AIR-200

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

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
	Dual Display	Dual HDMI
AI Engine	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.

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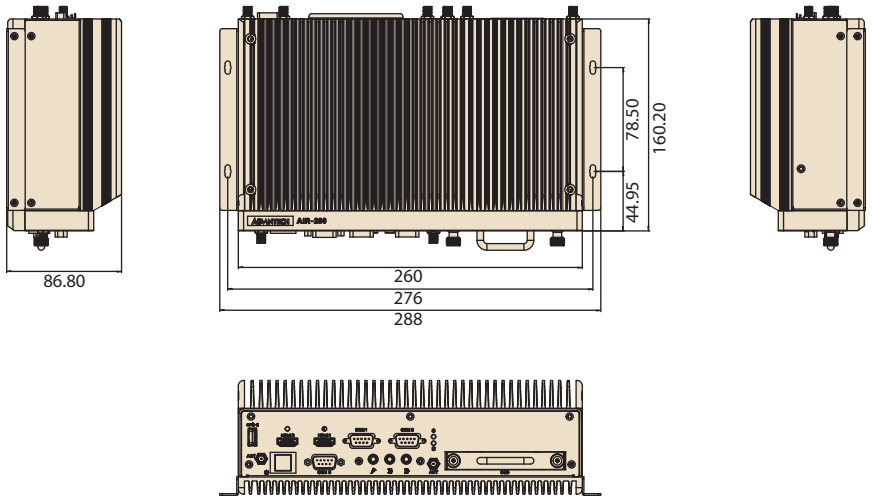
All product specifications are subject to change without notice.

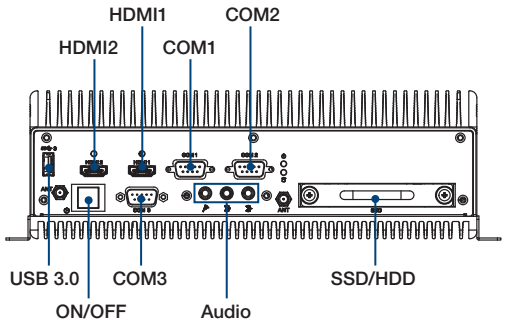
Last updated: 16-Dec-2020

Dimensions

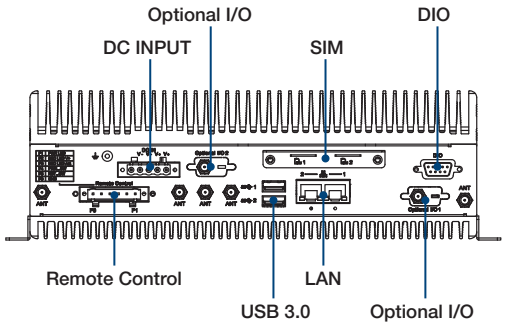
Unit: mm



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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