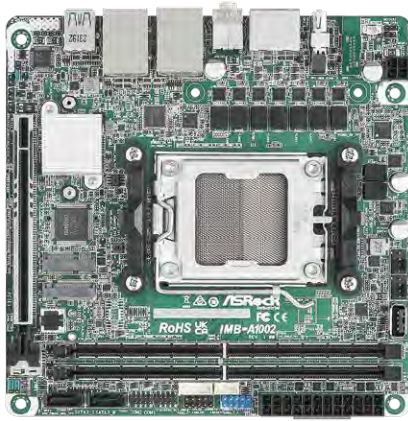


# IMB-A1002

## Mini-ITX Motherboard



### KEY FEATURES

- AMD Ryzen™ Embedded 7000 Series processors with B650 Chipset
- 2 x 288-pin Long-DIMM DDR5 5200 MHz, up to 64GB (32GB per DIMM)
- 1 x PCIe x16 (Gen5), 6 x USB 3.2 Gen2, 3 x USB2.0, 1 x M.2 Key B, 1 x M.2 Key M, 1 x M.2 Key E, 2 x COM, 2 x SATA3
- 2 x Realtek Gigabit LAN
- Supports Quad display, 3 x DP 1.2, 1 x eDP 1.4b
- TPM 2.0 onboard IC
- ATX PWR (24+4-pin)

### SPECIFICATIONS

#### Form Factor

Dimensions (LxWxH)	Mini-ITX (6.7-in x 6.7-in x 1.5-in, 17.0 cm x 17.0 cm x 3.7 cm)
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#### Processor System

CPU	AMD Ryzen™ Embedded 7000 Series processors, up to 65W Ryzen™ 9 PRO 7945 (12cores, 3.7GHz, 65W) Ryzen™ 7 PRO 7745 (8cores, 3.8GHz, 65W) Ryzen™ 5 PRO 7645 (6cores, 3.8GHz, 65W)
Chipset	AMD B650
Socket	AM5
BIOS	AMI SPI 256 Mbit

#### Memory

Technology	Dual Channel DDR5 5200 MHz
Capacity	64GB (32GB per DIMM)
Socket	2 x 288-pin Long-DIMM

#### Graphics

Controller	AMD RDNA™ 2 Architecture
DisplayPort	DisplayPort 1.2, DP++ Max resolution up to 4096x2160@60Hz
eDP	eDP 1.4b Max resolution up to 4096x 2160@60Hz
MultiDisplay	Quad Display

#### Expansion Slot

PCIe	1 x PCIe x16 (Gen5)
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 x1, USB 3.0, USB 2.0 and SIM Socket for 4G/5G
SIM Socket	1 x Socket connected to M.2 Key B

#### Audio

Interface	Realtek ALC662/ALC897, High Definition Audio. Mic-in, Line-out
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#### Ethernet

Controller/ Speed	LAN1: Realtek RTL8111H with 10/100/1000 Mbps LAN2: Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

#### Rear I/O

DisplayPort	3 x DP 1.2
Ethernet	2 x 1 Gigabit LAN
USB	6 x USB 3.2 Gen2
Audio	2 (Mic-in, Line-out)

#### Internal Connector

USB	3 x USB 2.0 (1 x 2.54 pitch header, 1 x USB 2.0 Type-A vertical con)
COM	COM1, COM2 (RS-232/422/485)
eDP	1

#### Storage

M.2	1 x M.2 (Key M, 2242/2280) with PCIe Gen4 x4 or SATA3 and USB2.0
SATA	2 x SATA3 (6Gb/s)

#### Security

TPM	TPM 2.0 onboard IC
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#### Watchdog Timer

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

#### Power Requirements

Input PWR	ATX PWR (24+4-pin)
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%