



## ROMED8-2T/BCM

- ATX (12" x 9.6")
- Single Socket SP3 (LGA 4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology\*)/7002 series processors
- 8 DIMM slots (1DPC), supports DDR4 RDIMM, LRDIMM, RDIMM/LRDIMM-3DS, NVDIMM-N
- 7 PCIe4.0 x16
- 2 OcuLink (PCIe4.0 x4)
- Supports 2 M.2 (PCIe4.0 x4 or SATA 6Gb/s)
- 10 SATA 6Gb/s
- 2 RJ45 (10GbE) by Broadcom BCM57416
- Remote Management (IPMI)



## Specifications

Physical Status	
Form Factor	ATX
Dimensions	12" x 9.6" (305 mm x 244 mm)
Processor System	
CPU	Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology*)/7002 Series Processors  *A BIOS update is required to support AMD EPYC™ 7003 series processors with AMD 3D V-Cache™ Technology
Socket	Single Socket SP3 (LGA4094)
Chipset	System on Chip
System Memory	
Supported DIMM Quantity	8 DIMM slots (1DPC)
Supported Type	Supports DDR4 288-pin RDIMM, LRDIMM, RDIMM/LRDIMM-3DS, NVDIMM-N
Max. Capacity per DIMM	RDIMM: up to 64GB LRDIMM: up to 128GB RDIMM/LRDIMM-3DS: up to 256GB NVDIMM-N: up to 32GB
Max. DIMM Frequency	RDIMM/ LRDIMM/NVDIMM-N: max. 3200MHz
Voltage	1.2V
PCIe Expansion Slots (SLOT7 close to CPU)	
PCIe x 16	SLOT7: PCIe4.0 x16 SLOT6: PCIe4.0 x16 SLOT5: PCIe4.0 x16 SLOT4: PCIe4.0 x16 SLOT3: PCIe4.0 x16 SLOT2: PCIe4.0 x16 or PCIe4.0 x8 + 1 M.2+1 miniSASHD or no PCIe SLOT +2 OcuLink+1 M.2+1 miniSAS HD (by jumper) SLOT1: PCIe4.0 x16
Other PCIe Expansion Connectors	
M.2 slot	1 M-key* (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor 1 M-key* (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor *Share with SLOT2 by jumper
OcuLink	2 OcuLink* (PCIe4.0 x4) *Shared with SLOT2 by jumper
SATA/SAS Storage	

PCH Built-in Storage	AMD EPYC 7003/7002 (10 SATA 6Gb/s): 2 Mini-SAS HD, 2 M.2
<b>Ethernet</b>	
Additional GbE Controller	1 Broadcom BCM57416: 2 RJ45 (10GbE)
<b>Server Management</b>	
BMC Controller	ASPEED AST2500
IPMI Dedicated GLAN	1 x Realtek RTL8211E for dedicated management GLAN
<b>Graphics</b>	
Controller	ASPEED AST2500
VRAM	DDR4 512MB
<b>Rear I/O</b>	
UID Button/LED	1
VGA Port	1 DB15
Serial Port	1 DB9
USB 3.2 Gen1 Port	2 Type-A (USB3.2 Gen1)
RJ45	2 RJ45 (10GbE) 1 dedicated IPMI
<b>Internal Connector/Headers</b>	
Power Connector	1 (24-pin, ATX main power), 1 (8-pin, ATX 12V), 1 (4-pin, ATX 12V)
Auxiliary Panel Header	1 (includes chassis intrusion, location button & LED, and front LAN LED)
System Panel	1 (rst, pwrbtn, hddled, pwrlcd)
Speaker Header	1 (4-pin)
Fan Header	7 (6-pin) [1CPU/4Front/2Rear]
Thermal Sensor Header	2
TPM Header	1 (17-pin, LPC), 1 (13-pin, SPI)
SMBus header	1
PMBus header	1
IPMB Header	1
Clear CMOS	1 (contact pads)
USB 3.2 (Gen1) Header	1 (19-pin, 2 USB3.2 Gen1)
NMI Header	1
<b>LED Indicators</b>	
Standby PWR LED 5vsb	1 (5VSB)
80 Debug Port LED	1
Fan Fail LED	7
BMC heartbeat LED	1
<b>System BIOS</b>	
BIOS Type	32MB AMI UEFI Legal BIOS
BIOS Features	Plug and Play (PnP), ACPI 6.3 Compliance Wake Up Events, SMBIOS 3.3.0, ASRock Rack Instant Flash
<b>Hardware Monitor</b>	
Temperature	CPU, MB, Card side, TR1, TR2 Temperature sensing
Fan	Fan Tachometer CPU Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) Fan Multi-Speed Control
Voltage	Vsoc, Vcpu, VCCM, VPPM, 3V/5V/12V, +BAT, 3VSB, 5VSB
<b>Supported OS</b>	
OS	Microsoft® Windows: - Server 2016 (64bit) - Server 2019 (64bit) - Server 2022 (64 bit)  Linux: - RedHat Enterprise Linux Server Server 8.2 (64bit) / 7.9 (64bit) - CentOS 8.5 ( 64 bit) / 8.2 ( 64 bit) / 7.9 ( 64 bit) - SUSE SLES 15.4(64 bit) / 15.2(64 bit) / 12.5(64bit)

- Ubuntu 22.04 (64 bit) / 20.04.4 (64 bit) / 18.04.5 (64 bit) / 16.04.7 (64 bit)

Hypervisor::

- VMWare® ESXi/ 7.0 U3d / 7.0 U1 / 6.7 U3

## Environment

Temperature

Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C

Humidity

Non operation humidity: 20% ~ 90% ( Non condensing)

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