

# IMB-V2000

Mini-ITX Motherboard



## KEY FEATURES

- AMD Ryzen™ Embedded V2000 SoC processors
- 2 x 260-pin ECC/non-ECC SO-DIMM DDR4 3200 MHz, up to 64GB (32GB per DIMM)
- 4 x USB 3.2 Gen1, 4 x USB 2.0, 1 x M.2 Key E, 1 x M.2 Key M, 1 x M.2 Key B, 1 x PCIe x8, 5 x COM, 2 x SATA3
- 1 x Realtek 1 Gigabit LAN (Support DASH), 1 x Realtek 2.5 Gigabit LAN
- Support Quad display, 1 x LVDS, 1 x eDP, 3 x DP1.2, 1 x DP1.4
- TPM 2.0 onboard IC
- Support DASH, Teaming function
- 12~28V DC-In (Lockable DC Jack)

## SPECIFICATIONS

### Form Factor

Dimensions(LxWxH)	Mini-ITX (6.7-in x 6.7-in x 1.5-in)
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### Processor System

CPU	AMD Ryzen™ Embedded V2000 SoC processors, up to 54W IMB-V2000P(V2748, 2.9GHz, 35-54W) IMB-V2000S(V2546, 3.0GHz, 35-54W) IMB-V2000M(V2718, 1.7GHz, 10-25W) IMB-V2000V(V2516, 2.1GHz, 10-25W)
Chipset	SoC
BIOS	AMI SPI 256 Mbit

### Memory

Technology	Dual Channel ECC/non-ECC DDR4 3200 MHz
Capacity	64GB (32GB per DIMM)
Socket	2 x 260-pin SO-DIMM

### Graphics

Controller	AMD Radeon™ Graphics
DisplayPort	3 x DP1.2a, Max resolution up to 3840x2160 @60Hz 1 x DP1.4, Max resolution up to 5120x2880 @120Hz
LVDS	LVDS shared with DP_1 Dual channel 24 bit up to 1920 x 1200@60Hz
eDP	eDP shared with DP_0 Max resolution up to 3840x2160 @60Hz
MultiDisplay	Quad display

### Expansion Slot

PCIe	1 x PCIe x8
M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 for Wireless 1 x M.2 (Key B, 3042/3052) with PCIe x2/USB 3.2 and SIM for 4G/5G
SIM Socket	1x SIM socket connected to M.2 key B

### Audio

Interface	Realtek ALC897 HD, High Definition Audio. Mic-In / Line-Out
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### Ethernet

Controller/ Speed	LAN1: Realtek RTL8125BG with 10/100/1000/2500 Mbps LAN2: Realtek R8111EPV with 10/100/1000 Mbps Support DASH, Teaming function
Connector	2 x RJ-45

### Rear I/O

DisplayPort	3 x DP1.2a, 1 x DP1.4
COM	1 x COM (RS-232) 1 x COM (RS-232/422/485)
Ethernet	1 x 1 Gigabit LAN, 1 x 2.5 Gigabit LAN
USB	2 x USB 3.2 (Gen1), 2 x USB2.0
Audio	2 (Mic-in, Line-out)
DC Jack	1 (Screw Type)

### Internal Connector

USB	2 x USB 3.2 Gen1 (1 x USB 3.2 Gen1 header) 2 x USB 2.0 (1 x 2.54 pitch header)
COM	3 x COM (RS-232)
GPIO	8 x GPI, 8 x GPO
TPM	TPM 2.0 onboard IC
LVDS	1
eDP	1
SATA PWR Output	1
Speaker Header	1

### Storage

M.2	1 x M.2 (Key M, 2242/2260/2280) with SATA3 and PCIe x4 for SSD
mSATA	N/A
SATA	2 x SATA3 (6Gb/s)
eMMC	N/A

### Watchdog Timer

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

### Power Requirements

Input PWR	12~28V DC-In with 4-pin wafer PWR cable or DC Jack (Screw Type)
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 Temp	-20°C ~ 70°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

## Assured Systems

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