



KEY FEATURES

- AMD EPYC™ 4005/4004 and AMD Ryzen™ 9000/8000/7000 Series Processors with B650 Chipset
- 2 x 262-pin ECC/non-ECC SO-DIMM DDR5 5200 MHz, up to 96GB (48GB per DIMM)
- 1 x PCIe x16 (Gen5), 4 x USB 3.2 Gen2, 2 x USB 3.2 Gen1, 4 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 2 x COM, 2 x SATA3
- 2 x Realtek Gigabite LAN
- Supports Quad display, 4 x DP 1.2++
- TPM 2.0 onboard IC

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 EPYC™ 4005/4004 and AMD Ryzen™ 9000/8000/7000 Series Desktop Processors, up to 65W
Chipset	AMD Promontory B650
Socket	AM5
BIOS	AMI SPI 256 Mbit

Memory

Technology	Dual Channel ECC/non-ECC DDR5 5600 MHz *ECC support may vary by CPU.
Capacity	96GB (48GB per DIMM)
Socket	2 x 262-pin SO-DIMM

Graphics

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

Expansion Slot

PCIe	1 x PCIe x16 (Gen5) *The availability of expansion slots may vary by CPU. Please refer to PCIe Bandwidth Table for details
M.2	1 x M.2 (Key E, 2230) with PCIe Gen4 x1, USB 2.0 for Wireless

Audio

Interface	Realtek 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	4 x DP 1.2++
Ethernet	2 x 1 Gigabit LAN
USB	4 x USB 3.2 Gen 2 2 x USB 2.0
Audio	2 (Mic-in, Line-out)

Internal Connector

USB	2 x USB 3.2 Gen1 2 x USB 2.0 (1 x 2.54 pitch header)
COM	COM1, COM2 (RS-232/422/485/TTL 5V/ccTalk, switch by Jumper setting)

Storage

M.2	1 x M.2 Key M (2242/2280) with PCIe Gen4 x4, and USB 2.0
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	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 ~ 60°C
Storage Temp	-40° C – 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

BLOCK DIAGRAM

IMB-A1003

