

AI Inference / ARM Platform

AIB-MR1A-B1 AIB-MR1B-B1



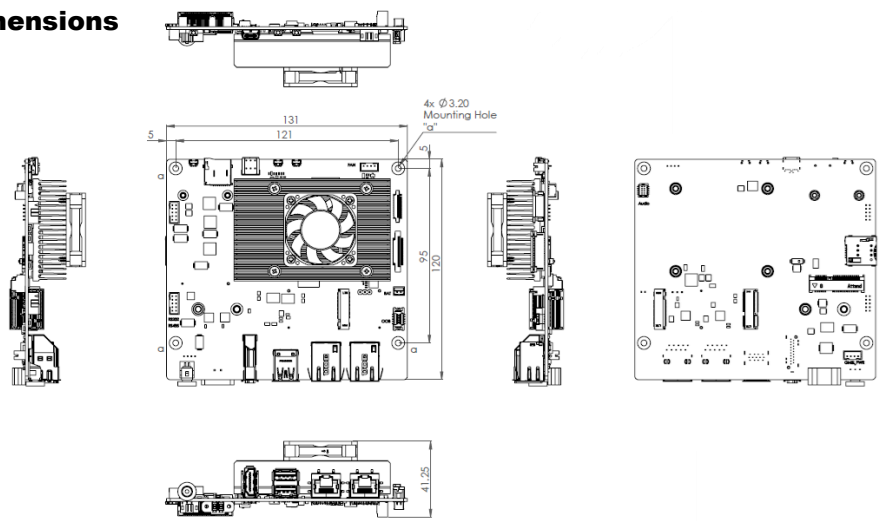
Features

- Powered by Rockchip RK3588
- LPDDR4X 8/16GB, eMMC 32GB
- 2 x M.2 M-Key, one w/ PCIe 3.0 x4 for AI ASIC Accelerator, one w/SATA for Storage
- 1 x M.2 E-Key for WIFI/BT, 1 x Mini PCIe for LTE
- 1 x USB 3.2 Gen1, 1 x USB 2.0, 2 x GbE, 2 x COM, 1 x HDMI 2.1

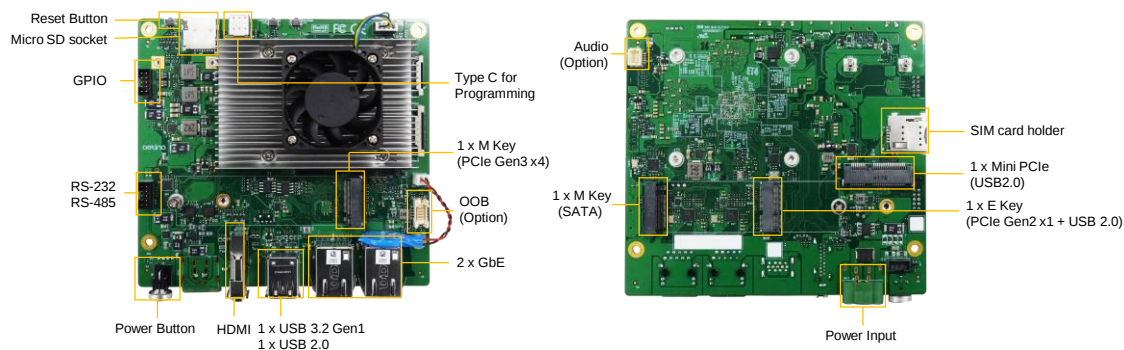
Specifications

Model Number	AIB-MR1A-B1	AIB-MR1B-B1
CPU	Rockchip RK3588	
Memory	LPDDR4X 8GB	LPDDR4X 16GB
Storage	32GB eMMC 1 x Micro-SD slot 1 x M.2 M-Key 2280 (SATA) for Storage (Bottom Side)	
Display	1 x HDMI 2.1 Type A (TMDS 3840X2160 60Hz)	
LAN	2 x RJ45 GbE	
Audio	1 x MIC-In, 1 x Line-Out, 1 x Line-In (Optional with daughter board)	
USB	1 x USB 3.2 Gen1 Type A 1 x USB 2.0 Type A 1 x Type C for Programming	
COM	1 x RS-232 (TXD/RXD/CTS/RTS) 1 x RS-485	
GPIO	3 x GPIO	
Expansion Slot	1 x M.2 M-Key 2280 (PCIe Gen3 x4) for AI Accelerator (Top Side) 1 x M.2 E-Key 2230 (PCIe 2.1 x1+USB 2.0) for WIFI/BT 1 x Mini PCIe full-size (USB 2.0) for LTE w/micro SIM card holder	
MISC. Function	1 x Power Button 1 x Reset Button 1 x Maskrom Button 1 x OOB function (Optional with OOB module)	
Power Input /Connector	DC-in 12V / Terminal Block 2-pin	
Dimension(W x D)	131 x 120mm (5.16" x 4.72")	
Net Weight	0.236 Kg (0.521 lb)	
Temperature	Operating Temperature: 0°C ~ 70°C (32°F ~ 158°F) Storage Temperature: -40°C ~ 85°C (-40°F ~ 185°F)	
Humidity	95% @ 40°C (Non-condensing)	
OS Support	Debian 11	
Certification	CE/FCC	

System & Mounting Dimensions



I/O Mechanical Layout



Ordering Information

Model name	Description
AIB-MR1A-B1	Rockchip RK3588, 8GB LPDDR4X, 32GB eMMC, 1 x HDMI, 2 x GbE, 2 x USB, 2 x M KEY, 12 VDC INPUT, 0°C ~ +70°C
AIB-MR1B-B1	Rockchip RK3588, 16GB LPDDR4X, 32GB eMMC, 1 x HDMI, 2 x GbE, 2 x USB, 2 x M KEY, 12 VDC INPUT, 0°C ~ +70°C

Packing List

Item/Part No.	Description
92-8RK358-K004	AIB-MR1A-B1 Motherboard
92-8RK358-K005	AIB-MR1B-B1 Motherboard
53-0FGSEC-0000	100-240V 60W 12V 5A power adaptor

Accessories (Optional)

Part No.	Description
32-010000-0005	US power cord
32-010000-0006	EU power cord
32-010000-0008	JP power cord
3102000037N000	UK power cord