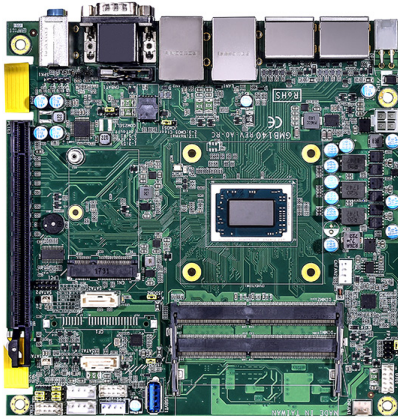
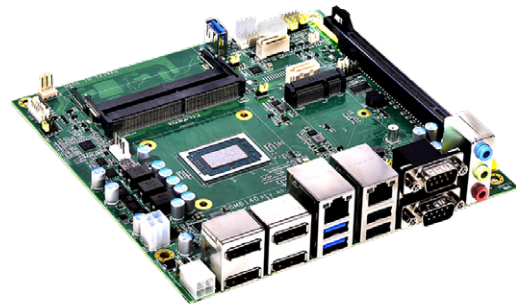


GMB140

AMD Ryzen™ Embedded V1000 / R1000 SoC Mini-ITX Board



▲ I/O view



▲ Side view

Features

- High performance AMD platform
- GLI verified TrustedBoot
- Extension PCIe I/F for gaming I/O module
- Optional support 9-bit serial port for SAS 6.02
- Lifetime long-term supply

Specifications

APU	AMD Ryzen™ Embedded V1000/R1000 SoC "Zen" CPU
System Memory	2 x DDR4 SO-DIMM up to 3200 MHz, max. up to 64 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 (supports PCIe x8 signal only) 1 x Mini PCI Express
Power Input	DC +12V
Dimensions	170 x 170 mm
Operation 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	V1000 series : 4 x DP++ R1000 series : 3 x DP++
I/O	
USB	7 x USB
Serial Interface	2 x RS-232 DB9 (1 x RS-422/485) 4 x RS-232 (1 x ID003, 2 x ccTalk)
Audio	HD audio 5.1 channels Line-out and stereo 6 W+6 W audio amplified output S/PDIF
Ethernet	2 x GbE LAN
GPIO	8-bit GPIO
Software	
OS Support	Windows® 10 IoT Enterprise, Linux

Ordering Information

GMB140-V1807-H (E38V140114)	AMD Ryzen™ Embedded V1807 with VEGA 11 graphics, 4 x DP++, 6 x COM, 7 x USB, 2 x GLAN, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB140-V1605-H (E38V140116)	AMD Ryzen™ Embedded V1605 with VEGA 8 graphics, 4 x DP++, 6 x COM, 7 x USB, 2 x GLAN, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB140-R1606-H (E38V140120)	AMD Ryzen™ Embedded R1606 with VEGA 3 graphics, 3 x DP++, 6 x COM, 7 x USB, 2 x GLAN, audio, PCIe x8 and Mini PCI Express, DC 12V input
GMB140-R1505-H (E38V140121)	AMD Ryzen™ Embedded R1505 with VEGA 3 graphics, 3 x DP++, 6 x COM, 7 x USB, 2 x GLAN, audio, PCIe x8 and Mini PCI Express, DC 12V input

Optional Accessories

59403208000E	SATA cable 180D to 180D with lock L: 20cm-UL
590000001800	SATA+power cable 7+15P F 180° female 180° and housing pitch 2.54mm 1 x 4P, L=45cm
594Q6002110E	COM Port cable DB9 Male x4 L=30CM
594Q3002800E	USB 2.0 cable HS2 x 5P P2.0/USB x 2 stack AF 20cm