

MXA-312M Series

Ultra-Compact ARM-based, Fanless, Low-Power Edge AI Platform
 Powered by MediaTek Genio IoT 520/720

Features

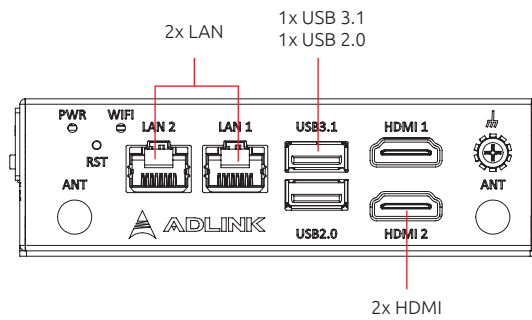
- Compact & Space-Saving – 120 x 90 x 40 mm
- AI Acceleration – Built-in NPU (10 TOPS)
- Fast Memory & Storage – LPDDR5 up to 16GB, UFS 3.1 64GB
- Wide Temperature Range – Operates from -20°C to 65°C
- Dual 4K Displays – HDMI support up to 4K@60fps
- Versatile Expansion – M.2 and adaptive function module
- Strong Security – Built-in TPM 2.0



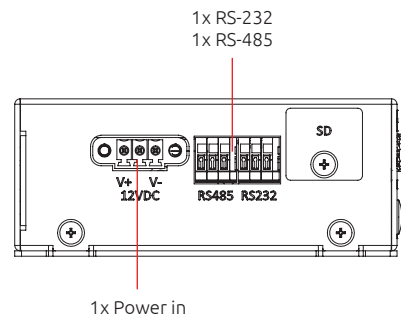
Specifications

Model	MXA-312M
Processor System	
CPU	Genio 520 MT8371/Genio 720 MT8391, 2 Arm Cortex-A78 + 6 Arm Cortex-A55
Memory	1 x LPDDR5 (X), up to 6400MHz 16GB
Operating Systems	Android, Yocto, Ubuntu
Display	
HDMI	2 x HDMI (up to 4K@60fps)
Ethernet	
Gbe Port	2x 1GbE
Controller/ Frequency	Ethernet PHY, support 1Gbps/10Mbps /100Mbps
I/O Interfaces	
USB	1 x USB 3.2 Gen 1 (Type-A) 1 x USB 2.0 (Type-A)
COM	1 x RS-232 + 1 x RS-485 Terminal Connector
Expansion Slots	M.2 2230 E Key with (Wi-Fi (PCIe x1), BT (USB2.0)) M.2 3042 B-key (USB2.0) w/ SIM card (option by installed AFM board cus kit)
TPM	Yes (TPM 2.0)
Mechanical and Environment	
Dimension	120 x 90 x 40 mm (4.72" x 3.54" x 1.57" inches)
Power Supply	12V Terminal connector
Operating Temperature	-20°C to 65°C
Storage Temperature	-40°C to 85°C
EMC	
	CE & FCC Class B
Safety	
	EN 61010-1 and EN 61010-2-201, LVD Test Report

I/O View



Front View



Side View

Product Dimensions

