

AIR-310

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

NEW



ubuntu® CE FCC RoHS COMPLIANT 2002/95/EC

Specifications

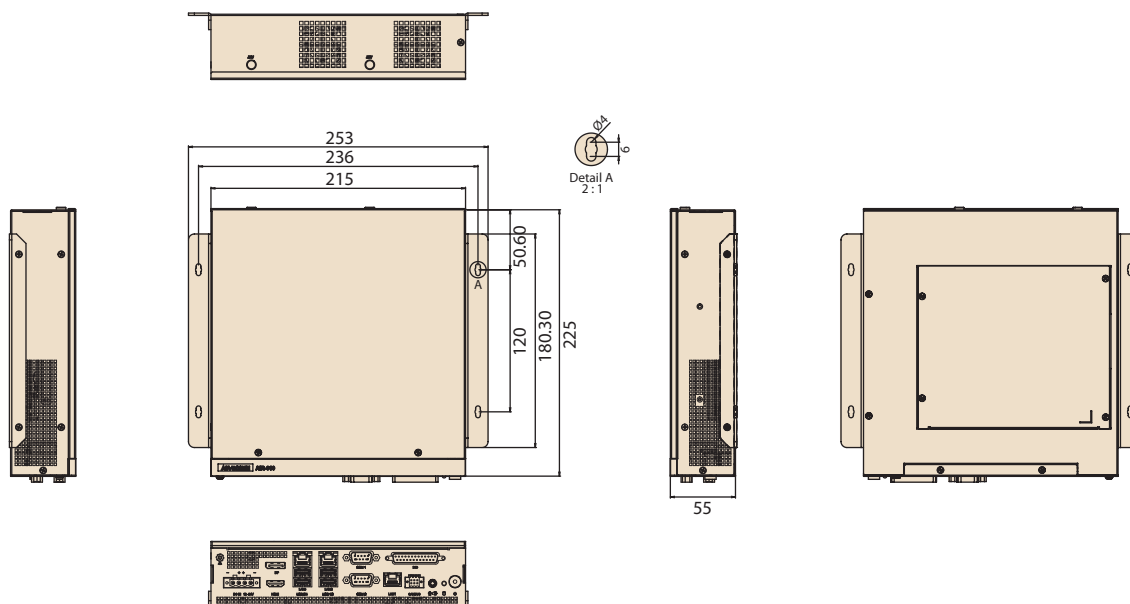
Features

- Support Intel® 12th/13th/14th Gen. Core™ i3/i5/i7/i9 processor up to 65W
- DDR5 SO-DIMM memory support 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

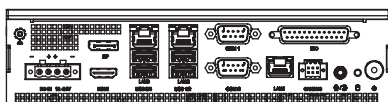
Processor System	CPU	i9-14900	i7-14700	i7-14700T	i5-14500	i3-14100	i7-13700E	i5-13500TE	i3-13100E
	TDP	65W	65W	35W	65W	60W	65W	35W	60W
	Frequency	2.0–5.8GHz	2.1–5.4GHz	1.3–5.2GHz	2.6–5.0GHz	3.5–4.7GHz	1.9–5.1GHz	1.9–5.1GHz	3.3–4.4GHz
	Chipset	H610E							
	BIOS	AMI EFI 256Mbit							
Memory	Technology	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(PCle 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								

Dimensions

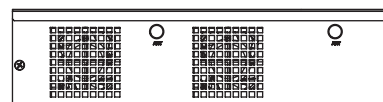
Unit: mm



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
-	Ubuntu 24.04
20706WLH1S0024	WIN11 IoT LTSC 24H2 64bit for i7/i9
20706WLVS0024	WIN11 IoT LTSC 24H2 64bit for i3/i5

AIR-310 Option Items

Optional Item for Default SKU

Part Number	Description
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