AIR-310

Intel® Core™ 12th/13th/14th Gen i3/i5/ i7/i9 LGA1700 MXM GPU Edge AI System

Features

- Support Intel® 12th/13th/14th Gen. Core™ i3/i5/i7/i9 processor up to 65W
- DDR5 SO-DIMM memory support up up to 64 GB
- Dual display: HDMI + DP
- Support MXM 3.1 Type A GPU card up to 60W
- Support 2 x 2.5GbE, 16-bit DIO, 2 x CANBus, TPM 2.0
- Qualified for Edge AI SDK

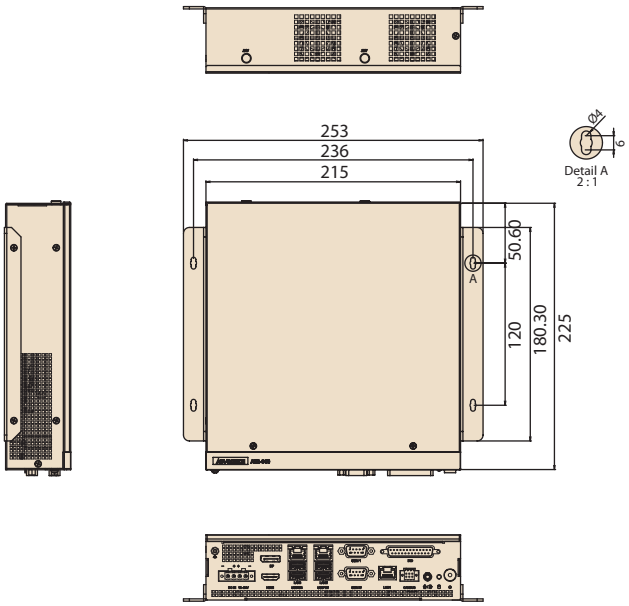
Specifications

14th Processor System	CPU	i9-14900/i9-14900T	i7-14700/i7-14700T	i5-14500/i5-14500T	i5-14400/i5-14400T	i3-14100/i3-14100T						
	Core Number (Performance and Efficient core)	8P+16E	8P+12E	6P+8E	6P+4E	4P						
	Max. Speed	5.8/5.5GHz	5.4/5.2GHz	5.0GHz/4.8GHz	4.7GHz/4.5GHz	4.7GHz/4.4GHz						
	Smart cache	36M	33M	24M	20M	12M						
	TDP	65W/35W	65W/35W	65W/35W	65W/35W	60W/35W						
13th Processor System	CPU	i9-13900E/i9-13900TE	i7-13700E/i7-13700TE	i5-13500E/i5-13500TE	i3-13100E/i3-13100TE	i9-13900	i7-13700	i5-13500	i5-13400	i3-13100		
	Core Number (Performance and Efficient core)	8P+16E	8P+8E	6P+8E	4P+0E	8P+16E	8P+8E	6P+8E	6P+4E	4P+0E		
	Max. Speed	5.20GHz/5.00GHz	5.10 GHz/4.80 GHz	4.60 GHz/4.50 GHz	4.40 GHz/4.10 GHz	5.60 GHz	5.20 GHz	4.80 GHz	4.80 GHz	4.50 GHz		
	Intel Smart Cache	36MB/ 36MB	30MB/ 30MB	24MB/ 24MB	12MB/ 12MB	36MB	30MB	24MB	20MB	12MB		
	TDP (W)	65W/35W	65W/35W	65W/35W	60W/35W	35W	35W	65W	65W	60W		
12th Processor System	CPU	i9-12900E/i9-12900TE	i7-12700E/i7-12700TE	i5-12500E/i5-12500TE	i3-12100E/i3-12100TE	G7400E/G7400TE	G6900E/6900TE	i9-12900	i7-12700	i5-12500	i5-12400	i3-12100
	Core Number (Performance and Efficient core)	8P+8E	8P+4E	6P+0E	4P+0E	2P+0E	2P+0E	8P+8E	8P+4E	6P+0E	6P+0E	4P+0E
	Max. Speed	5.0GHz/4.8GHz	4.8GHz/4.7GHz	4.5GHz/4.3GHz	4.2GHz/4.0GHz	3.6GHz/3.0GHz	3.0GHz/ 2.4GHz	5.10GHz	4.9GHz	4.6GHz	4.4GHz	4.3GHz
	Intel Smart Cache	30MB/ 30MB	25MB/ 25MB	18MB/ 18MB	12MB/ 12MB	6MB/6MB	4MB/4MB	30MB	25MB	18MB	18MB	12MB
	TDP (W)	65W/35W	65W/35W	65W/35W	60W/35W	46W/35W	46W/35W	65W	65W	65W	65W	60W
Processor System	Chipset	H610E										
	BIOS	AMI EFI 256 Mbit SPI										
Memory	Technology	DDR5 5600 MHz										
	Max. Capacity	64 GB										
	Socket	2 x 262-pin SO-DIMM (Non-ECC)										
GPU	MXM3.1 Type A	Compatible with Intel Arc A370M/Quadro® A2000										
	Cores	8 Xe-cores/ 2560 CUDA® cores										
	FP32 Performance (TFLOPS)	4.198 / 8.25										
	Memory	GDDR6 4 GB / GDDR6 8GB										
Display	Chipset	Intel® UHD Graphics 770								Intel® UHD Graphics 730		
	Graphic Engine	Direct x 12, OpenGL 4.5 HW Encode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, JPEG/MJPEG and VP8. HW Decode: H.265/HEVC, H.264/MPEG-4 AVC, MPEG-2, VC-1/WMV9, JPEG/MJPEG, VP8 and VP9										
	DP	1 x DP++, DP 1.4a, up to 4096 x 2304@60 Hz										
	HDMI	1 HDMI port, HDMI 2.0 for HD video playback, 4096x2160@60Hz										
Ethernet	LAN1	10/100/1000 Mbps Intel I219-LM GbE, support Wake On Lan										
	LAN2, 3	10/100/1000/2500 Mbps Intel I226 GbE, support Wake On Lan										
Audio	Interface	Realtek ALC888S, High Definition Audio, Line-out/Mic-in (switch)										
Others	Watch dog Timer	255-level timer interval, setup by software										
	TPM	TPM 2.0										
I/O Interface	Serial Port	2 x RS-232/422/485 port with auto flow control										
	USB	4 x USB 3.2 (Gen2 x 1, 5G)										
	DIO	16bit DIO										
	CANBus	2										
Expansions	M.2	1 x 2230 E key for WiFi										
Storage	SSD	1 x 2.5" SATAIII hard drive Bay with Max Height 7mm										
	NVME	1 x M.2 M Key 2280(PCIe Gen3 x4, SATA)										
Software Support	Microsoft Windows	Windows 10 IoT 2021 LTSC/ Windows 11 IoT										
	Linux	Ubuntu Desktop 24.04 LTS 64bit										
Power Requirements	Power Type	AT/ATX										
	Power Input Voltage	12-24V										
	Power Supply	AC to DC, 230W (Optional)										
Power Consumption (CPU/Memory Only)	Typical	33.29W (OS Idle mode)										
	Max.	106.84W (Full Loading)										
Mechanical	Mounting	Desk mounting										
	Dimensions (W x H x D)	215 x 225 x 55 mm										
	Weight	2.5 kg										
Environment	Operating Temperature	Without MXM and with extended temp peripherals: -20 ~ 55 °C with 0.7m/s air flow With MXM and extended temp peripherals: 0 ~ 50 °C with 0.7m/s air flow										
	Vibration During Operation	With SSD/MXM: 3 Grms, IEC 60068-2-64, random, 5 ~ 500 Hz, 1 hr/axis.										
	Shock During Operation	With SSD/MXM: 30 G, IEC 60068-2-27, half sine, 11 ms duration										
	Storage Temperature	-40 ~ 85 °C										
	Relative Humidity	95% @ 40 °C (non-condensing)										
	EMC	CE/FCC Class B, CCC, BSMI										
	Safety	CB, UL, CCC, BSMI										

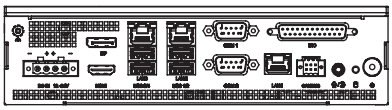
Last updated: 19-Sep-2025

Dimensions

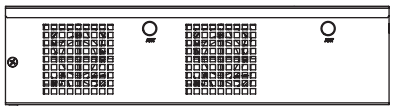
Unit: mm



Front View



Rear View



Ordering Information

Part No.	CPU	MXM	DDR5	Display	LAN	COM	USB	M.2	SSD	Operating Temperature
AIR-310-00A1U	LGA1700 Socket Type	1x MXM3.1 Type A	Up to 64GB	2	3	2	4	1 x M.2 E key 1 x M.2 M Key	1 x 2.5" SSD	-20 ~ 55 °C
AIR-310-005A1U	LGA1700 Socket Type	EAI-2100	Up to 64GB	2	3	2	4	1 x M.2 E key 1 x M.2 M Key	1 x 2.5" SSD	0 ~ 50 °C

Note: AIR-310-00A1U is barebone SKU, the CPU, memory, storage, MXM GPU Card and MXM GPU heatsink are not included.
AIR-310-005A1U is built-in with EAI-2100 GPU card, but the CPU, memory, storage are not included.

Packing List

Part Number	Description
-	AIR-310 Unit
1960093556N011	Mounting Kit
2006031000	User Manual (Simplified Chinese)
1652008233-01	Terminal Plug 6P for CANBus
1652003234	PLUG-IN BLOCK 4P for DC in

Embedded OS

Part Number	Description
20706WX1HS0112	WIN10 IoT LTSC 21H2 64bit for i7/i9
20706WX1VS0112	WIN10 IoT LTSC 21H2 64bit for i3/i5
20706U24DS0002	img UbuntuD AIR-310 64b 24.04 ENU
20706WLH1S0024	WIN11 IoT LTSC 24H2 64bit for i7/i9
20706WLV1S0024	WIN11 IoT LTSC 24H2 64bit for i3/i5

AIR-310 Option Items

Optional Item for Default SKU

Part Number	Description
SKY-MXM-A500-4SHA	Quadro A500 MXM 4GB MS Hybrid mode Type A
SKY-MXM-T1000-4HHB	Quadro T1000 MXM 4GB MS Hybrid mode Type A
SKY-MXM-A1000-4HHA	Quadro A1000 MXM 4GB Ms Hybrid mode Type A
SKY-MXM-2000A-8SHA	Quadro 2000 Ada MXM 8GB MS Hybrid mode Type A
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1702031801	Power cable 3-pin 183cm, UK type
1700000237	Power cable, 3-Pin 183cm, PSE type
96PSA-A230W24P4-3	AC to DC adapter, DC 24V 230W, -20 ~ 40 °C
AMK-A0050	MXM Heatsink for EAI-2100/SKY-MXM-A2000
EAI-2100-00A1	Intel Arc A370M Embedded MXM GPU Card
SKY-MXM-A2000-8SHA	Quadro A2000 MXM GPU Card MS Hybrid mode

Edge AI SDK — *Edge AI Inference Deployment and Hardware Validation*

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.

Benefits and Features

Unified Inference Runtime

- Consistent inference across CPUs, GPUs, and accelerators
- Vendor-optimized runtime integration
- Built-in UnielnfraI 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

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