

# AIR-310

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

NEW



### Features

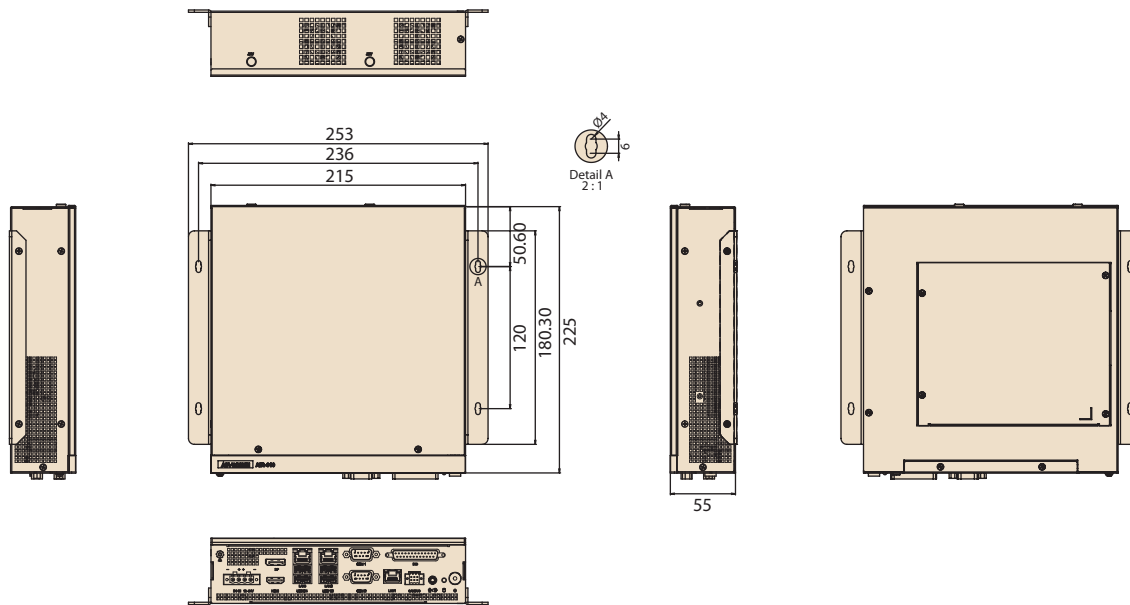
- Support Intel® 12th/13th/14th Gen. Core™ i3/i5/i7/i9 processor up to 65W
- DDR5 SO-DIMM memory support up to 64 GB
- Dual display: HDMI + DP
- Support MXM 3.1 Type A GPU card up to 60W
- Support 2 x 2.5GbE, 16-bit DIO, 2 x CANBus, TPM 2.0
- Qualified for Edge AI SDK

### Specifications

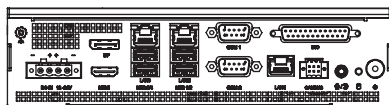
		i9-14900	i7-14700	i7-14700T	i5-14500	i3-14100	i7-13700E	i5-13500TE	i3-13100E	
Processor System	CPU	i9-14900	i7-14700	i7-14700T	i5-14500	i3-14100	i7-13700E	i5-13500TE	i3-13100E	
	TDP	65W	65W	35W	65W	60W	65W	35W	60W	
	Frequency	2.0-5.8GHz	2.1-5.4GHz	1.3-5.2GHz	2.6-5.0GHz	3.5-4.7GHz	1.9-5.1GHz	1.9-5.1GHz	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(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									

## Dimensions

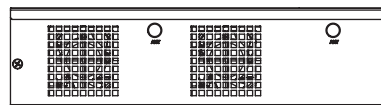
Unit: mm



## 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
20706WLV1S0024	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