4U8G-ROME2/2T

Top view

(3+1) 1600W RPSU

(8) double-width GPGPU cards

- Dual AMD EPYC 7002 processors
- supports up to 8 dual-slot PCIe4.0 x16
- Front side PCIe FHHL slot and OCP NIC 3.0, optional OCP2.0 mezzanine cards supportUp to 12x 3.5" drive bays
- On-board dual 10G Base-T

Front view

Rear view

Product Specifications

System

Form Factor	4U Rackmount
Dimensions	438mm*845mm*176.5mm (w/ fans)
Motherboard	ROME2D32GM-2T

Expansion Slots

Front	1 x FHHL (PCIe x8) via SL2P 1 x SFF OCP NIC3.0 (PCIe x8) via SL2OCP3 Optional OCP 2.0 connector A and B via SL2M
Rear	8x double-width (PCIe4.0 x16) on 4UXG_SWB

Drive Bays/ Storage

Controller	AMD EPYC 7002 series processors
Hot-swap	12x 3.5" Storage Bays supporting : 1. 2 x 3.5" HDD Trays (for 2.5" PCIe x4 NVMe) 2. 2 x 3.5" HDD Trays (for 2.5" PCIe x4 NVMe, shared with Front PCIe x8 slot) 3. 8 x 3.5" HDD Trays (optional SAS/SATA RAID/HBA card)
Internal	1x M.2 (PCIe x4)

Front I/O

Buttons	Power button w/ LED
	Reset button
	NMI button
	UID button
LEDs	System fault LED
	HDD activity LED
I/O ports	2x RJ45 10G Base-T via Intel X550-AT2
	1x RJ45 dedicated IPMI via AST2500+RTL8211E
	1x DB15 via AST2500
	4x USB 3.0

Power Supply

Redundancy	3+1
Output Watts	1600W
Efficiency	80-PLUS Platinum
Input range	100-240V AC/ 47-63 Hz

System Fan

Fan	5x 8080
	5x 8038

Processor System

CPU	Supports AMD EPYC 7002 series processors
Socket	1+1 Socket SP3 (LGA 4094)
TDP	280W
Chipset	System on chip

System Memory

Socket	16+16 DDR4 288-pin DIMM slots (2DPC)
Frequency	R-DIMM: max. 3200(1DPC)/ 2933MHz LR-DIMM: max. 3200(1DPC)/ 2933MHz NV-DIMM: TBD*
Capacity	R-DIMM: max. 64GB* LR-DIMM: max. 256GB* NV-DIMM: TBD*
Voltage	1.2V

Rear I/O

RJ45	2 RJ45 (10GbE) by Intel X550-AT2, shares with front panel 1 dedicated IPMI LAN, shares with front panel
USB	2x Type-A USB3.0
VGA	1x DB15
Others	UID button

Management

Controller	ASPEED AST2500

Graphics

Controller	ASPEED AST2500
VRAM	DDR4 16MB

TPM

Header	1x 17-pin (LPC), 1x 13-pin (SPI)

System BIOS

BIOS Type	256Mb AMI UEFI Legal BIOS

Operating Enviroment

Operating Temperature	
10°C ~ 35°C	
Non-operating temperature.	
-40°C ~ 70°C	

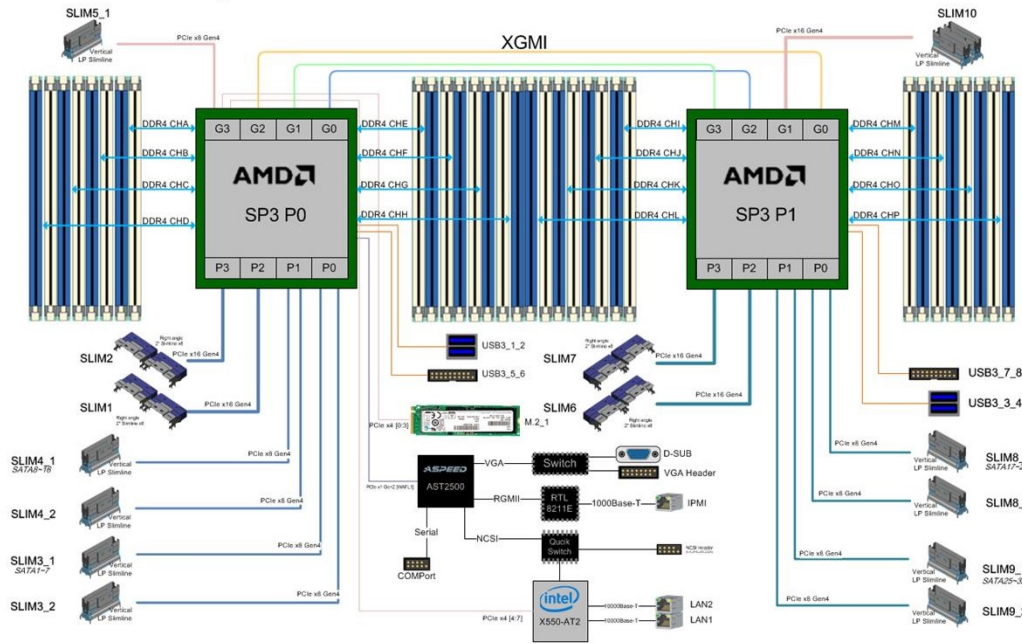* Wait device to validate

SKU Options

PCIe Gen4 x16 Slot	PCIe Gen4 x8 Slot	2.5" NVME	PCIe RAID card for 8 x SAS/SATA	M.2 (NVMe)
1	0	2	0	1
0	2	2	0	1
0	1	4	0	1
0	1	2	8	1
1	0	0	8	1
0	2	0	8	1
0	0	4	8	1

Motherboard Block diagram

System Topology