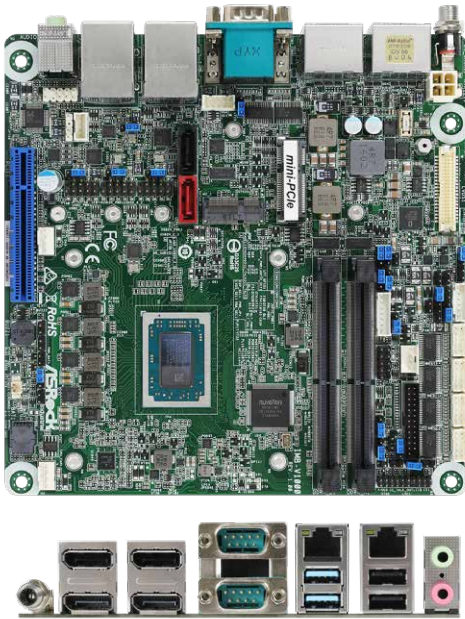


Preliminary

# IMB-V1000

## Mini-ITX Motherboard



### Spotlight Features

- AMD Ryzen CPU
- Supports Dual Channel DDR4 SO DIMM, up to 32GB
- 4 x Displayport, 1 x eDP, 1 x Dual Channel 24-bit LVDS, 1 x VGA
- 2 x USB3.1 (Gen2), 8 x USB2.0, 2 x SATA3, 6 x COM
- 1 x PCIe x8, 1 x mini-PCIe, 1 x M.2 Key E, 1 x M.2 Key M
- 2 x Realtek LAN
- 1 x TPM Header, 1 x TPM 2.0 IC onboard
- 12V/19~28V (DC-IN & 4-pin ATX PWR Con)

### Specifications

#### Processor System

Dimensions	Mini-ITX (6.7-in x 6.7-in)
CPU	AMD Ryzen FP5 BGA package, 14nm process, with CPU option 12W~54W (V1807B · V1756B · V1605B)
Chipset	SoC

#### Expansion Slot

PCIe	1 x PCIe x8
Mini-PCIe	1 x Full/Half mini-PCIe with PCIe x1 and USB 2.0
M.2	1x M.2 (Key E, 2230) with PCIe x1 and USB2.0 for Wireless 1x M.2 (Key M, 2242/2260/2280) with PCIe x2 and SATA for SSD

#### Memory

Technology	Dual Channel DDR4 3200 MT/s
Max	32GB
Socket	2 x SO-DIMM

#### Graphics

VGA	Supports max resolution up to 1920x1200
DVI	N/A
LVDS	Dual Channel 24-bit, max resolution up to 1920x1200@60Hz
eDP	Max resolution up to 3840x2160@60Hz
HDMI	N/A
DisplayPort	Max resolution up to 3840x2160@60Hz
Multi Display	Quad Display

#### Ethernet

Interface	10/100/1000 Mbps
Controller	1 x Realtek 8111EPV, 1 x Realtek 8111H

#### Rear I/O

VGA	N/A
DVI	N/A
HDMI	N/A
DisplayPort	4 x DP 1.3 (Support DP++)
Ethernet	2
USB	2 x USB3.1 (Gen 2), 2 x USB2.0
Serial	2 x COM (RS-232/422/485)
Audio Jack	2 (Mic-in, Line-out)

#### Internal Connector

USB	6 x USB2.0
LVDS	1 (Shared with DP)
eDP	1 (Shared with DP)
VGA	1 (Shared with DP)
Serial	4 x COM (RS-232, COM6 shared with ccTalk)
SATA	2 x SATA3 (6.0Gb/s)
GPIO	8 x GPI, 8 x GPO (Shared with LPT)
SATA PWR Output Con	1
Speaker Header	1
LPT Header	1
ccTalk	1

#### Watchdog Timer

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

#### 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
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