	Core i7-13800HE
	Cores (P + E + LPE)	14C (6P + 8E)
	Max. Frequency	5GHz
<b>AI Accelerator</b>	AI Engine	NVIDIA RTX 2000 Ada / RTX PRO 2000 Blackwell (planning)
	Form Factor (Interface)	MXM graphics module version 3.1, Type A (PCIe Gen 4 x8)
	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)
<b>Memory</b>	Technology / Socket	DDR5 5200MT/s / 2 x 262-pin DDR5 SODIMM
	Max. Capacity	up to 64GB (2 x 16GB, total 32GB pre-installed)
<b>Displays</b>	HDMI 2.1 (8K@60Hz)	1
<b>Ethernet</b>	LAN (Intel I226 2.5Gbps)	3x (LAN 2/3 support 802.at with 30W PoE)
<b>Expansion Slots</b>	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 (Gen 5 x8), RTX 2000 Ada pre-installed
<b>External I/O</b>	COM1	RS232/422/485 (5V/12V)
	COM2	RS232/422/485
	USB 3.2 Gen 2 x1(10Gbps)	2
	USB 2.0	2
	Buttons	1
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1
<b>Power</b>	Power Input Voltage	DC 19V (±5%)
	Power Consumption	19W@10.5A (with i7-13800HE/ 512GB SSD/ 32GB DRAM/ NVIDIA RTX 2000 Ada)
<b>Environment</b>	Operating Temperature	-20°C ~ 60°C (with NVIDIA RTX 2000 Ada)
<b>Miscellaneous</b>	LED Indicator	1 x HDD LED
<b>Physical Characteristics</b>	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
<b>Regulation</b>	Safety	CE/FCC/UKCA



### Intel-Based AI System with Qualcomm Cloud AI 100 UltraAccelerator

- Supports 870TOPS with 128GB LPDDR4x memory for SLM, LLM, and generative AI applications.
- Intel 13th Gen Core i7 CPU, 192GB DDR5 DRAM and 2TB NVMe SSD pre-installed.

<b>Platform</b>	Intel CPU	Core i7-13700E
	Cores (P + E + LPE)	16C (8P + 8E)
	Max. Frequency	5.1GHz
<b>AI Accelerator</b>	AI Engine	Qualcomm Cloud AI 100 Ultra
	Form Factor (Interface)	11.1cm H x 23.8cm L, single slot, full height (PCIe Gen 4 x16)
	Computing Power	870 TOPS (INT8) 288 TFLOPS (FP16)
	GPU memory	128GB LPDDR4x (w/ECC)
<b>Memory</b>	Technology / Socket	DDR5 4400MT/s <sup>*1</sup> / 4 x 288-pin DDR5 UDIMM
	Max. Capacity	up to 192GB (4 x 48GB, total 192GB pre-installed)
<b>Displays</b>	HDMI 2.0 (4K@30Hz)	1
	DP++ 1.4 (4K@60Hz)	2
	VGA	1 (optional, share the same connector with GPIO/DIO)
<b>Ethernet</b>	LAN (Marvell AQC113 10Gbps)	1
	LAN (Intel I226 2.5Gbps)	3 x (LAN2/3 support 802.at with 30W PoE)
<b>Expansion Slots</b>	M.2 2280 M Key	2 x (PCIe Gen 4 x4), 1 x 2TB 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	1 x (Gen 4 x16 signal), Cloud AI 100 Ultra pre-installed or 1 x (Gen 4 x8 signal)
	PCIe x16	1 x (Gen 4 x8 signal) <sup>*2</sup>
	PCIe x16	1 x (Gen 3 x4 signal)
	PCIe x4	1 x (Gen 3 x4 signal)
	PCIe x1	1 x (Gen 3 x1 signal)
<b>External I/O</b>	COM1	RS232/422/485
	COM2	RS232/422/485
	COM3	RS485 (RJ45)
	USB 3.2 Gen 2 x2 (20Gbps) Type-C	1
	USB 3.2 Gen 2 x1 (10Gbps)	8
	Buttons	1 x Power (with LED)
	Audio (Realtek ALC888S)	Mic-in x 1, Line-out x 1
	GPIO/DIO	8 bits (4 in/ 4 out)
<b>Power</b>	Power Input Voltage	DC 24~48V (±5%)
	Power Consumption	24V@14A (with i7-13700E/ 2TB SSD/ 192GB DRAM/ Qualcomm Cloud AI 100 Ultra)
<b>Environment</b>	Operating Temperature	0°C ~ 40°C (with Qualcomm Cloud AI 100 Ultra)
<b>Miscellaneous</b>	LED Indicator	2 x Power LED, 2 x Fan LED, 2 x Temp LED
<b>Physical Characteristics</b>	Dimension L x W x H (mm)	340 x 279 x 215
	Net Weight / Gross Weight (KG)	10 / 16
	Mount	Wall Mount / Desk mount
	Antenna Holes	6
<b>Regulation</b>	Safety	CE/FCC/UKCA

<sup>\*1</sup> by Intel CPU limitation <sup>\*2</sup> When enabled, will downclock speed from Gen 4 x16 to Gen 4 x8



### Qualcomm-Based AI System with IQ-9075

- Powered by Qualcomm Dragonwing™ IQ-9075, up to 100 TOPS AI computing power.
- 128GB UFS 3.1 storage, 36GB onboard memory; 2 x 2.5G Ethernet, 4 x 4-lane MIPI CSI-2.
- Longevity: Chipset supported through 2038.
- Accelerates AGV, AMR, and LLM applications at the edge with unparalleled performance.

<b>Platform</b>	CPU	Qualcomm Dragonwing™ IQ-9075 SoC
	Max. Frequency	2.36GHz
	Module Form Factor	COM-HPC Mini
<b>AI Accelerator</b>	AI Engine	100 TOPS (Dense) / 200 TOPS (Sparse) via 2 x Hexagon Tensor Processor
<b>Memory</b>	Technology/ Socket	LPDDR5X
	Max. Capacity	36GB (Onboard)
<b>Storage</b>	UFS 3.1	128GB (Pre-installed)
<b>Graphics</b>	Controller	Adreno 663
<b>Displays</b>	DP++ 1.2 (4K@60Hz)	2
<b>Ethernet</b>	LAN ( Realtek RTL8221 2.5G)	2
<b>Expansion</b>	M.2 2280 M Key	1 x PCIe Gen 4 x4
	M.2 3052 B Key	1 x (USB 3.2/USB2.0)
	M.2 2230 E Key	1 x (PCIe Gen 4 x2/USB 2.0)
<b>External I/O</b>	COM1	RS232/422/485
	USB 3.2 Gen 2 x1 (10Gbps)	3
	USB 3.2 Gen 2 x1 (10Gbps) Type-C	1 (OTG support)
	USB 2.0	2
	Buttons	1 x Power, 1 x Reset
	Audio (Cirrus Logic WM8904)	Mic-in x 1, Line-out x 1
	CAN FD	1
<b>Power</b>	Power Input Voltage	DC 9~36V (±5%)
<b>Environment</b>	Operating Temperature	-40°C ~ 70°C
<b>Security</b>	TPM 2.0	dTPM2.0 (Hardware, Infineon:SLM9670AQ2.0)
<b>Physical Characteristics</b>	Dimension L x W x H (mm)	180 x 108.7 x 69
	Net Weight/Gross Weight (KG)	1.7
<b>Operating System</b>	Operating System	Yocto Linux (Kernel 6.6); Ubuntu 24.04 (Kernel 6.8)
<b>Regulation</b>	Safety	CE/FCC



### 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.
- Integrated with Intel Core Ultra CPU, and 16GB DDR5 DRAM and 512GB NVMe SSD pre-installed.
- Supports dual MIPI over Type-C cameras by Innodisk.

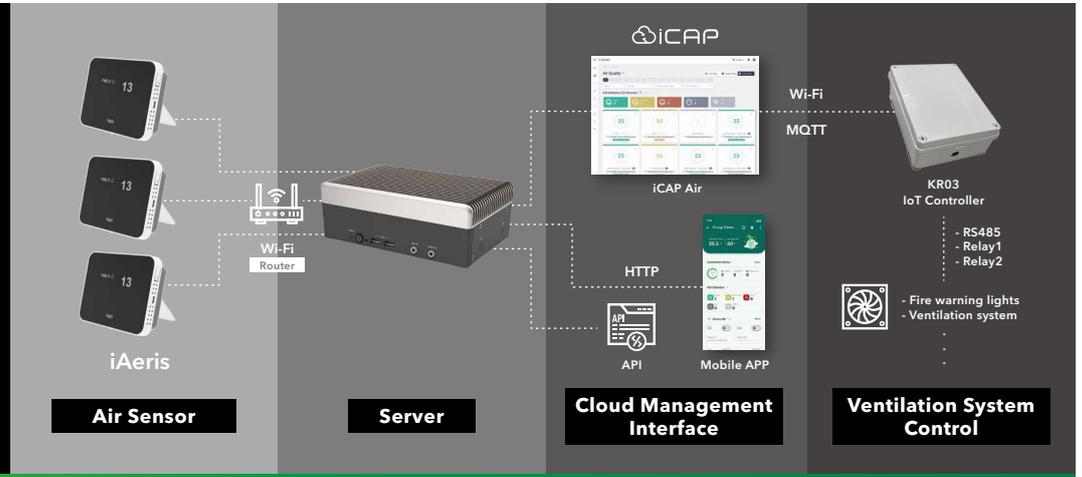
Platform	Intel CPU	Core Ultra 7 165HL	Core Ultra 5 135HL	Core Ultra 3 105UL
	Cores (P + E + LPE)	16C (6P + 8E + 2LPE)	14C (4P + 8E + 2LPE)	8C (2P + 4E + 2LPE)
	Max. Frequency	5.0GHz	4.6GHz	4.2GHz
AI Accelerator	AI Engine	Intel AI Boost up to 36 TOPS via (CPU+GPU+TPU)		
Memory	Technology / Socket	DDR5 5600MT/s / 2 x 262-pin DDR5 SODIMM		
	Max. Capacity	up to 96GB (1 x 16GB, 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 x1 (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 (±5%)		
	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/UKCA		

# 应用场景

## iCAP AIR

## 空气质量管理解决方案

### 全方位智能空气质量管理解决方案



#### 高灵敏度

通过 SHS、FCC、CE、RoHS、NCC、BSMI 等多项国际认证。



#### 群组管理

针对不同地点与设备类型，进行分类管理。



#### 自定义平面图

可上传楼层平面图，直观管理各区域的空气品质设备。



#### 阈值与警报设置

可针对不同空气因子自定义阈值，并触发即时警报。



#### 自动触发机制

根据实时空气质量自动启动通风设备，或通过自定义排程触发。



Air Sensor

### iCAP Air 规格表

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



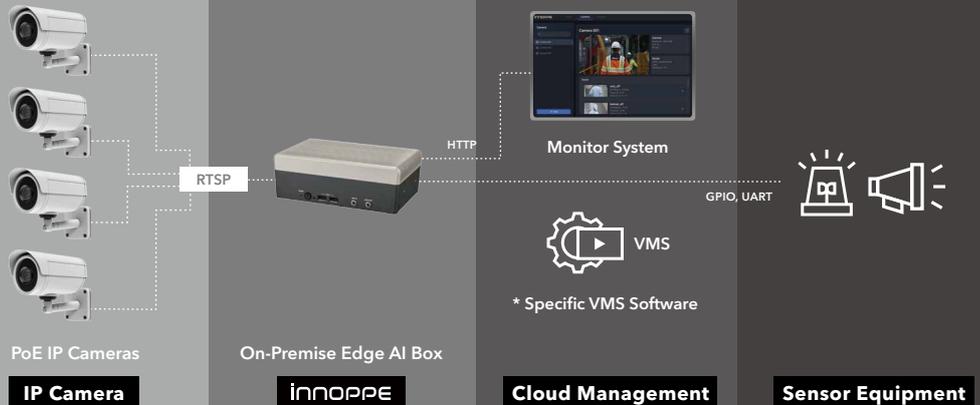
<b>Operating Environment</b>	-10°C ~ 50°C, below 90% RH
<b>Storage Temperature</b>	-20°C ~ 70°C, below 90% RH
<b>Screen</b>	2.23" OLED
<b>Control interface</b>	modbus-RTU or DO (Dry Contact)
<b>Communication Protocol</b>	RS485 (Modbus-RTU) / Wi-Fi (Modbus-TCP, HTTP, MQTT) (Optional) / BLE4.0 (Optional)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

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

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

### 高灵活性、智能化的 AI 识别方案

以边缘 AI 主机为核心，无缝连接前端 IP 摄像头与后端管理平台，轻松部署智能 PPE 识别方案。



\*InnoPPE 不包含视频管理软件(VMS)。本图仅用于说明 InnoPPE 可将检测事件发送至兼容的 VMS 平台，以触发警报通知。



#### 灵活架构

利用现有 IP 摄像头即可实现精准的个人防护装备(PPE)识别。



#### 高效部署

单台边缘 AI 主机可支持多路 IP 摄像头，降低部署成本。



#### 实时事件警报

实时记录违规事件，并可与现场警报系统集成，即时发送通知。



#### 智能电子围栏预警

支持区域侦测功能，可对未经授权闯入或徘徊行为实时发出警报。



#### 高灵活性 ODM 服务

针对实际应用场景，提供专属定制化 AI 模型，确保最优识别性能。



#### 第三方软件集成

集成 Nx Witness VMS 平台，可接收事件通知并录制关键视频片段。

## InnoPPE 硬件 / 软件规格

### HARDWARE



CPU	i5-1245UE
AI Accelerator	Hailo-8
Memory	16GB DDR5 SODIMM
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

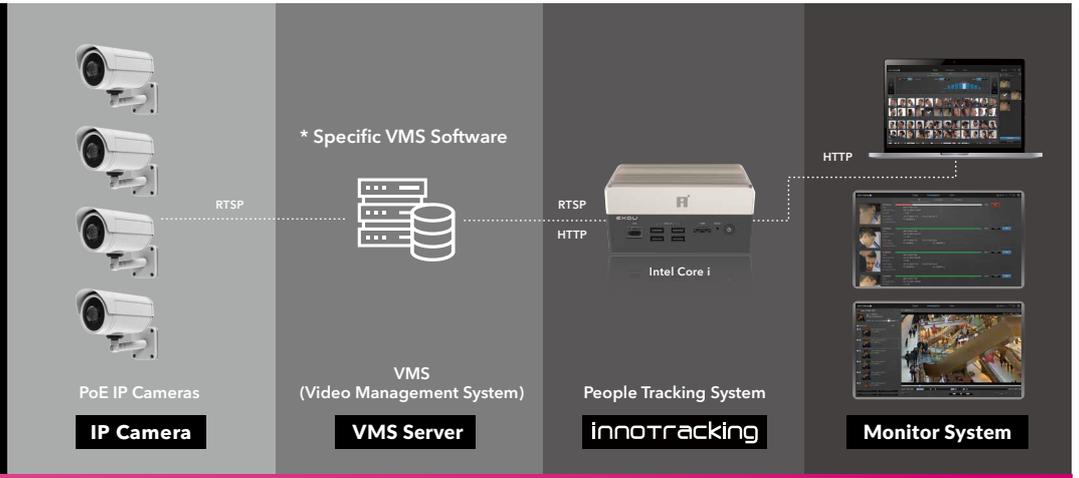
### SOFTWARE



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.

## 方案概览



\* InnoTracking 需从指定的视频管理软件(VMS)接收视频流作为输入源, 方案本身不包含 VMS 软件。



精准的 AI 人脸比对与搜索



无需预先注册人脸信息



简便直观的可疑目标追踪



充分利用现场现有摄像头



节能降本



坚固耐用: 耐高温与震动

## InnoTracking 硬件规格



**ABOX-5120**

Edge Server

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

我们提供坚固可靠的工业级内存与存储解决方案，  
支撑高性能计算与安全数据存储。

# 内存模组产品线

## IC 等级

原厂 IC	原厂 IC (Innodisk)	- 经各大 IC 供应商全面测试
eTT	经过有效测试的 DRAM (Effectively Tested)	- 经过有效测试，但测试模式因供应商而异 - 未标注 Logo，仅标注序列号或制造商信息
uTT	未经完整测试的 DRAM (Untested)	- 未通过完整测试流程 - 未标注 Logo，仅标注序列号或制造商信息
Downgrade	次级品 (Downgrade)	- 由良率极低的晶圆或裸晶制成，存在严重的兼容性与功能问题

## 增值服务特点

●: 支持项目 ▲: 可选项目

	宽温支持	抗硫化技术	30 μ" 加厚金手指	安装固定孔	连接器	iRAM	iSMART / iCAP	三防涂覆技术	U 型加固技术
CXL Memory Module									
CXL AIC									
DDR5	MRDIMM	●	●				▲	▲	▲
	LPDDR5X CAMM2		●				▲	▲	▲
	CAMM2		●				▲	▲	▲
	CUDIMM	●	●	●			▲	▲	▲
	CSODIMM	●	●	●			▲	▲	▲
	UDIMM	●	●	●			▲	▲	▲
	SODIMM	●	●	●			▲	▲	▲
	ECC UDIMM	●	●	●			▲	▲	▲
	ECC SODIMM	●	●	●			▲	▲	▲
	RDIMM	●	●	●			▲	▲	▲
	SORDIMM	●	●	●			▲	▲	▲
	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							▲	▲	

# 内存模组



## CXL 内存模组

Model Name	CXL Memory Module	CXL AIC
CXL Compliance	CXL 1.1 & CXL 2.0	CXL 1.1 & CXL 2.0
CXL Protocol	Type 3 (CXL.mem & CXL.io)	Type 3 (CXL.mem & CXL.io)
Interface	PCIe Gen 5 x8	PCIe Gen 5 x8
DRAM IC Generation	DDR5	DDR5
Form Factor	E3.S 2T	PCIe HHHL
Connector	EDSFF 2C (84 pin)	PCIe 5.0 *8 Connector
Density	64GB	up to 256GB
Operation Temperature	0°C ~ 70°C	0°C ~ 70°C



## DDR5 内存模组

Module Type	DDR5 MRDIMM	LPDDR5X CAMM2 	DDR5 CAMM2	DDR5 CUDIMM
Speed	8800MT/s (Gen 1), 12800 MT/s (Gen 2)	8533 MT/s	6400 MT/s	6400 MT/s, 7200 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	666pin	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, 7200 MT/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 SODIMM	DDR5 UDIMM ULP
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600MT/s, 6400MT/s, 7200 MT/s	4800 MT/s, 5600MT/s, 6400MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 24GB, 32GB, 48GB	16GB, 24GB, 32GB, 48GB, 64GB, 96GB, 128GB	16GB, 24GB, 32GB	16GB, 32GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Registered Memory with ECC	Non-ECC Unbuffered Memory
Pin Number	262pin	288pin	262pin	288pin
Bus Width	x72	x80	x80	x64
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	1.18 Inches	1.23 Inches	1.18 Inches	0.7 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 UDIMM VLP	DDR5 RDIMM VLP	DDR5 UDIMM WT	DDR5 SODIMM WT
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s, 6400MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 32GB	16GB, 24GB, 32GB, 48GB, 64GB	8GB, 16GB, 24GB, 32GB, 48GB	8GB, 16GB, 24GB, 32GB, 48GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	288pin	288pin	288pin	262pin
Bus Width	x72	x80	x64	x64
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	0.738 Inches	0.738 Inches	1.23 Inches	1.18 Inches
Operating Temperature	0°C ~ 95°C (Tc)	0°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)

Module Type	DDR5 ECC SODIMM WT	DDR5 ECC UDIMM WT	DDR5 RDIMM WT	DDR5 UDIMM ULP WT
Speed	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600MT/s, 6400MT/s	4800 MT/s, 5600MT/s
Density	16GB, 24GB, 32GB, 48GB	16GB, 24GB, 32GB, 48GB	16GB, 24GB, 32GB, 48GB	16GB, 32GB
Function	ECC Unbuffered Memory	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory
Pin Number	262pin	288pin	288pin	288pin
Bus Width	x72	x72	x80	x64
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	1.18 Inches	1.23 Inches	1.23 Inches	0.7 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 ECC UDIMM VLP WT	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, 6400 MT/s	4800 MT/s, 5600 MT/s	4800 MT/s, 5600 MT/s
Density	16GB, 32GB	32GB	8GB, 16GB, 32GB	16GB, 32GB
Function	ECC Unbuffered Memory	Registered Memory with ECC	Non-ECC Unbuffered Memory	Non-ECC Unbuffered Memory
Pin Number	288pin	288pin	262pin	288pin
Bus Width	x72	x80	x64	x64
Voltage	1.1V	1.1V	1.1V	1.1V
PCB Height	0.738 Inches	0.738 Inches	1.18 Inches	1.23 Inches
Operating Temperature	-40°C ~ 95°C (Tc)	-40°C ~ 95°C (Tc)	-40°C ~ 105°C	-40°C ~ 105°C



## DDR4 内存模组

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	8GB, 16GB, 32GB	8GB, 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 ~ 125°C (Tc)	-40°C ~ 125°C (Tc)



## DDR3 内存模组

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 内存模组

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	512MB, 1GB, 2GB	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 内存模组

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 内存模组

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

# 闪存 (FLASH) 存储设备



## PCIe - M.2

Model name	M.2 (P30) 4TE2		M.2 (P30) 4IE2		M.2 (P30) 4TE3		M.2 (P30) 4IE3	
	Connector		Connector		Connector		Connector	
Connector	M Key	A+E Key	M Key		M Key		M Key	
Interface	PCIe Gen 4 x4		PCIe Gen 3 x2		PCIe Gen 4 x4		PCIe Gen 4 x4	
Flash Type	3D TLC		3D TLC		iSLC (3D TLC)		3D TLC	
Capacity	128GB ~ 1TB		128GB ~ 1TB		40GB ~ 320GB		128GB ~ 1TB	
Max. Channel	2		2		2		2	
Sequential R/W (MB/sec, max.)	1750/1550		1750/1550		1750/1550		1800/1450	
Max. Power consumption	3.1W		3.1W		4.1W		3.1W	
External DRAM Buffer	N		N		N		N	
iData Guard	Y		Y		Y		Y	
iPower Guard	Y		Y		Y		N	
PLP (iCell)	N		N		N		N	
AES	Y		Y		Y		Y	
TCG Opal	Y		Y		Y		Y	
S.M.A.R.T.	Y		Y		Y		Y	
Dimension (WxLxH/mm)	ST: 22 x 30 x 3.5 WT: 25 x 30 x 15		ST: 22 x 30 x 3.5 WT: 25 x 30 x 15		ST: 22 x 30 x 3.5 WT: 25 x 30 x 15		ST: 22 x 30 x 3.5 WT: 25 x 30 x 15	

Model name	M.2 (P42) 3TE4		M.2 (P42) 3TE8		M.2 (P42) 3IE8	
	Connector		Connector		Connector	
Connector	M Key	B+M Key	M Key	B+M Key	M Key	B+M Key
Interface	PCIe Gen 3 x4		PCIe Gen 3 x2		PCIe Gen 3 x4	
Flash Type	3D TLC		3D TLC		iSLC (3D TLC)	
Capacity	128GB ~ 1TB		128GB ~ 1TB		40GB ~ 320GB	
Max. Channel	4		4		4	
Sequential R/W (MB/sec, max.)	2600/1800		1750/1500		3350/2600	
Max. Power consumption	4.0W		3.3W		4.2W	
External DRAM Buffer	N		N		N	
iData Guard	N		Y		Y	
iPower Guard	Y		Y		Y	
PLP (iCell)	N		N		N	
AES	Y		Y		Y	
TCG Opal	Y		Y		Y	
S.M.A.R.T.	Y		Y		Y	
Dimension (WxLxH/mm)	ST: 22 x 42 x 3 WT: 22 x 42 x 3.6		ST: 22 x 42 x 2.8 WT: 25 x 42 x 14.5		ST: 22 x 42 x 2.8 WT: 25 x 42 x 14.5	

Model name	M.2 (P42) 4TE2		M.2 (P42) 4IE2	M.2 (P42) 4TE3	M.2 (P42) 4IE3
Connector	M Key	M Key	M Key	M Key	M Key
Interface	PCIe Gen 4 x4	PCIe Gen 3 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC	iSLC (3D TLC)
Capacity	128GB ~ 2TB	4TB	40GB ~ 640GB	128GB ~ 2TB	40GB ~ 640GB
Max. Channel	4	4	4	4	4
Sequential R/W (MB/sec, max.)	3550/2950	3500/3100	3550/2950	3600/3150	3500/3000
Max. Power consumption	5.0W	5.1W	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)	Y	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 x 42 x 3.5 WT: 25 x 42 x 14.5	ST: 22 x 42 x 6 WT: 25 x 42 x 14.5	ST: 22 x 42 x 3.5 WT: 25 x 42 x 14.5	ST: 22 x 42 x 3.5 WT: 25 x 42 x 14.5	ST: 22 x 42 x 3.5 WT: 25 x 42 x 14.5

Model name	M.2 (P80) 3TE4		M.2 (P80) 3TE8		M.2 (P80) 3IE8	
Connector	M Key	B+M Key	M Key	B+M Key	M Key	B+M Key
Interface	PCIe Gen 3 x4	PCIe Gen 3 x2	PCIe Gen 3 x4	PCIe Gen 3 x2	PCIe Gen 3 x4	PCIe Gen 3 x2
Flash Type	3D TLC		3D TLC		3D TLC	
Capacity	128GB ~ 2TB		128GB ~ 2TB		40GB ~ 640GB	
Max. Channel	4		4		4	
Sequential R/W (MB/sec, max.)	2600/1800	1750/1500	3400/2750	1750 / 1650	3400/2850	1750/1700
Max. Power consumption	4.0W	3.4W	4.3W	3.0W	4.6W	3.1W
External DRAM Buffer	N		N	N	N	N
iData Guard	N		Y	Y	Y	Y
iPower Guard	Y		Y	N	Y	N
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 x 80 x 3 WT: 22 x 80 x 3.6		ST: 22 x 80 x 2.1 WT: 25 x 80 x 14.5		ST: 22 x 80 x 2.1 WT: 25 x 80 x 14.5	

Model name	InnoOSR M.2 (P80) 3TO8	M.2 (P80) 4TE2	M.2 (P80) 4IE2	M.2 (P80) 4TE3	M.2 (P80) 4IE3
Connector	M Key	M Key	M Key	M Key	M Key
Interface	PCIe Gen 3 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC	iSLC (3D TLC)
Capacity	128GB ~ 2TB	128GB ~ 2TB	40GB ~ 640GB	128GB ~ 2TB	40GB ~ 640GB
Max. Channel	4	4	4	4	4
Sequential R/W (MB/sec, max.)	3550/2700	3550/3300	3550/3300	3700/3300	3700/3200
Max. Power consumption	5.8W	5.4W	5.1W	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	Y	Y	Y	Y
AES	Y	Y	Y	Y	Y
TCG Opal	N	Y	Y	Y	Y
S.M.A.R.T.	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22 x 80 x 3.5	ST: 22 x 80 x 3.8 WT: 25 x 80 x 14.4	ST: 22 x 80 x 3.8 WT: 25 x 80 x 14.4	ST: 22 x 80 x 3.5 WT: 25 x 80 x 14.4	ST: 22 x 80 x 3.5 WT: 25 x 80 x 14.4

Model name	M.2 (P80) 4TG2-P	M.2 (P80) 4TS2-P	M.2 (P80) 4IG2-P	M.2 (P110) 4TG2-P
Connector	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
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	256GB ~ 4TB	200GB ~ 3.2TB	160GB ~ 1.28TB	512GB ~ 8TB
Max. Channel	8	8	8	8
Sequential R/W (MB/sec, max.)	6950/4700	6950/4700	6900/4350	7100 /5300
Max. Power consumption	10.2W	9.5W	10.2W	10.6W
External DRAM Buffer	Y	Y	Y	Y
iData Guard	Y	Y	Y	Y
iPower Guard	Y	Y	Y	Y
PLP (iCell)	Y	Y	N	Y
AES	Y	Y	Y	Y
TCG Opal	Y	Y	Y	Y
S.M.A.R.T.	Y	Y	Y	Y
Dimension (WxLxH/mm)	ST: 22 x 80 x 4 WT: 25 x 80 x 14.4	ST: 22.0 x 80 x 4 WT: 25 x 80 x 14.4	ST: 22 x 80 x 4 WT: 25 x 80 x 14.4	ST: 22 x 110 x 4 WT: 25 x 110 x 14.4

Model name	M.2 (P110) 4T52-P	M.2 (P110) 4IG2-P
Connector	M Key	M Key
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4
Flash Type	3D TLC	iSLC (3D TLC)
Capacity	400GB ~ 6.4TB	160GB ~ 2.56TB
Max. Channel	8	8
Sequential R/W (MB/sec, max.)	7000/5450	7000/5450
Max. Power consumption	10.5W	10.5W
External DRAM Buffer	Y	Y
iData Guard	Y	Y
iPower Guard	Y	Y
PLP (iCell)	Y	Y
AES	Y	Y
TCG Opal	Y	Y
S.M.A.R.T.	Y	Y
Dimension (WxLxH/mm)	ST: 22 x 110 x 4 WT: 25 x 110 x 14.4	ST: 22 x 110 x 4 WT: 25 x 110 x 14.4



## PCIe - U.2

Model name	U.2 SSD 4TG2-P	U.2 SSD 4T52-P	U.2 SSD 4IG2-P	U.2 SSD 5TG-P	U.2 SSD 5TS-P
Interface	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 4 x4	PCIe Gen 5 x4	PCIe Gen 5 x4
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC	3D TLC
Capacity	512GB ~ 16TB	400GB ~ 12.8TB	160GB ~ 1.28TB	2TB ~ 8TB	1.92TB ~ 7.68TB
Max. Channel	8	8	8	16	16
Sequential R/W (MB/sec, max.)	7150/6150	7150/6100	7050/5200	14000/10000	14000/10000
Max. Power consumption	13.5W	12.6W	12.1W	22W	22W
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	Y	Y	Y	Y
AES	Y	Y	Y	N	Y
TCG Opal	Y	Y	Y	N	Y
S.M.A.R.T.	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	100 x 69.8 x 6.9	100 x 69.8 x 6.9	100 x 69.8 x 6.9	100 x 69.8 x 14.8	100 x 69.8 x 14.8

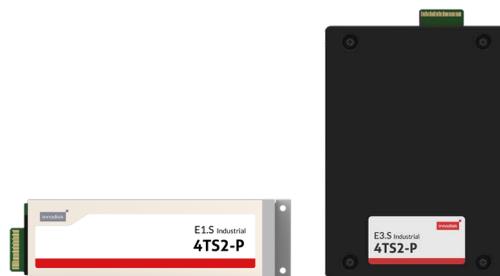


## PCIe - CFexpress

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 ~ 1TB	40GB ~ 320GB
Max. Channel	4	4
Sequential R/W (MB/sec, max.)	1750/1650	1750/1650
Max. Power consumption	3.2W	3.2W
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 ×4	PCIe Gen 4 ×4	PCIe Gen 4 ×4	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	Y	Y
TCG Opal	Y	Y	Y	Y	Y
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: 33.7 x 118.7 x 9.5 15mm: 33.7 x 118.7 x 15	5.9mm: 31.5 x 111.5 x 5.9 9.5mm: 33.7 x 118.7 x 9.5 15mm: 33.7 x 118.7 x 15	76 x 112.7 x 7.5	5.9mm: 31.5 x 111.5 x 5.9 9.5mm: 33.7 x 118.7 x 9.5 15mm: 33.7 x 118.7 x 15	76 x 112.7 x 7.5

## SATA - M.2



Model name	InnoOSR M.2 (S42) 3TO7	M.2 (S42) 3TEA	M.2 (S42) 3TE7	M.2 (S42) 3IE7	M.2 (S42) 3TEB
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	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	32GB ~ 512GB	64GB ~ 2TB	32GB ~ 512GB	20GB ~ 320GB	64GB ~ 2TB
Max. Channel	4	2	4	4	2
Sequential R/W (MB/sec, max.)	560/330	550/500	560/330	560/530	550/510
Max. Power consumption	1.6W	1.9W	1.6W	2.8W	1.2W
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	Y	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 x 42 x 3.5	22 x 42 x 3.5	22 x 42 x 3.5	22 x 42 x 3.5	22 x 42 x 3.5

Model name	M.2 (S42) 3TG6-P	M.2 (S42) 3SE4	M.2 (S42) 3ME4	M.2 (S42) 3IE4	M.2 (S42) 3SE3
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	3D TLC	SLC	MLC	iSLC (MLC)	SLC
Capacity	128GB ~ 1TB	8GB ~ 64GB	8GB ~ 256GB	4GB ~ 128GB	8GB ~ 32GB
Max. Channel	4	2	2	2	4
Sequential R/W (MB/sec, max.)	560/510	520/360	530/210	530/380	210/110
Max. Power consumption	2.9W	0.6W	1.4W	0.8W	1.2W
External DRAM Buffer	Y	N	N	N	N
iData Guard	Y	N	N	N	Y
iPower Guard	Y	Y	Y	Y	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 x 42 x 3.5	22 x 42 x 3.5	22 x 42 x 3.2	22 x 42 x 3.2	22 x 42 x 3.5

Model name	M.2 (S42) 3ME3	M.2 (S42) 3IE3	M.2 (S42) 3SE2-P	M.2 (S42) 3MG2-P	M.2 (S42) 3IE2-P
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	MLC	iSLC (MLC)	SLC	MLC	iSLC (MLC)
Capacity	8GB ~ 128GB	8GB ~ 64GB	8GB ~ 64GB	32GB ~ 256GB	16GB ~ 128GB
Max. Channel	2	2	4	4	4
Sequential R/W (MB/sec, max.)	220/80	200/80	550/330	560/340	560/450
Max. Power consumption	0.8W	1.3W	1.6W	2.6W	1.1W
External DRAM Buffer	N	N	Y	Y	Y
iData Guard	Y	Y	Y	Y	Y
iPower Guard	N	N	Y	Y	Y
PLP (iCell)	N	N	N	N	N
AES	N	N	Y	Y	Y
TCG Opal	N	N	Y	Y	Y
S.M.A.R.T.	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22 x 42 x 3.5				

Model name	InnoOSR M.2 (S80) 3TO7	M.2 (S80) 3TEA	M.2 (S80) 3TE7	M.2 (S80) 3IE7	M.2 (S80) 3TEB
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	3D TLC	iSLC (3D TLC)	3D TLC
Capacity	64GB ~ 2TB	64GB ~ 2TB	32GB ~ 1TB	20GB ~ 640GB	64GB ~ 1TB
Max. Channel	4	2	4	4	2
Sequential R/W (MB/sec, max.)	550/500	560/500	550/370	550/490	550/500
Max. Power consumption	2.6W	1.9W	2.0W	2.0W	1.2W
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	Y	N	N	N
AES	N	N	Y	Y	N
TCG Opal	N	N	N	N	N
S.M.A.R.T.	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22 x 80 x 3.5	22 x 80 x 3.5	22 x 80 x 3.5	22 x 80 x 3.5	22 x 80 x 3.5

Model name	M.2 (S80) 3TS9-P	M.2 (S80) 3TG9-P	M.2 (S80) 3TG6-P	M.2 (S80) 3SE4	M.2 (S80) 3ME4
Connector	B+M Key				
Interface	SATA III 6.0Gb/s				
Flash Type	3D TLC	3D TLC	3D TLC	SLC	MLC
Capacity	240GB ~ 1.92TB	4TB	128GB ~ 2TB	8GB ~ 64GB	8GB ~ 256GB
Max. Channel	4	4	4	2	2
Sequential R/W (MB/sec, max.)	550/530	500/520	560/510	520/360	530/170
Max. Power consumption	2.7W	5.5W	3.1W	1.6W	1.3W
External DRAM Buffer	Y	Y	Y	N	N
iData Guard	Y	Y	Y	N	N
iPower Guard	Y	Y	Y	Y	Y
PLP (iCell)	Y	N	Y	N	N
AES	N	N	Y	N	N
TCG Opal	N	N	Y	N	N
S.M.A.R.T.	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	22 x 80 x 4.2	22 x 80 x 3.5	22 x 80 x 3.5	22 x 80 x 2.1	22 x 80 x 3.2

Model name	M.2 (S80) 3IE4	M.2 (S80) 3SE3	M.2 (S80) 3SE2-P	M.2 (S80) 3MG2-P
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	iSLC (MLC)	SLC	SLC	MLC
Capacity	8GB ~ 128GB	32GB ~ 128GB	8GB ~ 256GB	32GB ~ 1TB
Max. Channel	2	4	4	4
Sequential R/W (MB/sec, max.)	530/360	380/220	520/340	530/450
Max. Power consumption	1.2W	2.0W	2.2W	4.6W
External DRAM Buffer	N	N	Y	Y
iData Guard	N	Y	Y	Y
iPower Guard	Y	N	Y	Y
PLP (iCell)	N	N	Y	Y
AES	N	N	Y	Y
TCG Opal	N	N	Y	Y
S.M.A.R.T.	Y	Y	Y	Y
Dimension (WxLxH/mm)	22 x 80 x 3.2	22 x 80 x 3.5	22 x 80 x 3.5	22 x 80 x 3.5

Model name	M.2 (S80) 3IE2-P	M.2 (S30) 3ME4	M.2 (S60) 3ME3
Connector	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
Flash Type	iSLC (MLC)	MLC	MLC
Capacity	32GB ~ 512GB	8GB ~ 256GB	32GB ~ 512GB
Max. Channel	4	2	4
Sequential R/W (MB/sec, max.)	560/450	530/170	380/200
Max. Power consumption	1.4W	1.3W	1.3W
External DRAM Buffer	Y	N	N
iData Guard	Y	N	Y
iPower Guard	Y	Y	N
PLP (iCell)	Y	N	N
AES	Y	N	N
TCG Opal	Y	N	N
S.M.A.R.T.	Y	Y	Y
Dimension (WxLxH/mm)	22 x 80 x 3.5	22 x 30 x 3.2	22 x 60 x 3.5



## SATA - 2.5"SSD

Model name	2.5" SATA SSD 3TEA	2.5" SATA SSD 3TE7	2.5" SATA SSD 3IE7
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)
Capacity	128GB ~ 2TB	32GB ~ 1TB	20GB ~ 320GB
Max. Channel	2	4	4
Sequential R/W (MB/sec, max.)	550/500	560/525	560/525
Max. Power consumption	1.5W	3.6W	3.6W
External DRAM Buffer	N	N	N
iData Guard	Y	Y	Y
iPower Guard	Y	Y	Y
PLP (iCell)	Y	N	N
AES	N	Y	Y
TCG Opal	N	N	N
S.M.A.R.T.	Y	Y	Y
Dimension (WxLxH/mm)	69.8 x 100.1 x 6.9	69.8 x 100.1 x 6.9	69.8 x 100.1 x 6.9

Model name	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
Flash Type	3D TLC	3D TLC	3D TLC
Capacity	128GB~1TB	4TB ~ 8TB	240GB ~ 1.92TB
Max. Channel	2	4	4
Sequential R/W (MB/sec, max.)	550/500	480/530	550/530
Max. Power consumption	4.4W	3.9W	3.7W
External DRAM Buffer	N	Y	Y
iData Guard	Y	Y	Y
iPower Guard	Y	Y	Y
PLP (iCell)	N	Y	Y
AES	N	N	N
TCG Opal	N	N	N
S.M.A.R.T.	Y	Y	Y
Dimension (WxLxH/mm)	69.8 x 100.1 x 6.9	69.8 x 100.1 x 6.9	69.8 x 100.1 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 ~ 1.28TB	128GB ~ 4TB
Max. Channel	4	4	4	4
Sequential R/W (MB/sec, max.)	560/510	510/460	550/510	500/460
Max. Power consumption	6.0W	5.0W	5.6W	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 100.1 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 100.1 x 9.5	69.85 x 100.1 x 6.9	69.8 x 100.1 x 6.9	69.8 x 100.1 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	16GB ~ 256GB	8GB ~ 2TB	8GB ~ 2TB	32GB ~ 2TB
Max. Channel	4	4	4	4
Sequential R/W (MB/sec, max.)	520/340	520/480	520/450	550/510
Max. Power consumption	4.4W	6.0W	5.8W	2.5W
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 x 9.5	69.8 x 99.8 x 9.5	69.8 x 100.1 x 6.9



## SATA - 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 ~ 2TB	40GB ~ 640GB	128GB ~ 512GB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB	8GB ~ 512GB
Max. Channel	4	4	4	2	2	2	4
Sequential R/W (MB/sec, max.)	550/510	550/500	550/510	520/360	530/210	530/360	520/460
Max. Power consumption	2.3W	3.0W	3.0W	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 x 39 x 4						



## SATA - 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	64GB ~ 512GB	20GB ~ 160GB	8GB ~ 128GB	8GB ~ 64GB	8GB ~ 32GB
Max. Channel	2	2	2	2	2
Sequential R/W (MB/sec, max.)	490/480	550/510	530/120	530/350	520/260
Max. Power consumption	1.5W	1.6W	1.3W	1.3W	1.6W
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 x 10.4 SH: 32.7 x 18 x 14.1	SV: 40.4 x 21 x 10.4 SH: 32.7 x 18 x 14.1	SV: 40.4 x 21 x 10.4 SH: 32.7 x 18 x 15.1	SV: 40.4 x 21 x 10.4	SV: 40.4 x 21 x 10.4 SH: 32.7 x 18 x 14.1

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	64GB ~ 512GB	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	1.9W	1.1W	1.1W	1.0W
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 x 10.5 SH(D):30 x 20.7 x 15.2	SL: 29.6 x 33 x 10.5 SH(D):30 x 20.7 x 15.2	SL: 29.6 x 33.06 x 10.5 SH(D): 30 x 20.79 x 15.2	SL: 29.6 x 33 x 10.5	SL: 29.6 x 33 x 10.5 SH(D):30 x 20.7 x 15.2

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	1.1W	1.5W	1.8W	1.1W	2.2W
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	41.5 x 25.2 x 10.4	41.5 x 25.2 x 10.4	ML: 37.1 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	2.7W	0.9W	0.9W	1.6W
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: 37.1 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 - mSATA

Model name	mSATA 3TEA	mSATA 3TE7	mSATA 3IE7	mSATA 3TG6-P	mSATA 3SE4	mSATA 3ME4	mSATA 3IE4
Interface	SATA III 6.0Gb/s						
Flash Type	3D TLC	3D TLC	iSLC (3D TLC)	3D TLC	SLC	MLC	iSLC (MLC)
Capacity	128GB ~ 2TB	32GB ~ 2TB	20GB ~ 640GB	128GB ~ 2TB	8GB ~ 64GB	8GB ~ 256GB	8GB ~ 128GB
Max. Channel	2	4	4	4	2	2	2
Sequential R/W (MB/sec, max.)	550/500	550/490	560 / 500	560/520	525/350	535/210	530/365
Max. Power consumption	2.3W	2.4W	1.6W	4.8W	1.4W	0.6W	0.6W
External DRAM Buffer	N	N	N	Y	N	N	N
iData Guard	Y	Y	Y	Y	N	N	N
iPower Guard	Y	Y	Y	Y	Y	Y	Y
PLP (iCell)	Y	Y	N	N	N	N	N
AES	N	Y	Y	Y	N	N	N
TCG Opal	N	N	N	Y	N	N	N
S.M.A.R.T.	Y	Y	Y	Y	Y	Y	Y
Dimension (WxLxH/mm)	29.8 x 50.8 x 3.7						

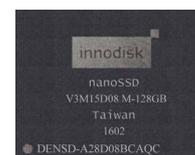
Model name	mSATA 3MG2-P	mSATA mini 3TE7	mSATA mini 3IE7	mSATA mini 3SE4	mSATA mini 3ME4	mSATA mini 3IE4
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	3D TLC	iSLC (3D TLC)	SLC	MLC	iSLC (MLC)
Capacity	8GB ~ 1TB	32GB ~ 1TB	20GB ~ 320GB	8GB ~ 64GB	8GB ~ 128GB	8GB ~ 64GB
Max. Channel	4	4	4	2	2	2
Sequential R/W (MB/sec, max.)	520/335	550/520	550/490	525/360	470/125	530/340
Max. Power consumption	3.4W	1.7W	1.7W	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)	29.8 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 - CFast

Model name	CFast 3TEA	CFast 3TE7	CFast 3IE7	CFast 3SE4
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)	SLC
Capacity	256GB ~ 2TB	32GB ~ 1TB	20GB ~ 320GB	8GB ~ 64GB
Max. Channel	2	4	4	2
Sequential R/W (MB/sec, max.)	550/500	560/490	550/490	520/360
Max. Power consumption	1.8W	2.5W	1.8W	1.0W
External DRAM Buffer	N	N	N	N
iData Guard	Y	Y	Y	N
iPower Guard	Y	Y	Y	Y
PLP (iCell)	N	N	N	N
AES	N	Y	Y	N
TCG Opal	N	N	N	N
S.M.A.R.T.	Y	Y	Y	Y
Dimension (WxLxH/mm)	42.8 x 36.4 x 3.6			

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



## SATA - nanoSSD

Model name	nanoSSD 3ME3	nanoSSD 3IE3
Interface	SATA III 6.0Gb/s	SATA III 6.0Gb/s
Flash Type	MLC	iSLC (MLC)
Capacity	16GB	16GB
Max . Channel	4	4
Sequential R/W (MB/sec, max .)	410/140	440/260
Max . Power consumption	2.3W	2.3W
External DRAM Buffer	N	N
iData Guard	Y	Y
iPower Guard	Y	Y
PLP (iCell)	N	N
S.M.A.R.T.	Y	Y
Dimension (WxLxH/mm)	16 x 20 x 1.7	16 x 20 x 1.7



## PATA - CF

Model name	iCF 9000	iCF 1ME	iCF 1ME2	iCF 1SE3
Interface	PATA	PATA	PATA	PATA
Connector	50pin CF connector	50pin CF connector	50pin CF connector	50pin CF connector
Flash Type	SLC	MLC	MLC	SLC
Capacity	1GB ~ 64GB	8GB ~ 256GB	8GB ~ 256GB	128MB ~ 64GB
Max. Channel	4	2	2	2
Sequential R/W (MB/sec, max.)	110/100	110/110	85/55	63/55
Max. Power consumption	1.0W (5V) 0.7W (3.3V)	0.8W (5V) 0.6W (3.3V)	0.9W (5V)	0.7W (5V)
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)	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



## Others - USB

Form Factor	USB Drive	USB Drive
Model name	USB Drive 3SE	USB Drive 3ME
Interface	USB 3.0	USB 3.0
Connector	Type A	Type A
Flash Type	SLC	MLC
Capacity	4GB ~ 32GB	8GB ~ 64GB
Ma x . Channel	1	1
Sequential R/W (MB/sec, ma x .)	100/85	100/50
Ma x . Power consumption	0.7W	0.7W
External DRAM Buffer	N	N
iData Guard	N	N
iPower Guard	Y	N
PLP (iCell)	N	N
AES	N	N
TCG Opal	N	N
S.M.A.R.T.	Y	Y
Dimension (WxLxH/mm)	16.6 x 48.5 x 7.6	16.6 x 48.5 x 7.6

Form Factor	USB Drive	USB EDC Horizontal
Model name	USB Drive 3IE4	USB EDC H 2ME3
Interface	USB 3.0	USB 2.0
Connector	Type A	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm
Flash Type	iSLC (3D TLC)	MLC
Capacity	16GB ~ 128GB	8GB ~ 128GB
Ma x . Channel	2	1
Sequential R/W (MB/sec, ma x .)	330/125	35/35
Ma x . Power consumption	1.3W	0.7W
External DRAM Buffer	N	N
iData Guard	Y	Y
iPower Guard	Y	Y
PLP (iCell)	N	N
AES	N	N
TCG Opal	N	N
S.M.A.R.T.	Y	N
Dimension (WxLxH/mm)	16.6 x 48.5 x 7.6	26.6 x 36.9 x 6.3 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.8 (Pin Pitch 2.54mm)

Form Factor	USB EDC Horizontal	USB EDC Vertical	USB EDC Vertical
Model name	USB EDC H 3IE4	USB EDC V 3SE	USB EDC V 3ME
Interface	USB 3.0	USB 3.0	USB 3.0
Connector	Standard, 9pin, 2.54mm Low profile, 9pin, 2.00mm	Standard, 20pin, 2.00mm	Standard, 20pin, 2.00mm
Flash Type	iSLC (3D TLC)	SLC	MLC
Capacity	16GB ~ 128GB	4GB ~ 32GB	8GB ~ 64GB
Ma x . Channel	2	1	1
Sequential R/W (MB/sec, ma x .)	330/125	110/85	100/50
Ma x . Power consumption	1.3W	0.8W	0.8W
External DRAM Buffer	N	N	N
iData Guard	Y	N	N
iPower Guard	Y	N	Y
PLP (iCell)	N	N	N
AES	N	N	N
TCG Opal	N	N	N
S.M.A.R.T.	Y	Y	Y
Dimension (WxLxH/mm)	26.6 x 36.9 x 6.3 (Pin Pitch 2.00mm) 26.6 x 36.9 x 9.8 (Pin Pitch 2.54mm)	24 x 22 x 5	24 x 22 x 5



## Others - SD

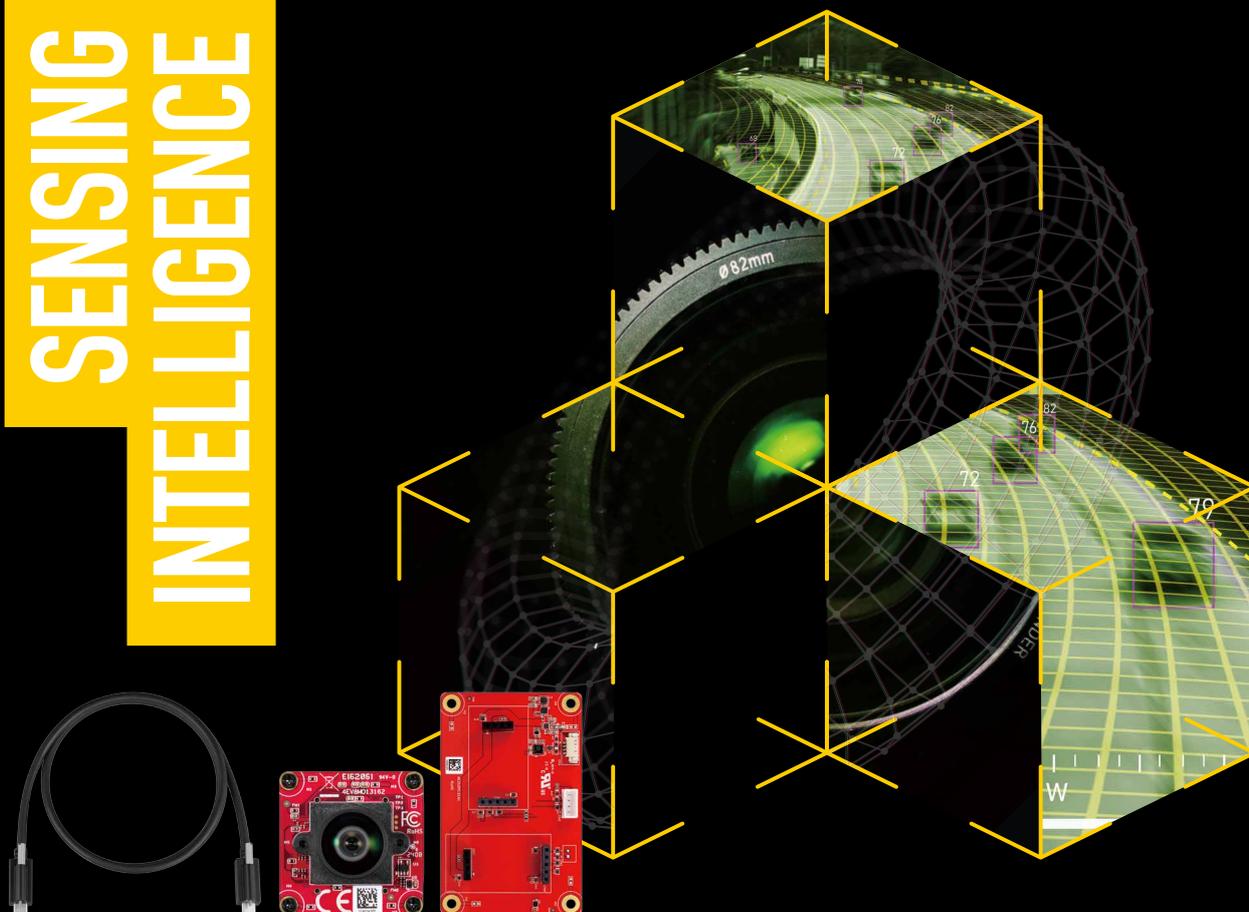
Model name	MicroSD 3TE4	MicroSD 3IE4	MicroSD 3SE3	MicroSD 3ME3	MicroSD 3ME2
Interface	SD 3.0/6.1	SD 3.0/6.1	SD 3.0	SD 3.0	SD 3.0
Flash Type	3D TLC	iSLC (3D TLC)	SLC	MLC	MLC
Capacity	32GB ~ 512GB	8GB ~ 128GB	4GB ~ 8GB	8GB ~ 64GB	8GB ~ 64GB
Max. Channel	1	1	1	1	1
Sequential R/W (MB/sec, max.)	95/85	95/85	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 x 15 x 1	11 x 15 x 1	11 x 15 x 1	11 x 15 x 1	11 x 15 x 1

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 x 15 x 1	11 x 15 x 1	24 x 32 x 2.1	24 x 32 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 x 32 x 2.1			

innodisk

# SENSING INTELLIGENCE

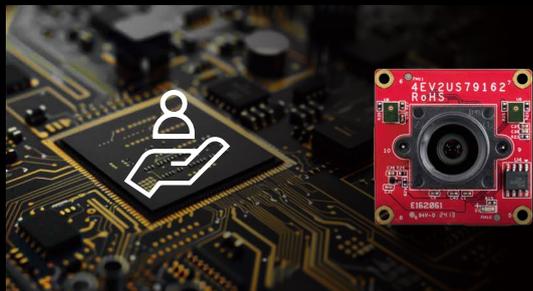


## SENSING INTELLIGENCE

从物理环境中精准、可靠地采集图像与数据，我们的模组可作为边缘智能应用的起点。

# 相机模组

# 相机设计服务



硬件(PCBA、尺寸)



多样镜头选项



影像画质调校



平台整合服务



## 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° / 69° / 42°	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	EV2U-LOM2-GSCF	EV8U-LSM1-RLCF	EV8U-LSM1-RLCN
Module Type	USB 2.0 2MP Fixed Focus Camera Module	USB 2.0 2MP Fixed Focus Camera Module	USB 2.0 8MP Fixed Focus Camera Module	USB 2.0 8MP Fixed Focus Camera Module
Resolution (Max.)	2MP	2MP	8MP	8MP
Frame Rate (Max. Resolution)	30fps	60fps	30fps	30fps
Output I/F	USB 2.0	USB 2.0	USB 2.0	USB 2.0
Sensor	onsemi AR0246	onsemi AR0234	Sony IMX415	Sony IMX415
Shutter	Rolling	Global	Rolling	Rolling
Video Format	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG	YUV422, MJPEG
Power Consumption	Approximate 1W (MJPEG @Max. Resolution )	Approximate TBD W (MJPEG @Max. Resolution )	Approximate 1W (MJPEG @Max. Resolution )	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"	1/2.6"	1/2.8"	1/2.8"
Pixel Size	2.0µm	3.0µm	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 21.88 32 x 32 x 21.88 41.4 x 41.4 x 37.68 (Housing)	38 x 38 x TBC 41.4 x 41.4 x TBC (Housing)	38 x 38 x 28 41.4 x 41.4 x 44.8 (Housing)	38 x 38 x 29 41.4 x 41.4 x 44.6 (Housing)
Lens FOV(D/H/V)	96° / 88° / 57°	97° / 87° / 61°	89° / 81° / 51°	89° / 81° / 51°
OS Support	Windows / Linux / Android / macOS	Windows / Linux / Android / macOS	Windows / Linux / Android / macOS	Windows / Linux / Android / macOS
Housing	Board Level, Housing	Board Level, Enclosure	Board Level, Housing	Board Level, Housing
Features	HDR, DMIC	Global Shutter	Low Light, DMIC	Low Light, Night Vision
Warranty	3 Years	3 Years	3 Years	3 Years

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

Model Name	EV8U-LSM1-RLCA	EV8U-LSN1-RSCA
Module Type	USB 2.0 8MP Auto Focus Camera Module	USB 2.0 8MP Auto Focus Camera Module
Resolution (Max.)	8MP	8MP
Frame Rate (Max. Resolution)	30fps	20fps
Output I/F	USB 2.0	USB 2.0
Sensor	Sony IMX415	Sony IMX179
Shutter	Rolling	Rolling
Video Format	YUV422, MJPEG	YUV422, MJPEG
Power Consumption	Approximate 1W (MJPEG @Max. Resolution )	Approximate 2W (MJPEG @Max. Resolution )
Operating Temperature	0°C ~ 70°C	0°C ~ 60°C
Sensor Size	1/2.8"	1/3.2"
Pixel Size	1.45µm	1.4µm
Chroma Type	Color	Color
Lens Type	Fixed Focus (M12)	Auto Focus (M5)
Dimension (WxLxH/mm)	38 x 38 x 29 41.4 x 41.4 x 44.6 (Housing)	62 x 9.5 x 6.5
Lens FOV(D/H/V)	89° / 81° / 51°	72° / 61° / 47°
OS Support	Windows / Linux / Android / macOS	Windows / Linux / Android / macOS
Housing	Board Level, Housing	Board Level
Features	Low Light, DMIC	Auto Focus
Warranty	3 Years	3 Years

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

## MIPI CSI-2



Model Name	EV2M-OOM3-RHCF	EV2M-OOM1-UHCA	EV2M-ZOM1-GSCV	EV2M-CSM1-RHCF
Module Type	MIPI CSI-2 2MP Fixed Focus Camera Module	MIPI CSI-2 2.3MP Fixed Focus Camera Module	MIPI CSI-2 2.3MP Varifocal Focus Camera Module	MIPI CSI-2 2MP Fixed Focus Camera Module
Resolution (Max.)	2MP	2.3MP	2.3MP	2MP
Frame Rate (Max. Resolution)	30fps	60fps	60fps	120fps
Output I/F	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2
Sensor	onsemi AR0246	onsemi AR0234	onsemi AR0234	Sony IMX290
Shutter	Rolling	Global	Global	Rolling
Video Format	YUV422	YUV422	YUV422	YUV422
Power Consumption	Approximate 1W (YUV422 @Max. Resolution )	Approximate 1W (YUV422 @Max. Resolution )	Approximate 2W (YUV422 @Max. Resolution )	Approximate 1.5W (YUV422 @Max. Resolution )
Operating Temperature	-30°C ~ 70°C	-30°C ~ 70°C	-20°C ~ 65°C	-20°C ~ 65°C
Sensor Size	1/4"	1/2.6"	1/2.6"	1/2.8"
Pixel Size	2.0µm	3.0µm	3.0µm	2.9µm
Chroma Type	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Varifocal	Fixed Focus (M12)
Dimension (WxLxH/mm)	30 x 30 x TBC 39 x 39 x TBC (Open Front Housing)	38 x 38 x 26.75 46 x 46 x 26.75 (Open Front Housing)	42 x 42 x 77.7	46 x 46 x 40.6 (Open Front Housing)
Lens FOV(D/H/V)	96° / 88° / 57°	104° / 86° / 46°	W: 128° / 103° / 60° T: 39° / 33° / 21°	106° / 92° / 51°
OS Support	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin	NVIDIA Jetson Orin
Housing	Board Level, Open Front Housing	Board Level, Open Front Housing	Board Level	Open Front Housing
Features	HDR, External Trigger			HDR, Low light
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.

Model Name	EV5M-CSM1-RTCF	EV8M-CSM1-RTCF	EV8M-OOM1-RHCF	EVDM-OOM1-RHCF
Module Type	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.)	5MP	8MP	8MP	13MP
Frame Rate (Max. Resolution)	30fps	30fps	30fps	20fps
Output I/F	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2	MIPI CSI-2
Sensor	Sony IMX335	Sony IMX415	onsemi AR0822	onsemi AR1335
Shutter	Rolling	Rolling	Rolling	Rolling
Video Format	YUV422	YUV422	YUV422	YUV422
Power Consumption	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	-30°C ~ 70°C	-30°C ~ 70°C
Sensor Size	1/2.8"	1/2.8"	1/1.8"	1/3.2"
Pixel Size	2.0µm	1.45µm	2.0µm	1.1µm
Chroma Type	Color	Color	Color	Color
Lens Type	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)	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)	130° / 100° / 73°	148° / 125° / 67°	107° / 100° / 67°	91° / 71° / 52°
OS Support	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel
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, External Trigger	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.

## MIPI over Type-C



Model Name	EV2C-OOM3-RHCF	EV8C-OOM1-RHCF 
Module Type	MIPI over Type-C 2MP Fixed Focus Camera Module	MIPI over Type-C 8MP Fixed Focus Camera Module
Resolution (Max.)	2MP	8MP
Frame Rate (Max. Resolution)	30fps	30fps
Output I/F	MIPI over Type-C	MIPI over Type-C
Sensor	onsemi AR0246	onsemi AR0822
Shutter	Rolling	Rolling
Video Format	YUV422	YUV422
Power Consumption	Approximate 1W (YUV422 @Max. Resolution )	Approximate 1W (YUV422 @Max. Resolution )
Operating Temperature	-30°C ~ 70°C	-30°C ~ 70°C
Sensor Size	1/4"	1/1.8"
Pixel Size	2.0µm	2.0µm
Chroma Type	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	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)	96°/88°/57°	107°/100°/67°
OS Support	NVIDIA Jetson Orin, Intel	NVIDIA Jetson Orin, Intel
Housing	Board Level, Housing	Board Level, Housing
Features	HDR	HDR
Warranty	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	EV2F-OOM3-RHCF	EV2F-OOM4-GSCF	EV3F-ZSM1-RXCF	EV2F-COM1-GSCF
Module Type	GMSL2 2MP Fixed Focus Camera Module	GMSL2 2MP Fixed Focus Camera Module	GMSL2 3MP Fixed Focus Camera Module	GMSL2 2MP Fixed Focus Camera Module
Resolution (Max.)	2MP	2.3MP	3MP	2.3MP
Frame Rate (Max. Resolution)	30fps	120fps	60fps	60fps
Output I/F	GMSL2	GMSL2	GMSL2	GMSL2
Sensor	onsemi AR0246	onsemi AR0235CS	SONY ISX031	onsemi AR0234
Serializer	MAX9295A	MAX9295A	MAX9295A	MAX9295A
Shutter	Rolling	Global	Rolling	Global
Video Format	YUV422	YUV422	YUV422	YUV422
Power Consumption	Approximate 1.2W (YUV422 @Max. Resolution )	TBC	Approximate 1.2W (YUV422 @Max. Resolution )	Approximate 1.5W (YUV422 @Max. Resolution )
Operating Temperature	-30°C ~ 70°C	-30°C ~ 70°C	-40°C ~ 85°C	-30°C ~ 65°C
Sensor Size	1/4"	1/2.8"	1/2.42"	1/2.6"
Pixel Size	2µm	2.8µm	3µm	3.0µm
Chroma Type	Color	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	42 x 41 x 64	42 x 41 x TBC	25 x 25 x 57	42 x 41 x 55.6
Lens FOV (D / H / V)	72° / 64° / 39°	TBC	80° / 64° / 41°	148°/118°/70°
Platform Support	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin
Housing	IP67 Housing	IP67 Housing	IP69K Housing	IP67 Housing
Features	HDR		LFM, 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.

Model Name	EV5F-CSM1-RTCF	EV8F-CSM1-RTCF	EV8F-OOM1-RHCF
Module Type	GMSL2 5MP Fixed Focus Camera Module	GMSL2 8MP Fixed Focus Camera Module	GMSL2 8MP Fixed Focus Camera Module
Resolution (Max.)	5MP	8MP	8MP
Frame Rate (Max. Resolution)	30fps	30fps	30fps
Output I/F	GMSL2	GMSL2	GMSL2
Sensor	SONY IMX335	SONY IMX415	onsemi AR0822
Serializer	MAX9295A	MAX9295A	MAX9295A
Shutter	Rolling	Rolling	Rolling
Video Format	YUV422	YUV422	YUV422
Power Consumption	Approximate 1.5W (YUV422 @Max. Resolution )	Approximate 1.9W (YUV422 @Max. Resolution )	TBC
Operating Temperature	-30°C ~ 65°C	-30°C ~ 65°C	-30°C ~ 70°C
Sensor Size	1/2.8"	1/2.8"	1/1.8"
Pixel Size	2.0µm	1.45µm	2.0 um
Chroma Type	Color	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	42 x 41 x 55.6	42 x 41 x 56.9	42 x 41 x TBC
Lens FOV (D / H / V)	139°/105°/76°	148°/125°/67°	119°/110°/72°
Platform Support	NVIDIA Jetson Orin	NVIDIA Jetson Orin	NVIDIA Jetson Orin
Housing	IP67 Housing	IP67 Housing	IP67 Housing
Features	HDR, Low Light	HDR, Low Light	HDR
Warranty	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	EV8F-NSM1-RXCF	EVDF-OOM1-RHCF
Module Type	GMSL2 8MP Fixed Focus Camera Module	GMSL2 13MP Fixed Focus Camera Module
Resolution (Max.)	8MP	13MP
Frame Rate (Max. Resolution)	30fps	20fps
Output I/F	GMSL2	GMSL2
Sensor	SONY IMX728	onsemi AR1335
Serializer	MAX9295A	MAX9295A
Shutter	Rolling	Rolling
Video Format	YUV422	YUV422
Power Consumption	TBC	Approximate 1W (YUV422 @Max. Resolution )
Operating Temperature	-40°C ~ 85°C	-30°C ~ 70°C
Sensor Size	1/1.72"	1/3.2"
Pixel Size	2.1µm	1.1µm
Chroma Type	Color	Color
Lens Type	Fixed Focus (M12)	Fixed Focus (M12)
Dimension (WxLxH/mm)	TBC	42 x 41 x 53.3
Lens FOV (D / H / V)	TBC	91° / 71° / 52°
Platform Support	NVIDIA Jetson Orin	NVIDIA Jetson Orin
Housing	IP67 Housing	IP67 Housing
Features	LFM, HDR	HDR
Warranty	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.

# 空气传感模组

## 空气传感器



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 µg/m3	0 ~ 5000 ppm	0.01 ~ 5 ppm	0 ~ 20 ppm
Resolution	1 µg/m3	1 ppm	0.01 ppm	0.1 ppm
Accuracy	±10±10% of reading µg/m3	±30±3% of reading ppm	±0.02±10% of reading ppm	±2% FS ppm
Response Time(T90) (sec)	<10 sec	<120 sec	<30 sec	<30 sec
Operation Temperature(°C)	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 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 <sup>2</sup> C	I <sup>2</sup> C	I <sup>2</sup> C	I <sup>2</sup> 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	±0.1±10% of reading ppm	±5% FS ppm	±0.1±10% of reading ppm	±5±5% of reading ppm
Response Time(T90) (sec)	<60 sec	<30 sec	<10 sec	<30 sec
Operation Temperature(°C)	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 50°C	-10°C ~ 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 <sup>2</sup> C	I <sup>2</sup> C	I <sup>2</sup> C	I <sup>2</sup> 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)

## 规格表

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

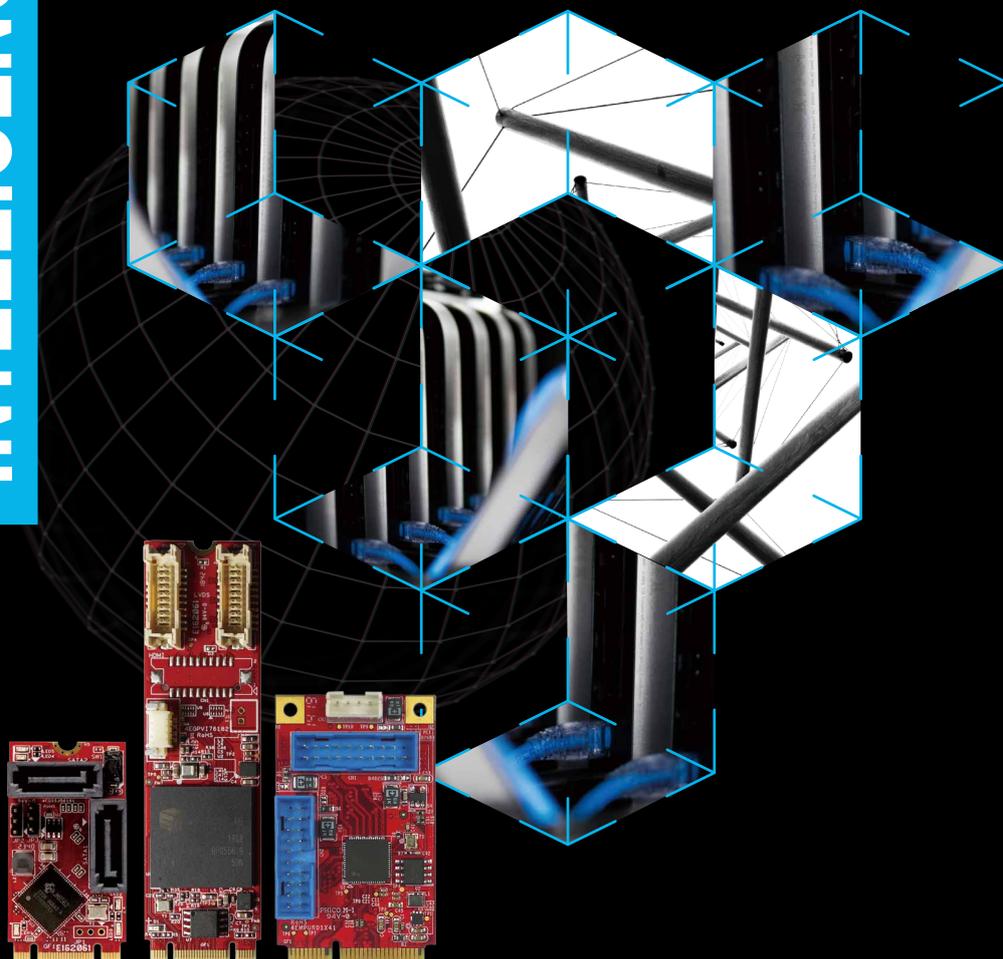


## 传感器转接板

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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## 存储与磁盘阵列



Model	EMPS-3401	EGPS-3401	EMPU-3201	EMPU-3401
Description	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
Description	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
Description	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	19 Pin box header x 2
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



## 测试工具

Model	EMXX-0102
Description	mPCIe to M.2 B Key Module
Form Factor	mPCIe
Input I/F	PCI Express, USB 2.0, SATA
Input Connector	mPCIe
Output I/F	PCI Express, USB 2.0, SATA
Output Connector	M.2 Key B
Dimension (WxLxH/mm)	30 x 54.4 x 6.4
Temperature	Wide temp: -40°C ~ 85°C
Order info.	EMXX-0102-W1

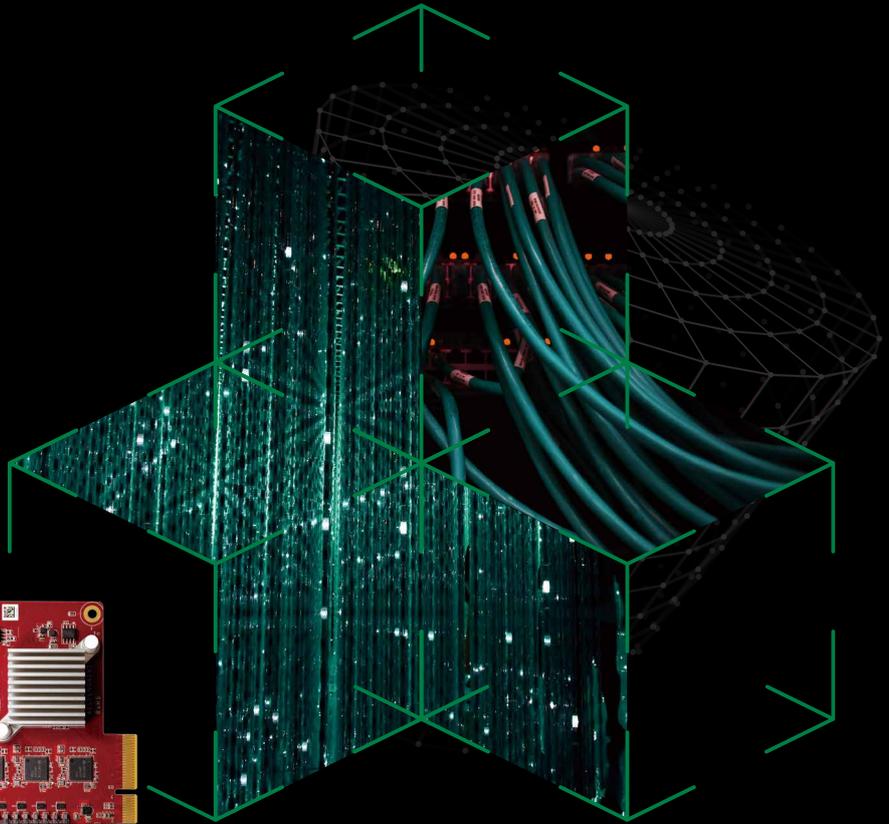
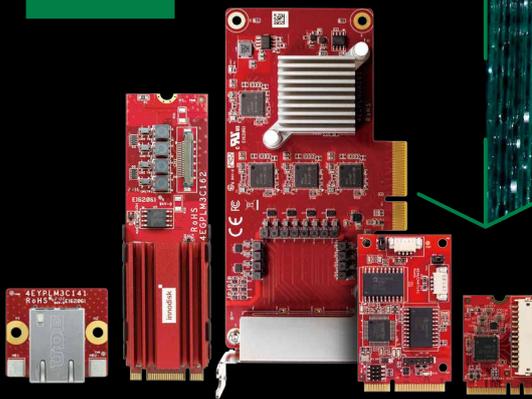


## 显示模组

Model	EMPV-1201	EGPV-1101
Description	mPCIe to Dual VGA and HDMI Module	M.2 to Single HDMI or DVI-D Module
Form Factor	mPCIe	M.2 2280
Input I/F	PCI Express 1.0	PCI Express 2.0 x2
Input Connector	mPCIe	M.2 B+M Key
Output I/F	VGA x 2, HDMI x 1	HDMI, Single & Dual LVDS
Output Connector	40pin 1.25mm x 2 (40DP-1.25)	20 pin x 1 (HDMI) 20 pin x 2 (LVDS)
Dimension (WxLxH/mm)	31.5 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 Wide temp: -40°C ~ 85°C
Order info.	EMPV-1201-C1	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.)

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## CAN Bus 模组

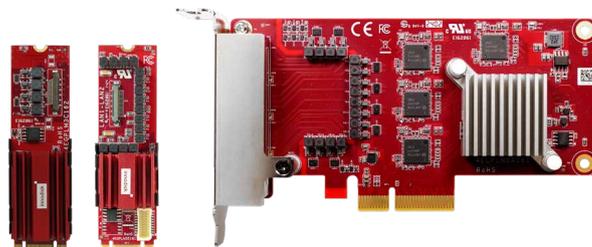


Model	EMUC-B202	EGPC-B201	EGPC-B4S1	EGPC-B1S1
Description	USB to Dual Isolated CAN Bus 2.0B/J1939 Module	M.2 to Dual Isolated CAN Bus 2.0B/J1939 Module	M.2 to Four Isolated CAN Bus 2.0B Module	M.2 to Single Isolated CAN Bus 2.0B Module
Form Factor	mPCIe	M.2 2260/2280	M.2 2280	M.2 2242
Input I/F	USB 2.0	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 Key	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
Description	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 Module	mPCIe to Dual Isolated CAN FD Module
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)	EMPC-B2S1-W1 EMPC-B2S1-W2 (J1939, CANopen)	EMUC-B2S3-W1 EMUC-B2S3-W2 (J1939, CANopen)	EMUC-F2S3-W1

Model	EGUC-F2S3	EGUC-F4S3	ESPC-F2S3	ESPC-F4S3
Description	M.2 2280 to Dual Isolated CAN FD Module	M.2 2280 to Four Isolated CAN FD Module	PCIe to Dual Isolated CAN FD Module	PCIe to Dual Isolated CAN FD Module
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
Description	mPCIe to Single Isolated GbE LAN Module	mPCIe to Dual Isolated GbE LAN Module + Cable	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-C3 EMPL-G101-W3 EMPL-G101-C4 (with bracket) EMPL-G101-W4 (with bracket)	EMPL-G201-C3 EMPL-G201-W3 EMPL-G201-C4 (with bracket) EMPL-G201-W4 (with bracket)	EMPL-G102-C3 EMPL-G102-W3 EMPL-G102-C4 (with bracket) EMPL-G102-W4 (with bracket)	EMPL-G202-C3 EMPL-G202-W3 EMPL-G202-C4 (with bracket) EMPL-G202-W4 (with bracket)

Model	EGPL-G101	EGPL-G201	EGPL-G102	EGPL-G202
Description	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-C3 EGPL-G101-W3 EGPL-G101-C4 (with bracket) EGPL-G101-W4 (with bracket)	EGPL-G201-C3 EGPL-G201-W3 EGPL-G201-C4 (with bracket) EGPL-G201-W4 (with bracket)	EGPL-G102-C3 EGPL-G102-W3 EGPL-G102-C4 (with bracket) EGPL-G102-W4 (with bracket)	EGPL-G202-C3 EGPL-G202-W3 EGPL-G202-C4 (with bracket) EGPL-G202-W4 (with bracket)

Model	EMPL-G103	EMPL-G203	EGPL-G104	EGPL-G105
Description	mPCIe to Single GbE LAN Module	mPCIe to Dual GbE LAN Module	M.2 2230 to Single Isolated GbE LAN Horizontal Module	M.2 2242 to Single Isolated GbE LAN Horizontal Module
Form Factor	mPCIe	mPCIe	M.2 2230	M.2 2242
Input I/F	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x1	PCI Express 2.1 x2
Input Connector	mPCIe	mPCIe	M.2 A+E Key	M.2 2242 B+M Key
Output I/F	GbE LAN x 1	GbE LAN x 2	GbE LAN x 1	GbE LAN x 1
Output Connector	RJ45 x 1	RJ45 x 2	RJ45 x 1	RJ45 x 1
Dimension (WxLxH/mm)	30 x 50.9 x 9.3	30 x 50.9 x 9.3	22 x 30 x 5.4	22 x 42 x 5.4
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.	EMPL-G103-C3 EMPL-G103-W3	EMPL-G203-C3 EMPL-G203-W3	EGPL-G104-C1 EGPL-G104-W1	EGPL-G105-C1 EGPL-G105-W1

Model	EGPL-G205	EGPL-G1N3	EMPL-G2N3
Description	M.2 2242 to Dual Isolated GbE LAN Horizontal Module	M.2 to Single GbE LAN Module	M.2 to Dual GbE LAN Module
Form Factor	M.2 2242	M.2 2280	M.2 2280
Input I/F	PCI Express 2.1 x2	PCI Express 2.1 x2	PCI Express 2.1 x1
Input Connector	M.2 2242 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	GbE LAN x 1	GbE LAN x 1	GbE LAN x 2
Output Connector	RJ45 x 2	RJ45 x 1	RJ45 x 2
Dimension (WxLxH/mm)	22 x 42 x 5.4	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
Order info.	EGPL-G205-C1 EGPL-G205-W1	EGPL-G1N3-C1 EGPL-G1N3-W1	EGPL-G2N3-C1 EGPL-G2N3-W1

Model	ELPL-G401	EGPL-G401	EGPL-G1F1	EGPL-G2F1
Description	PCIe to Four Isolated GbE LAN Module	M.2 2280 to Four Isolated GbE LAN Module	M.2 to Single GbE SFP Network Module	M.2 to Dual GbE SFP Network Module
Form Factor	Low-Profile PCIe	M.2 2280	M.2 2242 B+M Key M.2 2280 B+M Key	M.2 2242 B+M Key M.2 2280 B+M Key
Input I/F	PCI Express 2.1 x4	PCI Express 2.1 x2	PCI Express 2 x2	PCI Express 2 x2
Input Connector	PCIe x 4	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	GbE LAN x 4	GbE LAN x 4	GbE Fiber Optica x 1	GbE Fiber Optica x 2
Output Connector	RJ45 x 4	RJ45 x 4	SFP x 1	SFP x 2
Dimension (WxLxH/mm)	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	W1:22 x 80 x 3.75 W2:22 x 42 x 3.75	W1:22 x 80 x 3.75 W2:22 x 42 x 3.75
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	Operation : 0°C ~ 55°C Storage : -55°C ~ 95°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.	ELPL-G401-C1 ELPL-G401-W1	EGPL-G401-C1 (Mounting hole) EGPL-G401-C2 (PCIe low profile bracket) EGPL-G401-C3 (PCIe standard bracket)	EGPL-G1F1-W1 EGPL-G1F1-W2	EGPL-G2F1-W1 EGPL-G2F1-W2

## 2.5G LAN



Model	EMPL-21S1	EMPL-22S1	EMPL-21S2	EMPL-22S2
Description	mPCIe to Single Isolated 2.5GbE LAN Module	mPCIe to Dual Isolated 2.5GbE LAN Module	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
Description	M.2 to Single Isolated 2.5GbE LAN Module	mPCIe 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-W1	EGPL-22S2-C1 EGPL-22S2-W1

Model	EGPL-21S4	EGPL-22S4	EMPL-21N1	EMPL-22N1
Description	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
Description	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
Description	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 (Standard Bracket) EGPL-T102-C3 (Low-profile Bracket)

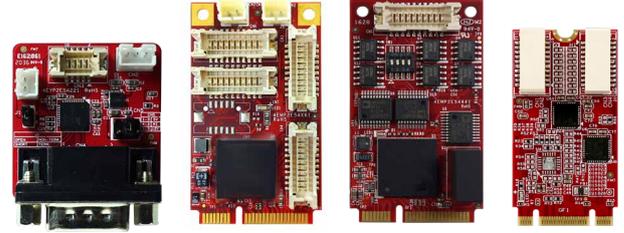
## PoE



Model	EMPL-G2P1	EGPL-G2P1
Description	mPCIe to Dual PoE Module	M.2 to Dual PoE Module
Form Factor	mPCIe	M.2 2280
Input I/F	PCI Express 2.1 x1	PCI Express 2.1 x1
Input Connector	mPCIe	M.2 B+M Key
Output I/F	PoE x 2	PoE x 2
Output Connector	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
Temperature	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C
Order info.	EMPL-G2P1-C5 (Mounting hole, 4pin header) EMPL-G2P1-W5 (Mounting hole, 4pin header) EMPL-G2P1-C6 (Bracket, 4pin header) EMPL-G2P1-W6 (Bracket, 4pin header) EMPL-G2P1-C7 (Mounting hole, DC Jack) EMPL-G2P1-W7 (Mounting hole, DC Jack) EMPL-G2P1-C8 (Bracket, DC Jack) EMPL-G2P1-W8 (Bracket, DC Jack)	EGPL-G2P1-C5 (Mounting hole, 4pin header) EGPL-G2P1-W5 (Mounting hole, 4pin header) EGPL-G2P1-C6 (Bracket, 4pin header) EGPL-G2P1-W6 (Bracket, 4pin header) EGPL-G2P1-C7 (Mounting hole) EGPL-G2P1-W7 (Mounting hole, DC Jack) EGPL-G2P1-C8 (Bracket, DC Jack) EGPL-G2P1-W8 (Bracket, DC Jack)

Model	ESPL-G4P1	ESPL-24P1
Description	PCIe to Four PoE/PoE+ Module	PCIe to Four 2.5GbE PoE/PoE+ Module
Form Factor	Standard PCIe	Standard PCIe
Input I/F	PCI Express 2.1 x4	PCI Express 2.1 x4
Input Connector	PCIe x 4	PCIe x 4
Output I/F	PoE/PoE+ x 4	2.5GbE PoE/PoE+ x 4
Output Connector	RJ45 x 4	RJ45 x 4
Dimension (WxLxH/mm)	169.55 x 111.15 x 19.6	169.55 x 111.15 x 19.6
Temperature	STD temp: 0°C ~ 70°C Wide temp: -40°C ~ 85°C	STD temp: 0° ~ 70°C Wide temp: -40° ~ 85°C
Order info.	ESPL-G4P1-C1 ESPL-G4P1-W1	ESPL-24P1-C1 ESPL-24P1-W1

## 串口 (Serial)



Model	EMP2-X202	EMP2-X402	EMP2-X203	EMP2-X403	EMP2-X404
Description	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
Description	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
Description	M.2 to Dual RS-232 Module	M.2 to Four RS-232 Module	M.2 to Four Isolated RS-422 & RS-485 Module
Form Factor	M.2 2242	M.2 2242	M.2 2280
Input I/F	PCI Express 1.1	PCI Express 1.1	PCI Express 2.0 x1
Input Connector	M.2 B+M Key	M.2 B+M Key	M.2 B+M Key
Output I/F	RS-232 x 2	RS-232 x 4	RS-422 x 4 or RS-485 x 4
Output Connector	DB-9 x 2	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
Temperature	Wide temp: -40°C ~ 85°C	Wide temp: -40°C ~ 85°C	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)

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MANAGEMENT  
INTELLIGENCE



## MANAGEMENT INTELLIGENCE

借助先进的软件与服务，在实际应用中实现便捷管理，确保每个环节都发挥最佳性能。



Innodisk 自主研发的 iCAP 云端管理平台，简化了边缘 AI 设备与 AI 模型的远程管理。用户可通过任意浏览器访问，实时监控系统健康状态，并可针对存储设备寿命自定义警报通知。

iCAP 同时支持无缝 AI 模型部署，提供高效、易用的云端管理方案。



## iCAP 核心优势



### 高度兼容性

iCAP Agent 兼容 Windows 与 Linux 平台，可通过各类网页浏览器轻松访问。此外，还支持移动应用，让用户可远程监控和管理设备，并具备远程 (OOB) 重启功能。



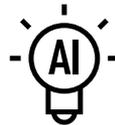
### 高效事件追踪

事件通知追踪功能会记录所有变更，让用户实时掌握最新动态，确保问题发生时能快速响应与处理。



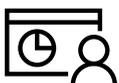
### 通过 OTA 统一部署 AI 模型与系统

iCAP 的 OTA (空中下载) 功能支持一站式 AI 模型部署。除了传统的 BIOS 与固件更新，还可将 iVIT 模型库中的训练模型轻松分发至指定设备或预设群组。该统一管理方式将 AI 模型与系统固件解耦，实现对所有边缘设备的系统软件与 AI 智能进行高效、可靠且集中化的运维管理。



### AI 聊天机器人 / 智能代理助理

集成 AI 聊天机器人，提供对话式管理与主动响应。用户可通过自然语言快速查询设备状态，并便捷配置规则与定时任务。此外，底层的智能代理 AI (Agentic AI) 会自动分析关键事件，生成可执行的修复建议，将运维支持从被动警报升级为提前预警。



### 远程系统恢复

iCAP 全面支持本地 (In-band) 与远程 (OOB) 管理，并提供一键还原功能，可让故障设备迅速恢复正常运行。



### 存储与内存监控

iCAP 支持存储与内存监控，用户可远程访问 iSMART 提供的存储与内存信息，并实现模组状态预测。



## 带外管理 OOB ( 远程管理 )

Model	InnoAgent EZ2N-0XL1
Description	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-W3 (Private Cloud: with Standard Bracket) EZ2N-0XL1-W4 (Private Cloud: with Low-profile Bracket)

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# MACHINE-LEARNING INTELLIGENCE



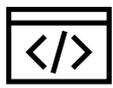
## MACHINE-LEARNING INTELLIGENCE

借助我们的 AI 训练与推理能力，全面释放数据洞察潜能。



无需代码，人人皆可轻松上手的 AI 开发工具

Innodisk 自主开发的 iVIT 视觉智能套件，高效简化 AI 模型的训练与推理流程。通过集成主流深度学习框架，iVIT 帮助开发者快速构建产品原型，打造定制化 AI 模型。



无需代码



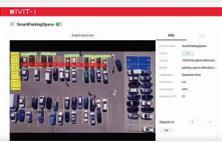
AI 模型部署



相机视频流



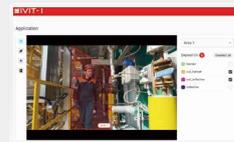
事件日志记录



智慧交通



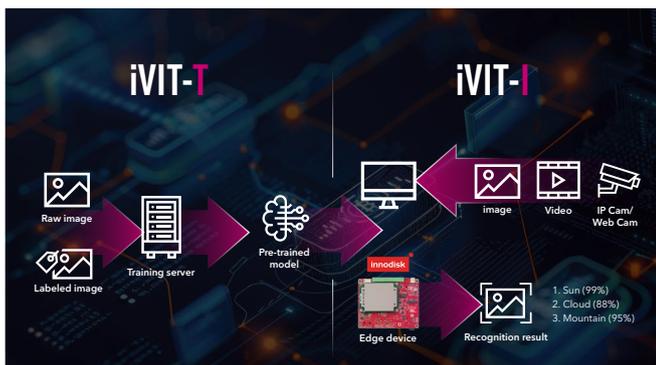
智慧工厂



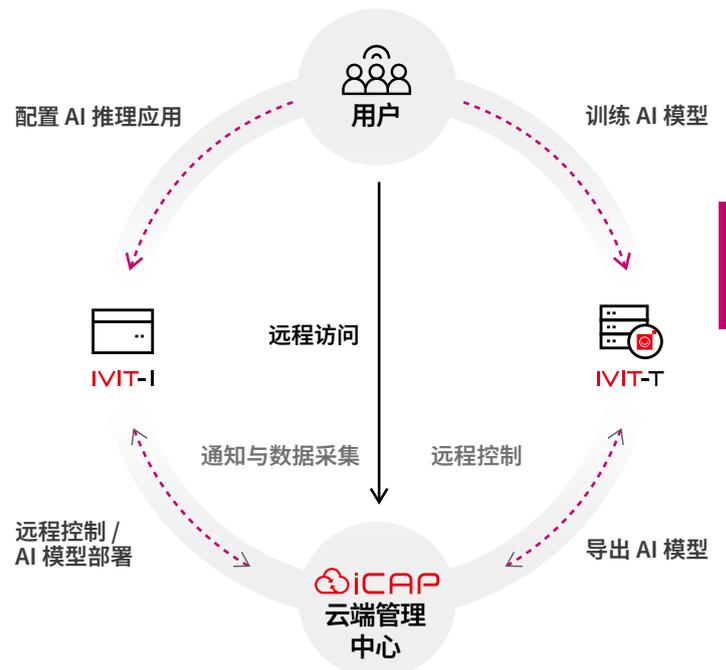
智慧安防

### 整合 AI 开发 打造量身定制的解决方案

iVIT 解决方案包含用于 AI 模型训练的 iVIT-T 与用于推理的 iVIT-I。两者协同工作，可无缝实现 AI 模型的定制化，精准满足各类机器视觉应用的特定需求。

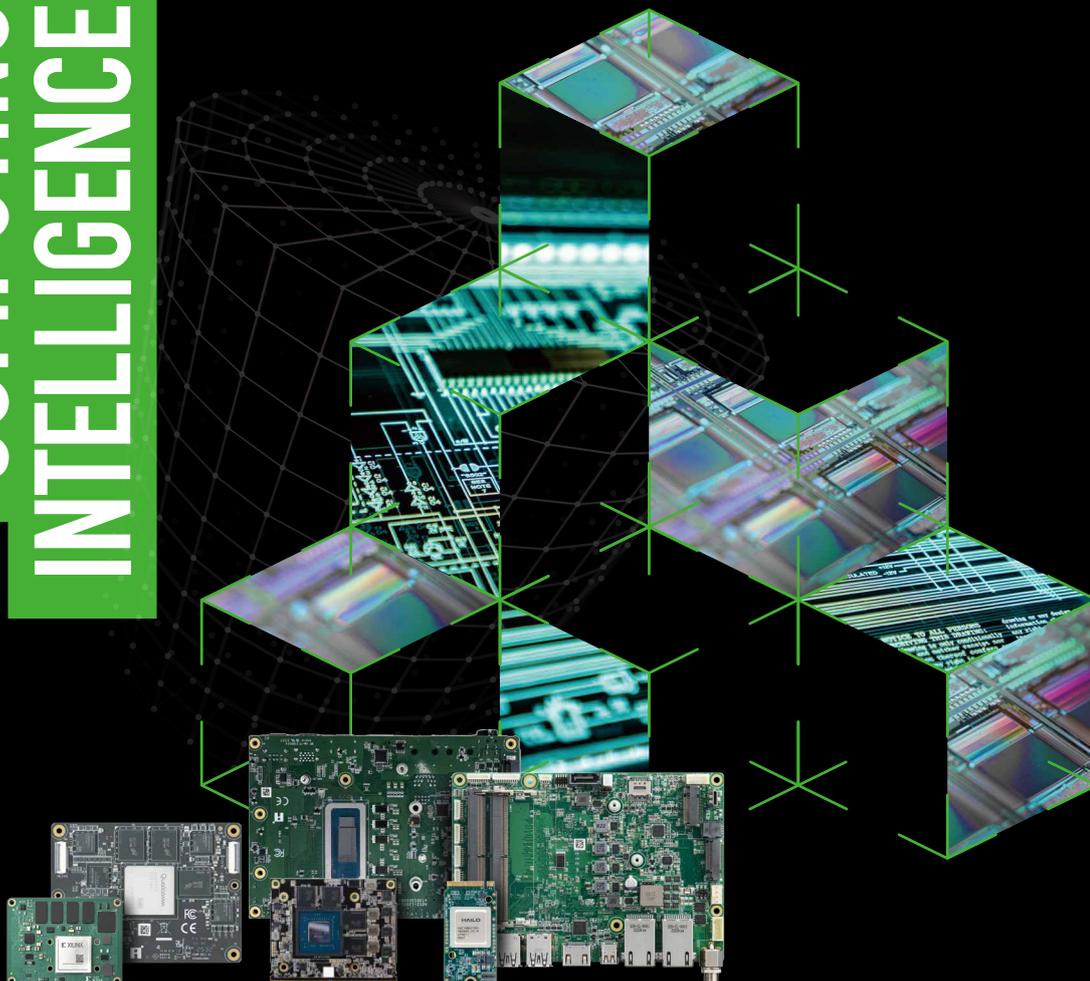


### iVIT 与 iCAP 协同发力 释放 AI 无限潜力



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# COMPUTING INTELLIGENCE



## COMPUTING INTELLIGENCE

借助我们的 AI 加速计算系统，全面提升边缘端的数据处理与分析能力。



## 高通 (Qualcomm) 解决方案

Model Name	EXMP-Q911
Module Form Factor	COM-HPC Mini
CPU	QCS9075 (Octa-core Kryo Gen 6 : 8x Kryo Gold Prime @2.36GHz)
Graphics	Adreno 663 GPU
Memory	36GB LPDDR5X
Storage	128GB UFS 3.1
AI Engine	100 TOPS (Dense) / 200 TOPS (Sparse) via 2 x Hexagon Tensor Processor
Expansion	1 x PCIe Gen 4 x4
	1 x PCIe Gen 4 x2
MIPI	2 x 4-lane MIPI CSI-2 (22pin, P: 0.5, on module)
Ethernet	2 x RJ45 2.5 GbE LAN
Display	2 x DP1.2
	1 x eDP
Audio	1 x I <sup>2</sup> S for Headphone / AMP
I/O Interfaces	2 x USB 3.2 Gen 2 x1 (10Gbps)
	4 x USB 2.0
	2 x UART (1 with CTS / RTS)
	1 x COM (RS232 / 422 / 485, on module)
	1 x SPI (General SPI)
	1 x CAN FD
	4 x I <sup>2</sup> C (1 x on module, 3.3V)
	12 x GPIO
Power	8 ~ 20V DC Power Supply
Security	TPM 2.0
OS Support	Yocto Linux (Kernel 6.6); Ubuntu 24.04 (Kernel 6.8)
Environment	Temperature: Operating : -40°C ~ 85°C (Ta) Storage : -40°C ~ 95°C (Ta)
	Humidity: Operating & Storage : 5% to 95%, Non-condensing
Certification	CE / FCC Class B
Dimensions (W x L/mm)	95 x 70



Model Name	EXEC-Q911		
Module Form Factor	COM-HPC Mini		
CPU	QCS9075 (Octa-core Kryo Gen 6 : 8x Kryo Gold Prime @2.36GHz)		
Graphics	Adreno 663 GPU		
Memory	36GB LPDDR5X		
Storage	128GB UFS 3.1		
AI Engine	100 TOPS (Dense) / 200 TOPS (Sparse) via 2 x NPU Hexagon Tensor Processor		
Expansion Slots	M.2 2280 M Key	1 x PCIe Gen 4 x4	
	M.2 3052 B Key	USB 3.2 Gen2, USB 2.0	
	M.2 2230 E Key	1 x PCIe Gen 4 x2, USB 2.0	
MIPI	2 x 4-lane MIPI CSI-2 (22pin, P : 0.5, on module)		
Ethernet	2 x 2.5GbE RJ45		
Display	2 x DP1.2		
	1 x eDP		
Audio	MIC In / LINE Out	Phone Jack 3.5mm	
	AMP Out	Wafer (1 x 4)	
External I/O	USB 3.2 Gen 2 x1 (10Gbps)	3	
	USB 3.2 Gen 2 x1 (10Gbps) Type-C	1 (OTG support)	
	USB 2.0	2	
	Audio Phone Jack	1 (MIC In / LINE Out)	
	DP	2 (DP1.2)** 4K@60hz	
	LAN	2 (2.5GbE RJ45)	
Internal I/O	Debug Port (UART)	1 (1 x 3, P : 2.54, 3.3V)	
	EDL Jumper	1 (1 x 3, P : 2.0)	
	CPU Fan Connector	1 (1 x 4, P : 2.54, for PWM Control, 12V)	
	eDP	1 (40pin, P : 0.5)	
	GMSL Power	1(1 x 4, P: 2.0, 12V 3A)	
	GPIO	8 (1 x 10, P : 1.0, 0.5A VCC, GND)	
	SPI	1 x General SPI 3.3V, 2 x I2C (2 x 6, P:2.0, 12-pin header)	
	I2C		
	CAN FD	1 (1 x 3, P : 2.0)	
	COM	2 (1 x 9 P : 1.0, on module, 1x9 P : 1.0, on carrier board, RS232 / 422 / 485)	
	USB 2.0	1(1 x 8, P : 1.0)	
	Power	Power Input Voltage	DC 9-36V (12V@2.6A)
		RTC Battery	CR2302 Coin Cell
Security	TPM2.0		
OS Support	Yocto Linux (Kernel 6.6); Ubuntu 24.04 (Kernel 6.8)		
Temperature	Operating : -40°C ~ 85°C (Ta) Storage : -40°C ~ 95°C (Ta)		
Humidity	Operating & Storage : 5% to 95%, Non-condensing		
Certification	CE / FCC Class B		
Dimensions (W x L/mm)	146 x 102 x 56.99		

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# COLLECTIVE INTELLIGENCE



## COLLECTIVE INTELLIGENCE

我们携手行业领军企业，共同构建智能生态体系，释放边缘 AI 应用的无限潜能。

此外，我们与供应商、全球客户及员工紧密协作，共同应对环境挑战、践行社会责任，持续创造积极影响。





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