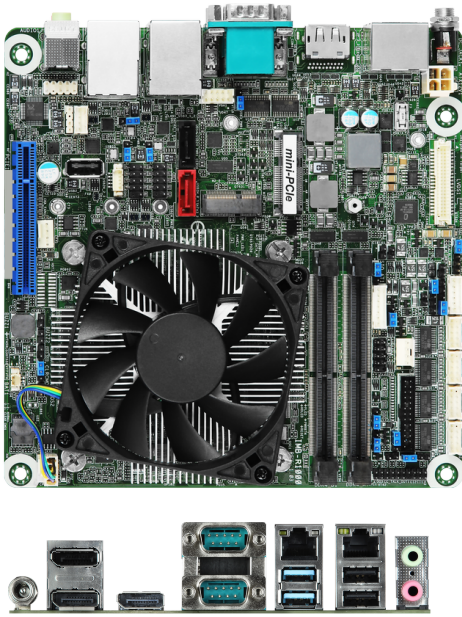




IMB-R1000

Mini-ITX Motherboard

Key Features

- AMD Ryzen™ Embedded R-Series
- Supports Dual Channel DDR4 SO-DIMM 2400MHz, up to 32GB
- 3 x DisplayPort, 1 x eDP, 1 x Dual Channel 24-bit LVDS, 1 x VGA
- 2 x USB 3.1, 7 x USB 2.0, 2 x SATA3, 6 x COM
- 1 x PCIe x4, 1 x mini-PCIe, 1 x M.2 Key E, 1 x M.2 Key M
- 2 x Realtek LAN
- 1 x TPM 2.0 IC onboard, 1 x TPM Header
- 12V/19~28V DC-in (DC Jack & 4-pin ATX PWR Con.)

Specifications

Processor System

Dimensions	Mini-ITX (6.7-in x 6.7-in)
	AMD Ryzen™ Embedded R-Series -IMB-R1000M(R1606G, DC, 2.6GHz, 12-25W) -IMB-R1000V(R1505G, DC, 2.4GHz, 12-25W)
Chipset	SoC

Expansion Slot

PCIe	1 x PCIe x4
Mini-PCIe	1 x Full/Half mini-PCIe with PCIe x1 and USB 2.0
M.2	1 x M.2 (Key E, 2230) with PCIe x1 and USB2.0 for Wireless 1 x M.2 (Key M, 2242/2260/2280) with PCIe x2 and SATA for SSD

Memory

Technology	Dual Channel DDR4 2400MHz
Max	32GB
Socket	2 x SO-DIMM

Graphics

VGA	Supports max resolution up to 1920 x 1200
DVI	N/A
LVDS	Dual Channel 24-bit, max resolution up to 1920 x 1200@60Hz
eDP	Max resolution up to 3840 x 2160@60Hz
HDMI	N/A
DisplayPort	Max resolution up to 3840 x 2160@60Hz
Multi Display	Triple Display

Ethernet

Interface	10/100/1000 Mbps
Controller	2 x Realtek R8111G

Rear I/O

VGA	N/A
DVI	N/A
HDMI	N/A
DisplayPort	3 x DP 1.3 (Support DP++)
Ethernet	2
USB	2 x USB 3.1, 2 x USB 2.0
Serial	2 x COM (RS-232/422/485)
Audio Jack	2 (Mic-in, Line-out)

Internal Connector

USB	4 x USB 2.0, 1 x USB 2.0(Type A)
LVDS	1 (Shared with DP)
eDP	1 (Shared with DP)
VGA	1
Serial	4 x COM (RS-232, COM6 shared with ccTalk)
SATA	2 x SATA3 (6.0Gb/s) Red header shared with M.2 Key M SATA signal
GPIO	8 x GPI, 8 x GPO (Shared with LPT)
SATA PWR Output Con	1
Speaker Header	1
LPT Header	1
ccTalk	1
TPM	1 x Onboard TPM 2.0IC, 1 x Header

Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...255sec

Power Requirements

Input PWR	12V/19V~28V DC-in (DC Jack/ 4-pin ATX PWR Con.)
Power On	AT/ATX Supported AT: Directly PWR on as power input ready ATX: Press button to PWR on after power input ready

Environment

Operating Temperature	0°C – 60°C
Storage Temperature	-40°C – 85° C