

ASRock 2U4N-F/ROME-M3, Rack 2U, 4xUP node, AMD EPYC 7002, 4xSFF/node, OCP mezz., Red. PSU, IPMI

Part number: 2U4N-F/ROME-M3



Chassis Form Factor	Rack 2U
# of systems (nodes)	4
CPU Socket	LGA 4094 (Socket SP3)
# of CPU sockets (per node)	1
Supported CPU's	AMD EPYC 7002 AMD EPYC 7003
Max CPU TDP	225 W
Chipset	System on Chip
Memory Type	DDR4 ECC RDIMM DDR4 ECC LRDIMM
Memory Speed	3200 MHz 2933 MHz
# of DIMM's (per node)	8
# of 2.5 Hybrid NVMe bays (per node)	2
# of 2.5 hot-swap bays (per node)	2
# of PCIe x16 4.0 (per node)	2
I/O expansion modules (per node)	1 x OCP 3.0 PCI-E 4.0 x16
Integrated BMC	IPMI Dedicated RJ45
BMC chip	Aspeed AST2500
Power Supply	Redundant
PSU Wattage	1600 W
PSU Certification	80+ Platinum
Chassis Dimensions	820 x 442.2 x 86.6 mm
Warranty	1 year standard 3 years on request

2U4N-F/ROME-M3

- 2U chassis with 4 node support 16x 2.5" HDD, 1600W Redundant (1+1) PSU
- Single AMD EPYC™ 7002 Processor family
- 8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
- Supports 4 x 2.5" HDD/SSD per node (all SATA or 2 x NVME* + 2 x SATA)
- Supports 2x PCIe4.0 x 16, 2x M.2 slots per node
- Integrated IPMI 2.0 and KVM with Dedicated LAN
- Supports OCP 3.0 PCIe4.0 x 16 mezzanine card

Specifications

System	
Form Factor	- 2U Rackmount
Chassis Model	- 2U4N-F
Dimensions	- 820mm X 442.2mm X 86.6mm
Support MB	- 17"X6.5"(431.8mm X 165.1mm)
Front Panel	
Buttons	- Power On/Standby button(per node) in the front - System reset button(per node) in the front - UID button(per node) in the rear
LEDs	- HDD Act/Err/Locate LED - Power LED (Front Panel per Node) - UID LED (Front Panel per Node)
I/O Ports	- 1 x USB 2.0 ports(per node)
Rear IO	
USB 3.0	- 2
VGA	- 1 x mini Display port (need to bundle ASRockRack special cable for VGA)
Lan Port	- 1 (IPMI) Lan port (RJ45) - LAN Ports with LED (ACT/LINK LED and SPEED LED)
External Drive Bay / Storage	
Front Side Drive Bay	- 4x 2.5" HDD/SSD per node (all SATA or 2 x NVME + 2 x SATA)
Output Watts	- 2 (1+1) 1600W Redundant
Efficiency	- Platinum
Front	- 40x56mm x16
Physical Status	
Form Factor	- Half width
Dimensions	- 6.5" × 17"
Processor System	
CPU	- AMD EPYC™ 7002 series processor family
Socket	- Single Socket SP3 LGA 4094
Power Design	- 120W~225W
System Memory	
Capacity	- 8 DIMM slots
Type	- 1 DIMM per channel. DDR4 RDIMM, LRDIMM up to 3200MHz
Voltage	- 1.2V
Expansion Slot	
PCIe 4.0 x 16	- 2 slots (Low Profile card)
M.2	- 2 slots (SATA/PCIe 4.0 x4, 2280/22110/30110)
Management	
BMC Controller	- ASPEED AST2500
IPMI Dedicated GLAN	- 1 x Realtek RTL8211E for dedicated management GLAN
Features	- Watch Dog - NMI
Graphics	
Controller	- ASPEED AST2500

Rear Panel I/O	
VGA Port	- 1 (MiniDisplay port, Dsub to miniDisplay cable)
USB 3.2 Gen1 Port	- 2
Lan Port	- 1 (IPMI) Lan port (RJ45) - LAN Ports with LED (ACT/LINK LED and SPEED LED)
UID Button/UID LED	- 1
Internal Connector	
COM Header	- 1
M.2	- 2 ((SATA/PCIe 4.0 (x4)) 2280/22110/30110)
Auxiliary Panel Header	- 1 (CI, FSMB, 2FLANLED, LOCBLED)
TPM Header	- 1
IPMB Header	- 1
Fan Header	- 4x 6 pin system Fan
ATX Power	- 2x 8-pin
USB 3.2 (Gen1) Header	- 1 (support 2 USB 3.0)
Type A USB 2.0 Port	- 1
Hardware Monitor	
Temperature	- CPU Temperature Sensing - System Temperature Sensing - MB/Card Side Temperature Sensing
Fan	- Fan Tachometer - Quiet Fan (Allow CPU Fan Speed Auto-Adjust by CPU Temperature) - Fan Multi-Speed Control
Voltage	- Voltage Monitoring: +12V, +5V, +3.3V, VSOC, VCPU, VPPM_ABCD, VPPM_EFGH, VCCM_ABCD, VCCM_EFGH, +BAT, 3VSB, 5VSB, +1.8V, +1.8VSB, MEZZ_P1_+3V
Watchdog	- Yes
Environment	
Temperature	Operation temperature: 10°C ~ 35°C / Non operation temperature: -40°C ~ 70°C

The specification is subject to change without notice in advance. The brand and product names are trademarks of their respective companies. Any configuration other than original product specification is not guaranteed.

Visit us for more info:

<https://www.superstorage.pl/asrock-2u4n-rome-m3-rack-2u-4xup-node-amd-epyc-7002-4xsff-node-ocp-mezz-red-psu-ipmi-p-4853.html>