

AIR-355

Intel® Core™ Ultra Series 3 PTL MXM Type A GPU Edge AI System



Features

- Powered by Intel® Core Ultra 5(325) or 7(366H) Panther Lake Processor
- 1x M.2 E Key (Wi-Fi/BT) or B Key (5G)
- 2x M Key (1x 2242, 1x 2280 storage)
- 12-24V wide range power input
- -10~50°C wide operating temperature
- Support MXM 3.1 Type A (Up to 60W) or extra 2x M.2 2280 M Key expansion
- Support up to 8x GMSL cameras via 2x AMO-MMDP (mini DP to GMSL dongle)

Specifications

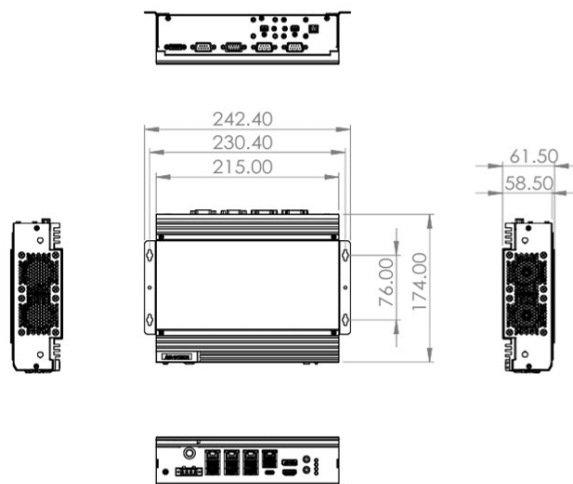
Processor System	CPU	Intel® Core™ Ultra 7 - 366H (4Xe)	Intel® Core™ Ultra 5 - 325 (4Xe)
	Frequency	1.9GHz / up to 4.8GHz	2.1GHz / up to 4.5GHz
	AI Capacity	Up to 99 TOPS	Up to 95 TOPS
Memory	Technology	DDR5 6400/7200 MT/s CSODIMM	DDR5 6400 MT/s CSODIMM
	Max Capacity	Up to 128GB	
	Socket	2x 262-pin CSODIMM (Non-ECC)	
GPU	MXM 3.1 Type A	Compatible with RTX™ PRO 2000 Blackwell Discrete Mode	NA
	Cores	3328 CUDA® cores	NA
	FP32 Performance (TFLOPS)	13.78	NA
	Memory	GDDR7 8GB	NA
Ethernet	Interface	RJ-45	
	Speed	4x 2.5GbE Ethernet (10/100/1000/2500 Mbps)	
Display	HDMI	1x HDMI 2.1 (FRL), Max 3840 x 2160 (4K) at 60Hz	
	DP	1x DP 1.4a, Max 3840 x 2160 (4K) at 60Hz	
IO Ports	USB	7x USB 3.2 Gen2 Type A 1x USB 2.0 Type A 1x USB Type C w/USB4, DP alt mode	
	CANBus	1x CANBus (DB9 connector)	
	DI/DO	1x 8-bit (DB9 connector)	
	COM	2x RS-232/RS-422/RS-485 (default: RS-232) (DB9 connector)	
	Audio	1x Line-out, 1x Mic-in	
	Mini DP (MIPI interface)	1x Mini DP w/MIPI CSI2 D-PHY 2 lane 1x Mini DP w/MIPI CSI2 D-PHY 4 lane	
Expansion	M.2	1x M.2 2230 E Key (PCIe Gen3 x1) for Wi-Fi/Bluetooth or 1x M.2 3052 B Key (USB 2.0) for 5G w/ 1x nano SIM holder	
Other	WatchDog Timer	255 levels timer interval, setup by software	
	TPM	TPM 2.0	
Storage	M.2	1x M.2 2280 M Key (PCIe Gen5 x4) for NVMe (Default) 1x M.2 2242 M Key (PCIe Gen4 x2) for NVMe	
Power	Power Input	12-24V DC input	
	Power Type	ATX/AT, ATX default	
Power Consumption	Typical (OS idle mode)	TBD	
	Max. (Full loading)	TBD	
Environment	Op. Temp	-10~50°C with 0.7m/s air flow	
	Op. Humidity	95% @ 40 °C (non-condensing)	
Mechanical	Dimensions (W x D x H)	215 x 174 x 58.5 mm	
	Weight	2.4 kg	
	Mounting	Wall Mount	
Operating System	Microsoft Windows	Windows 11 IoT Enterprise LTSC	
	Linux	Ubuntu 24.04	
Software Support	Software API	Edge AI SDK / SUSI / DeviceOn	
Certifications	EMC/Safety	CE/FCC Class B, CB, UL, CCC and BSMI	

Advantech SUSI is a device management and system monitoring suite for hardware configuration, control, and status monitoring.

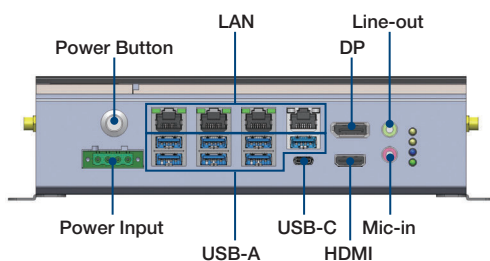
SUSI information: <https://github.com/ADVANTECH-Corp/SUSI>

Dimensions

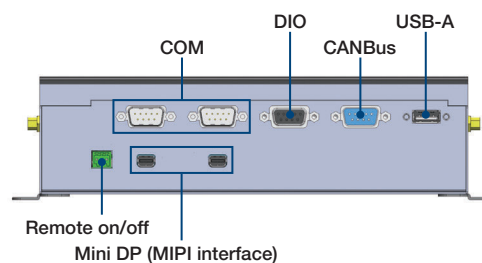
Unit: mm



Front Panel I/O Placement



Back Panel I/O Placement



Ordering Information

Part No.	CPU	RAM	MXM	HDMI	DP	LAN	USB Type A	USB Type C	CANBus	DIO	COM	Mini DP	M.2 B	M.2 E	M.2 M	SIM	Option Module
AIR-355-45A1U	Ultra 5 325	2 socket (up to 128G)	NA	1	1	4	7x USB3.2 1x USB2.0	1	1	1	2	2	1	1	2	1	5G/Wi-Fi
AIR-355M-48A1U	Ultra 7 366H	2 socket (up to 128G)	Type A	1	1	4	7x USB3.2 1x USB2.0	1	1	1	2	2	1	1	2	1	5G/Wi-Fi

Packing List

Part Number	Description	Quantity
-	AIR-355 Unit	1
-	User Manual	1
-	Mounting Kit	1
1652003234	Power in plug	1
1652008227-01	Remote plug	1

* In case of any changes, the actual packaging shall prevail

Optional

Part Number	Description
SKY-MXM-2000B-8HDA	RTX PRO 2000 Blackwell MXM 8GB Discrete mode
96PSA-A330W24P4-3	A/D 100-240V 330W 24V C14 TERMINAL BLOCK 4P
1702002600	Power Cord UL 3P 10A 125V 183cm (US)
1702002605	Power Cord EU 3P 10A 250V 183cm (EU)
1702031801	Power Cord BSI 3P 10A 250V 183cm (UK)
1700000237	Power Cord PSE 3P 12A 125V 183cm (Japan)
1700013977	Power Cord CCC 3P 10A 250V 200cm 90°(China)
AIW-173BQ-GI1	Qualcomm Wi-Fi 7 M.2 2230 E Key
1751000620-01	1x Cable Ant. L300mm for WIFI
1751000460-01*2	1x Cable Ant. L100mm for WIFI
1751000651-01	1x Antenna for WIFI
AIW-356DQ-E01	Qualcomm 5G M.2 3052 B-Key
1751000623-01*3	1x Cable Ant. L300mm for 5G
1751000649-01	1x Cable Ant. L100mm for 5G
1750009372-01*4	1x Antenna for 5G

Inference Kit | Production-Ready AI Inference on Edge Devices

Provides a unified and hardware-aligned runtime for deploying and validating AI inference on edge devices

It simplifies integration across CPUs, GPUs, and AI accelerators while enabling performance benchmarking and compatibility verification on target hardware. Designed for production use, Inference Kit helps hardware partners ensure stable, scalable, and repeatable AI deployment across product lines.



EdgeAI SDK Inference Kit

Streamlined Edge Inference

- Ready-to-Run Inference Runtime
- Accelerator-Aware Optimization
- Stable Edge Production Stack
- Unified Inference Interfaces





Benefits and Features

Unified Inference Runtime ▪ Consistent inference across CPUs, GPUs, and accelerators ▪ Vendor-optimized runtime integration ▪ Built-in UniIntra acceleration framework ▪ Optimized inference pipelines and runtime efficiency	Hardware Validation ▪ Benchmarking on target devices ▪ OS and accelerator compatibility validation ▪ Performance and stability verification
Production-Ready Deployment ▪ Stable, long-running inference operation ▪ System monitoring and observability support ▪ Designed for scalable edge deployment	Global Customer Support ▪ System reliability certification ▪ Inference computing enablement ▪ Edge-to-cloud scalability collaboration

