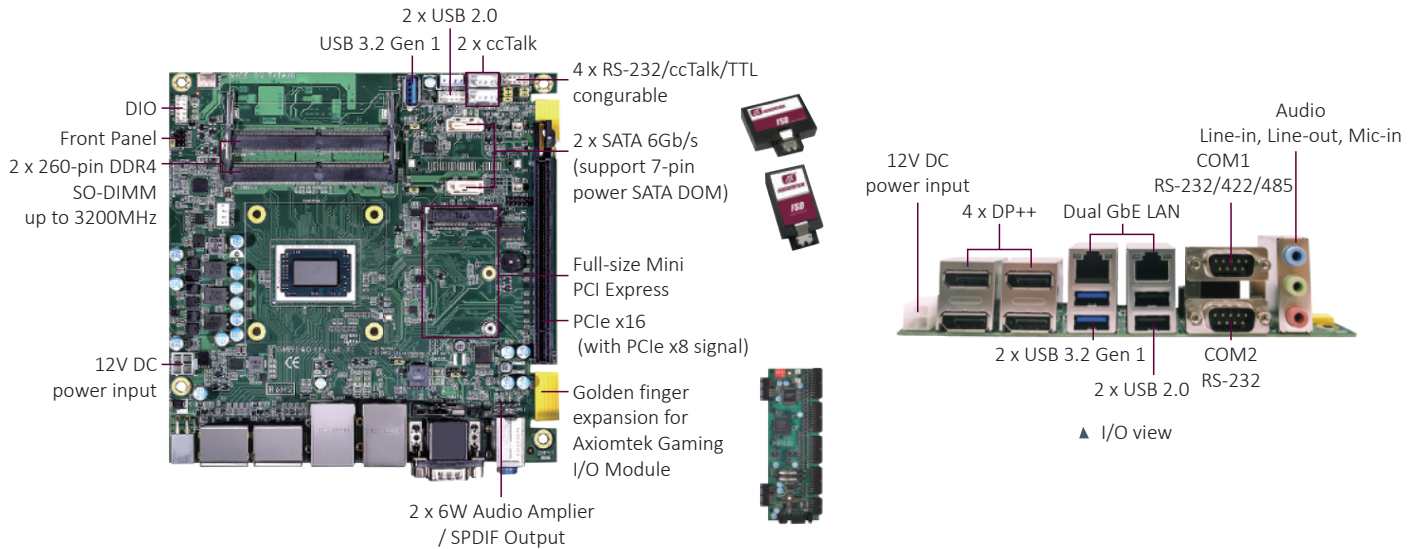


GMB142

AMD Ryzen™ Embedded R2000 SoC Mini-ITX Board



Features

- High performance AMD platform
- GLI verified TrustedBoot
- PCIe golden finger expansion for Gaming I/O Module
- Optional support 9-bit serial port for SAS 6.02
- Lifetime long-term supply

Specifications

CPU	AMD Ryzen™ Embedded R2000 series SoC "Zen+" AP AMD Ryzen™ Embedded R2544, Quad Core, 8 CU, 3.35GHz (3.7GHz), 35-54W AMD Ryzen™ Embedded R2514, Quad Core, 8 CU, 2.1GHz (3.7GHz), 12-35W AMD Ryzen™ Embedded R2314, Quad Core, 6 CU, 2.1GHz (3.5GHz), 12-35W AMD Ryzen™ Embedded R2312, Dual Core, 3 CU, 2.7GHz (3.5GHz), 12-25W
System Memory	2 x DDR4 SO-DIMM up to 3200 MHz, max. up to 32 GB
BIOS	AMI-uEFI TrustedBoot (Bios secure boot) secure hash and public key algorithm
Watchdog Timer	1 sec. to 255 min.
Expansion Interface	1 x PCIe x16 (PCIe x8 signal) 1 x full-size Mini PCI Express (PCIe x1 & USB 2.0 signal) 2 x PCIe golden finger expansion for Axiomtek Gaming I/O Module
Power Input	DC +12V
Dimensions	170 x 170 mm
Operating Temperature	0°C to +60°C (+32°F to +140°F)
Relative Humidity	10 % to 90 %, non-condensing
Security	- TPM 2.0 engine - RSA2048 and AES256 hybrid encryption



Specifications

Display

Graphics	AMD high performance Radeon™ VEGA graphics
Display Interface	4 x DP++ (up to 3840 x 2160 @ 60Hz) R2312 supports triple displays

I/O

USB	External	2 x USB 3.2 Gen 1 x1 (5Gb/s) 2 x USB 2.0
	Internal	1 x USB 3.2 Gen 1 x1 (5Gb/s) 2 x USB 2.0 box header
Serial Interface	External	2 x Full RS-232 DB9 (COM1 supports RS-232/422/485)
	Internal	4 x Simple RS-232 box header (Two support ccTalk/ Two support TTL)
Audio	External	HD audio Line-in/Line-out/Mic-in phone jack (7.1 Ch.)
	Internal	Stereo 6W + 6W audio amplifier outputs pin header SPDIF output pin header
Ethernet	2 x GbE LAN port	
GPIO	8-bit GPIO	

Software

OS Support	Windows® 11 GAC & Windows® 10 IoT Enterprise, 64-b Linux Kernel
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Ordering Information

GMB142-R2544 (P/N: E38V142100)	Mini-ITX board supports AMD Ryzen™ Embedded R2544 with VEGA graphics, 4 x DP++, 6 x COM, 7 x USB, 2 x GbE, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB142-R2514 (P/N: E38V142101)	Mini-ITX board supports AMD Ryzen™ Embedded R2514 with VEGA graphics, 4 x DP++, 6 x COM, 7 x USB, 2 x GbE, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB142-R2314 (P/N: E38V142102)	Mini-ITX board supports AMD Ryzen™ Embedded R2314 with VEGA graphics, 4 x DP++, 6 x COM, 7 x USB, 2 x GbE, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB142-R2312 (P/N: E38V142103)	Mini-ITX board supports AMD Ryzen™ Embedded R2312 with VEGA graphics, 3 x DP++, 6 x COM, 7 x USB, 2 x GbE, audio, PCIe x4 and Mini PCI Express, DC 12V input