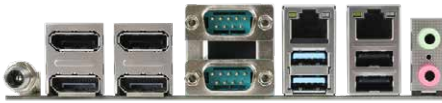


# IMB-V1000

Mini-ITX Motherboard



## Key Features

- AMD Ryzen™ Embedded V-Series
- Supports Dual Channel DDR4 SO-DIMM 2400MHz, up to 32GB
- 4 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 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 (DC Jack & 4-pin ATX PWR Con.)

## Specifications

### Processor System

|            |  |
|------------|--|
| Dimensions | Mini-ITX (6.7-in x 6.7-in)   |
| CPU        | AMD Ryzen™ Embedded V-Series<br>-IMB-V1000P(V1807B, QC, 3.35GHz, 35-54W)<br>-IMB-V1000M(V1605B, QC, 2GHz, 12-25W)<br>-IMB-V1000V(V1202B, DC, 2.3GHz, 12-25W) |
| 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       | 1 x M.2 (Key E, 2230) with PCIe x1 and USB2.0 for Wireless<br>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 | Quad 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 | 4 x DP 1.3 (Support DP++) |
| Ethernet    | 2                         |
| USB         | 2 x USB3.1, 2 x USB2.0    |
| Serial      | 2 x COM (RS-232/422/485)  |
| Audio Jack  | 2 (Mic-in, Line-out)      |

### Internal Connector

|                     |   |
|---------------------|---|
| USB                 | 4 x USB2.0, 1 x USB 2.0(Type A)                                   |
| 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) 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   |

### 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<br>AT: Directly PWR on as power input ready<br>ATX: Press button to PWR on after power input ready |

### Environment

|                       |            |
|-----------------------|------------|
| Operating Temperature | 0°C – 60°C |
|-----------------------|------------|