

AIR-200

Edge AI Inference Rugged System with 6th Gen Intel® Core i5-6442EQ QC and Two Intel MA2485 VPUs

NEW



Features

- Intel® i5-6442EQ QC SoC
- Intel® Movidius™ Myriad™ X VPU MA2485 x 2 Built-in
- Intel® OpenVINO™ toolkit supported
- Support TPM2.0
- Extreme graphic performance, support up to 1080p 120fps video encode&decode
- Isolated 12 ~ 24V_{DC} wide-range power input
- Diversity communication extensible, ex. WLAN, WWAN
- Anti-vibration & shock proof, certified by MIL-STD-810G
- Certified for general standard, CE, FCC, CB, UL, CCC and BSMI
- Integrated with Edge AI Suite

Windows 10

OpenVINO™



OpenVINO™ Toolkit

- Model optimizer
- Inference engine
- Supports TensorFlow, Caffe, mxnet, ONNX



Enhanced Inference Efficiency

Scaling AI inference workloads with modular, plug & play design



VEGA-330 built-in

- Two MA2485 VPU
- Full size miniPCIe
- PCIe Gen2 x1, USB 2.0

Specifications

		AIR-200-S92A1
Processor System	CPU	Intel® i5-6442EQ QC SoC
	Frequency	1.9GHz
	Cache	6 MB
	BIOS	AMI EFI
Memory	Technology	DDR4 2133MHz
	Max. Capacity	32GB (1 x DDR4 8GB (-20~85°C) built in)
	Socket	2 x 260-pin SO-DIMM
Graphics	Chipset	QM170
	Graphic Engine	DirectX 11.3, OGL 4.4, OCL 2.1 Encode: H.264, MPEG2/4, VC1, WMV9 Decode: H.264, MPEG2 HEVC: H.265
	HDMI	HDMI 1.4a for HD video playback, 1080P at 60Hz
AI Engine	Dual Display	Dual HDMI
	VPU	Dual Intel Movidius™ Myriad™ X MA2485 (1x VEGA-330-02A1 Built-in)
Ethernet	LAN1	10/100/1000 Mbps Intel i219 GbE, support Wake On Lan
	LAN2	10/100/1000 Mbps Intel i210 GbE, support Wake On Lan
Audio	Interface	Realtek ALC888S, High Definition Audio, Line-out, Mic-in, Line-in
IO Interface	Serial Ports	3 x RS-232/422/485 port with auto flow control
	USB Interface	3 x USB3.0 Type A
	GPIO	4 x DI & 4 x DO w/ 1.5KV isolation, Input Voltage: 0 to 30 V _{DC} , Output Current: Max. 500 mA per channel, On-state Voltage: 24 V _{DC} nominal, open collector to 30 V _{DC}
	CANBus	Optional
Other	Watchdog timer	255 levels timer interval, setup by software
Expansion	Mini PCIe	1 x Full-size Mini PCIe (SATA/PCIe/USB) w/external SIM socket #1
	M.2	1 x M.2 2230 E key #1
Storage	SSD/HDD	1 x 2.5" 64GB (-40~85°C) SATA SSD built in
	mSATA	1 x full size mSATA socket (share with Mini PCIe)
Software Support	Microsoft Windows	Win10 (Pre-installed Win10)
	Linux	Support by project
Power Requirement	Power Type	ATX
	Power Input Voltage	12~24V _{DC} w/isolation
	Isolation	1.5 KV
Mechanical	Construction	Aluminum housing
	Mounting	Wall mounting kit
	Dimensions (W x H x D)	260 x 86.8 x 160.2 mm
	Weight	3.5 Kg
Environment	Operating Temperature	With extended temperature peripherals: -20 ~ 60 °C with 0.7m/s air flow
	Storage Temperature	- 40 ~ 85 °C (-40 ~ 185 °F)
	Relative Humidity	95% @ 40 °C (non-condensing)
	Vibration During Operation	MIL-STD-810G, Method 514.6
	Shock During Operation	MIL-STD-810G, Method 516.6
	EMC	CE, FCC Class B, CCC, BSMI
Safety	UL, CCC, BSMI, CB	

#1 SIM holder and M.2 slot are hardware interface for wireless communication integration only. System level RF certification is not available.

ADVANTECH

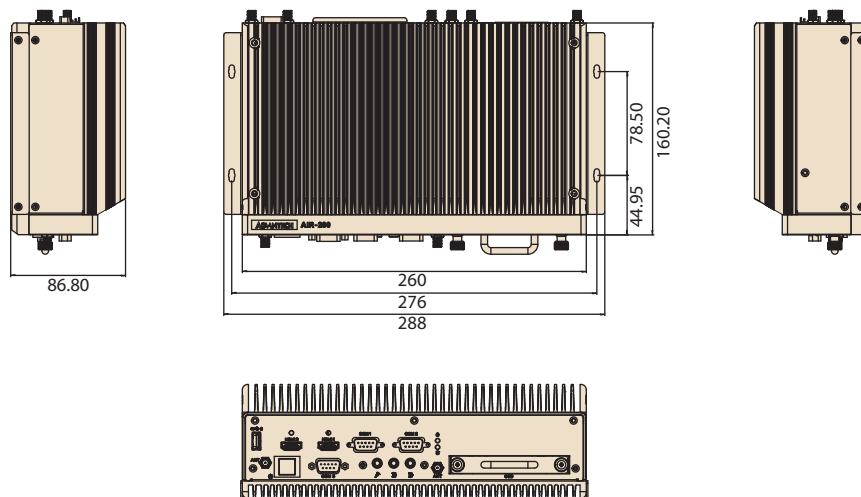
Edge AI Inference System

All product specifications are subject to change without notice.

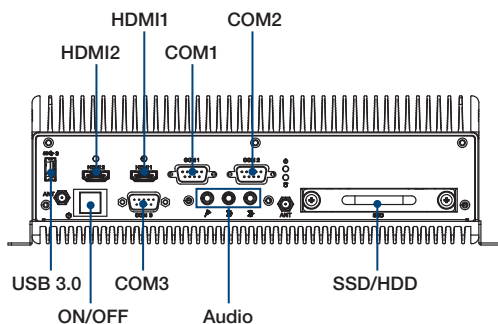
Last updated: 16-Dec-2020

Dimensions

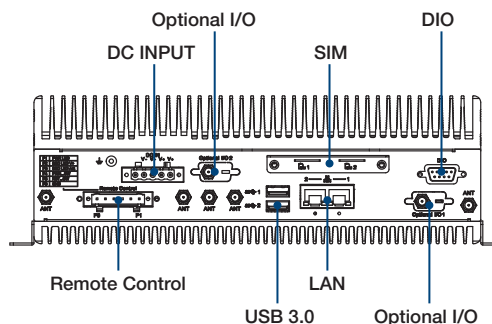
Unit: mm



Front Panel External I/O Mechanical Layout/Drawing



Rear Panel External I/O Mechanical Layout/Drawing



Ordering Information

Part No.	CPU	VPU	Memory	Storage	HDMI	GbE	USB 3.0	DIO	RS-232/422/485	Audio	MiniPCIe	M.2	Operating Temp.
AIR-200-S92A1	Intel® Core i5-6442EQ QC	Two Intel Movidius Myriad X MA2485 Built-in	8GB Built-in	64GB Built-in	2	2	3	4Di, 4Do	3	Lin-out, Line-in, MIC	1	1	-20 - 60 °C

Packing List

Part Number	Description
-	1 x AIR-200 Unit
-	1 x User Manual (Simplified Chinese)
1652001524	1 x Terminal Block 6P 5mm
1652000177	1 x Terminal Block 5P 5mm
1960071555N011	2 x Wall Mounting Brackets

Optional Item for Default SKU

Part Number	Description
96PSA-A150W24T2-3	AC-to-DC Adapter, DC24V/150W
1702002600	Power cable 3-pin 183cm, USA type
1702002605	Power cable 3-pin 183cm, EU type
1702031801	Power cable 3-pin 183cm, UK type
VEGA-320-01A1*	M.2 2230 Edge AI acceleration module with One Intel Myriad X
AMK-A0033*	VEGA-320 thermal kit for AIR-200
VEGA-330-02A1**	miniPCIe Edga AI acceleration module with Two Intel Myriad X
AMK-A0034**	VEGA-330 thermal kit for AIR-200

Note* Please place order on optional VEGA-320 and AMK-A0033 together.

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