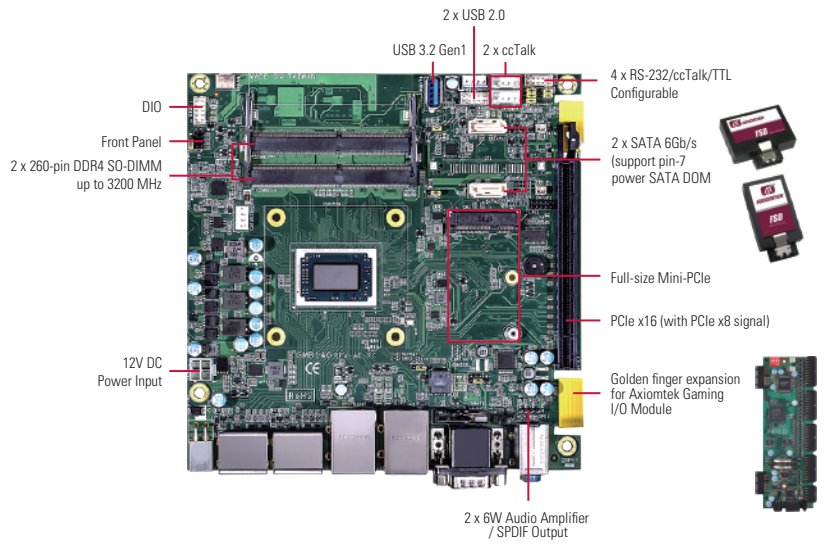
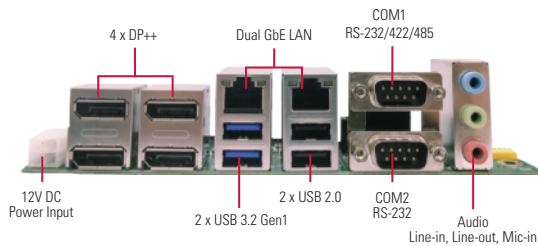


GMB142

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



System

CPU	AMD Ryzen™ Embedded R2000 Series SoC “Zen+” APU 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
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	1 x PCIe x16 (PCIe x8 signal) 1 x Full-size Mini-PCle (PCIe x1 & USB 2.0 signal) 2 x PCIe golden finger expansion for Axiomtek Gaming I/O Module
Power Input	DC +12 V
Dimensions	170 mm x 170 mm
Operating Temperature	0 °C to 60 °C (32 °F to 140 °F)
Humidity	10 % to 90 %, non-condensing
Security	- TPM 2.0 engine - RSA2048 and AES256 hybrid encryption

I/O

USB	External: 2 x USB 3.2 Gen1x1 (5Gb/s) 2 x USB 2.0 Internal: 1 x USB 3.2 Gen1x1 (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
Storage	2 x SATA 6Gb/s (support pin-7 power SATA DOM)
Ethernet	2 x GbE LAN port
GPIO	8-bit GPIO

Display

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

Software

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

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

* All specifications and photos are subject to change without notice.

For more information please contact: gaming@axiomtek.com.tw No. 1140-0001701