

AMD EPYC™ 7003/7002 Processors

Breakthrough Performance For the Modern Data Center

General Purpose Storage/ GPU/ Multi-node Barebones
OPEN19 Bricks and Cages
Server Motherboards



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Server Platform Naming Rule

ROME2D16NM3-2T

Character	Representation	Options
1 st ~ 4 th	CPU Type	<ul style="list-style-type: none"> • ROME = AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/ 7002 series processors • MILAN = AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/ 7002 series processors • EPYC = AMD EPYC™ 7002/7001 series processors
5 th	Number of CPU Supported	<ul style="list-style-type: none"> • 2 = Dual • NA = Single
Others	Number of DIMM Supported	<ul style="list-style-type: none"> • D4 = 4 DIMM • D6 = 6 DIMM • D8 = 8 DIMM • D16 = 16 DIMM • D32 = 32 DIMM
	Form Factor	<ul style="list-style-type: none"> • H = Half-width • U = Micro-ATX (9.6"x9.6") • ID = Deep mini-ITX (6.7" x 8.2") • L = L-shape • T = T-shape
	Feature	<ul style="list-style-type: none"> • N = Non-shading side-by-side CPU • G = For GPU server • Q = OCP slot not in standard I/O area, multi-SlimSAS to the front • M = OCP 2.0 slot • M3 = OCP NIC 3.0 slot • 2T = Dual 10GbE RJ45 • 2L = Dual 1GbE RJ45 • NL = No LAN

4U36L2E-ROME2/2T

Character	Representation	Options
1 st + 2 nd	System Height	<ul style="list-style-type: none"> • 1U = 1U chassis • 2U = 2U chassis • 3U = 3U chassis • 4U = 4U chassis • 7U = 7U chassis
Others	Drive Bay	<ul style="list-style-type: none"> • L = 3.5" HDD Bay • S = 2.5" HDD/SSD Bay • E = U.2 Bay
	Feature	<ul style="list-style-type: none"> • G = Dual-slot cards supported • X = NVIDIA HGX platform intergrated • N = Number of nodes • F = Front I/O

1U4L4E-ROME/2T



1U/2U High Density Storage



3200



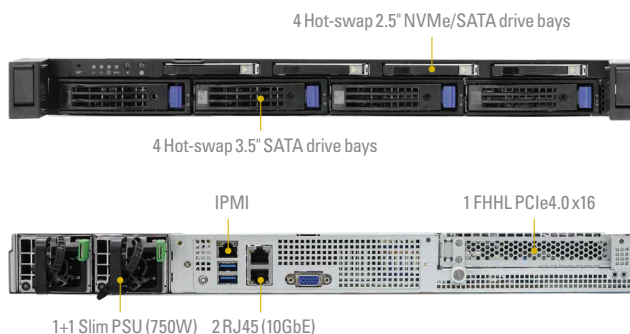
10Gbase-T



Storage

Application

- Hybrid-storage server
- Cloud computing
- Enterprise server



1U4L4E-ROME/2T

CPU	Socket	1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology) /7002 series processors
DIMM	Slot	8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	676.5 x 438 x 43.4 mm (26.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, ID button w/ LED, System reset
	LEDs	HDD Activity, LAN 1/2, System Event
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID button w/ LED
Expansion Slots	Rear	1 FHHL PCIe4.0 x16 via RB1UX16_G4
Drive Bay/ Storage	External	4 Hot-swap 2.5" NVMe (PCIe3.0 x4)/SATA drive bays 4 Hot-swap 3.5" SATA drive bays
	Internal	1 M-key (PCIe4.0 x4 or SATA 6Gb/s); support 2280 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 750W Slim PSU
System Cooling	Fan	6 40x56 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

1U4LW-ROME/2T



1U/2U High Density Storage



3200

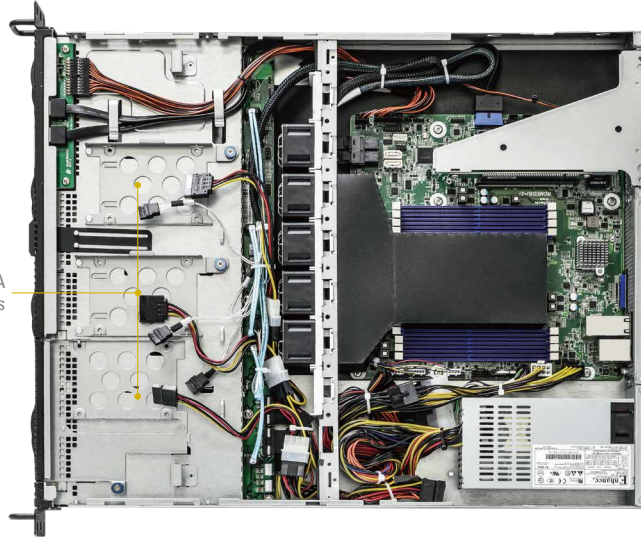


10Gbase-T



Storage

3 fixed 2.5" SATA drive bays



Application

- Enterprise server
- General purpose server



4 Hot-swap 3.5" SATA drive bays



1 Flex ATX PSU (600W) 2 RJ45 (10GbE)

1 FHHL PCIe4.0 x16

1U4LW-ROME/2T

CPU	Socket	1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology) / 7002 series processors
DIMM	Slot	8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	533.4 x 482.6 x 44.4 mm (21" x 19" x 1.75")
Front Panel	Buttons	Power Switch, ID Switch, System reset
	LEDs	Power, UID, HDD Activity, LAN 1/2, System Event
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA)
Expansion Slots	Rear	1 FHHL PCIe4.0 x16
Drive Bay/ Storage	External	4 Hot-swap 3.5" SATA drive bays
	Internal	3 fixed 2.5" SATA drive bays
		1 M-key (PCIe4.0 x4 or SATA 6Gb/s); support 2280 form factor
Power Supply	Module	1, 600W Flex ATX PSU
System Cooling	Fan	5 PWM 40x28 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

1U10E-ROME/2T



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1U/2U High Density Storage

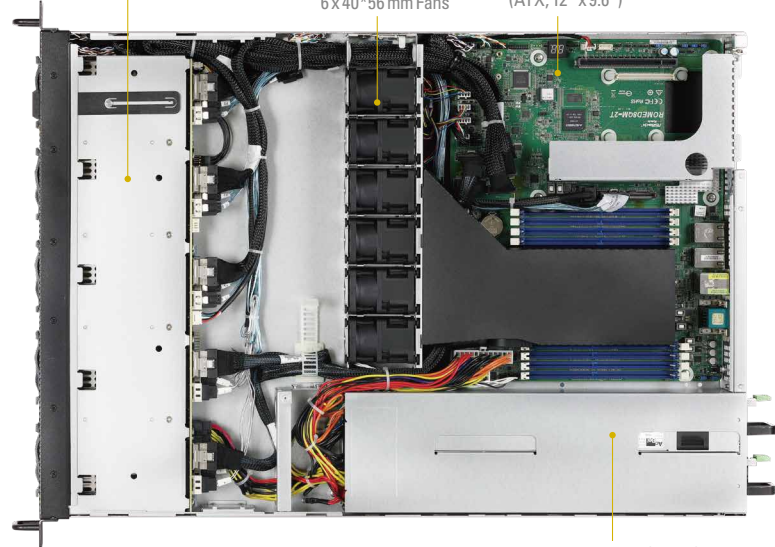


10Gbase-T

10 Bay 2.5" NVMe/SATA HDD (6Gb/s)

6 x 40*56 mm Fans

MB: ROMED8QM-2T (ATX, 12" x 9.6")

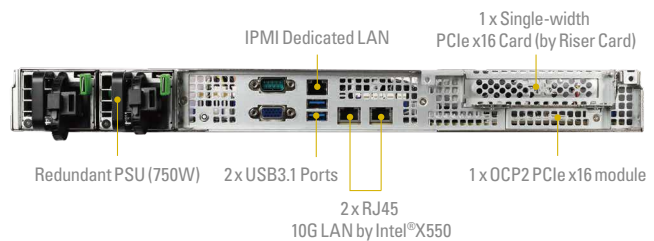


Redundant PSU (750W)

Application

- Data Center Server
- SMB and Database Processing & Storage

10 x 2.5" NVMe/SATA HDD



IPMI Dedicated LAN

1 x Single-width PCIe x16 Card (by Riser Card)

Redundant PSU (750W)

2 x USB3.1 Ports

1 x OCP2 PCIe x16 module

2 x RJ45
10G LAN by Intel® X550

1U10E-ROME/2T

System Physical Status	Form Factor	1U Rackmount
	Chassis Model	1U10E-ROME
	Chassis Dimension	625 x 430 x 43.5 mm (24.6" x 16.9" x 1.7")
	Support MB Size	ATX, 12" x 9.6"(ROMED8QM-2T)
CPU		1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
Memory		8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933/2666/2400 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Drive Bay/ Storage	External	10 x 2.5" NVMe (PCIe3.0 x4) SSDs or 10xSATA3 6.0Gb/s
	Internal	1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2242 form factor
Front Panel	Buttons	Power Button, Reset Button
	LEDs	Power LED, LAN LED
	I/O Port	1 x USB 3.1 Gen 1 Port
Ethernet	Interface	10000/1000/100/10 Mbps
	LAN Controller	2 x RJ45 10GLAN by Intel® X550
		1 x RJ45 Dedicated IPMI LAN port
Power Supply	Capacity	2(1+1)
	Output Watts	750W
System Cooling	Fan	6 x 40*56 mm fans

1U8S2E-ROME/2T



1U/2U High Density Storage



3200



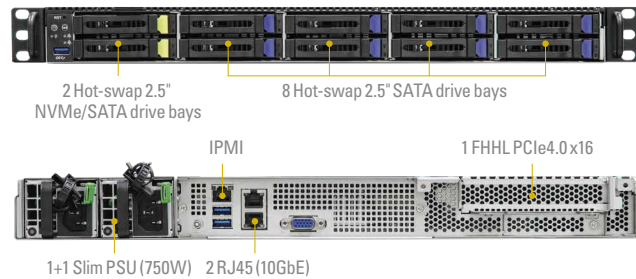
10Gbase-T



Storage

Application

- Hybrid-storage server
- Enterprise server



1U8S2E-ROME/2T

CPU	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	625 x 430 x 43.5 mm (24.6" x 16.9" x 1.7")
Front Panel	Buttons	Power Switch, System reset, NMI button
	LEDs	Power status, LAN1/LAN2 LED
	I/O	1 Type-A (USB3.2 Gen1)
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 UID w/ LED
Expansion Slots	Rear	1 FHHL PCIe4.0 x16 via RB1UX16_G4
Drive Bay/ Storage	External	2 Hot-swap 2.5" NVMe (PCIe3.0 x4)/SATA drive bays 8 Hot-swap 2.5" SATA drive bays
	Internal	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 750W Slim PSU
System Cooling	Fan	6 PWM 40x56 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

2U24E2S-ROME

2U24E-ROME



1U/2U High Density Storage



3200



OCP NIC 3.0



Storage

Application

- All-flash storage server
- Database processing
- Virtualization



24 Hot-swap 2.5" NVMe drive bays



1+1 CRPS (1200W)

1 low-profile PCIe4.0 x8

2 Hot-swap 2.5" SATA drive bays

2 RJ45 (1GbE)
IPMI

1 OCP NIC 3.0

2U24E2S-ROME



2U24E-ROME



CPU	Socket	1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors	
DIMM	Slot	16 DDR4 288-pin (2DPC)	
System Physical Status	Form Factor	2U Rackmount	
	Chassis Dimension	660 x 438 x 87.5mm (26" x 17.2" x 3.4")	
Front Panel	Buttons	Power button w/ LED, Reset button, NMI button, UID button w/ LED	
	LEDs	System fault LED, HDD activity LED, LAN1 / LAN2 LED	
	I/O	2 Type-A (USB3.2 Gen1)	
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2 1 dedicated IPMI	
	USB	2 Type-A (USB3.2 Gen1)	
	Others	1 DB15 (VGA), 1 RJ45 (COM), 1 UID button w/LED	
	Expansion Slots	Rear	1 low-profile PCIe4.0 x8 1 OCP NIC 3.0 (PCIe4.0 x16)
Drive Bay/ Storage	External	24 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays 2 Hot-swap 2.5" SATA/SAS drive bays ^{Note1}	24 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	2 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor	
Power Supply	Module	1+1, 80-PLUS Platinum, 1200W CRPS	
System Cooling	Fan	4 PWM 80x38 mm fans	
Management		ASPEED BMC AST2500	
Security		TPM by optional accessory	

Note1: Supports 2 SATA/SAS drive bays with optional RAID/HBA adaptor card

2U12L2S-ROME/2T



12x3.5" HDD/SSD bays



Storage



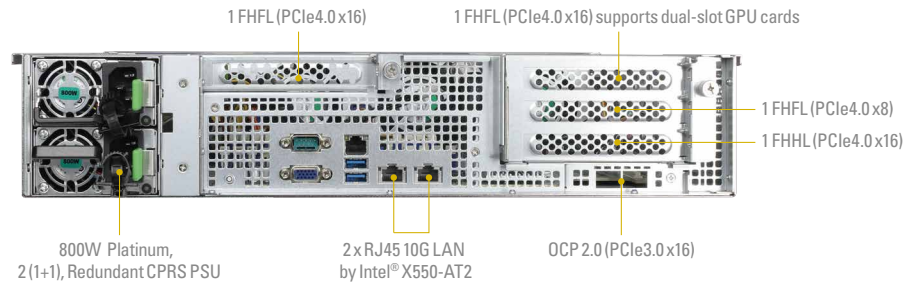
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10Gbase-T

Application

- Software-defined Storage
- Data Analytics



2U12L2S-ROME/2T

CPU	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology) / 7002 series processors
DIMM	Capacity	8 DDR4 DIMM slots (1DPC), Supports DDR4 R-DIMM up to 64GB each/ LR-DIMM up to 256GB each; max. 3200MHz
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	625 x 430 x 87mm (24.6" x 16.9" x 3.4")
Front Panel	Buttons	Power button w/LED, UID button, NMI button (left ear)
	LEDs	LAN1 and LAN2, system fault
	USB	1 Type-A USB3.1 Gen1 (right ear)
Rear IO	RJ45	2 RJ45 (10GbE) via Intel® X550-AT2 1 dedicated IPMI via AST2500
	USB	2 USB3.2 Gen1 (5Gbps)
	Video	1 DB15 (VGA) via AST2500
	Others	1 DB9 COM port, 1 UID button w/ LED
	Expansion Slots	Rear
Storage	External Drive Bay	12 Hot-swappable 3.5" (SATA 6Gb/s)
	Internal Storage	1 M-key (PCIe3.0x4/ SATA); Form factor: 2280 2 SFF 2.5" drive bay
	Power Supply	Module
System Cooling	Fan	4 80x38 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory (TPM2-S)

1U12L4E-MILAN



1U/2U High Density Storage



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OCP NIC 3.0



Storage



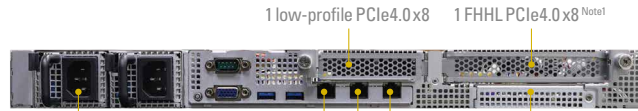
12 Hot-swap 3.5" SATA drive bays

Application

- Software-defined storage
- Cloud datacenter storage



4 Hot-swap 2.5" NVMe drive bays



1+1 PSU (1000W)

IPMI 2 RJ45 (1GbE)

1 OCP NIC 3.0

1U12L4E-MILAN

CPU	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	16 DDR4 288-pin (2DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	930 x 438 x 43.5 (36.6" x 17.2" x 1.7")
Front Panel	Buttons	Power button w/ LED, UID button w/ LED
	LEDs	HDD activity
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 DB9 (COM), 1 UID w/ LED
Expansion Slots	Rear	1 FHHL PCIe4.0 x8 ^{Note1} 1 low-profile PCIe4.0 x8 1 OCP NIC 3.0 (PCIe4.0 x16)
	External	4 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	12 Hot-swap 3.5" SATA drive bays 2 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor ^{Note1}
Power Supply	Module	1+1, 1000W PSU
System Cooling	Fan	6 PWM Easy-swap 40x56 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: SLOT6 share lanes with 2 M.2, both M.2 sockets will disable when SLOT6 is occupied

1U12XL-EPYC/2T

1U12XL-EPYC/2T2E



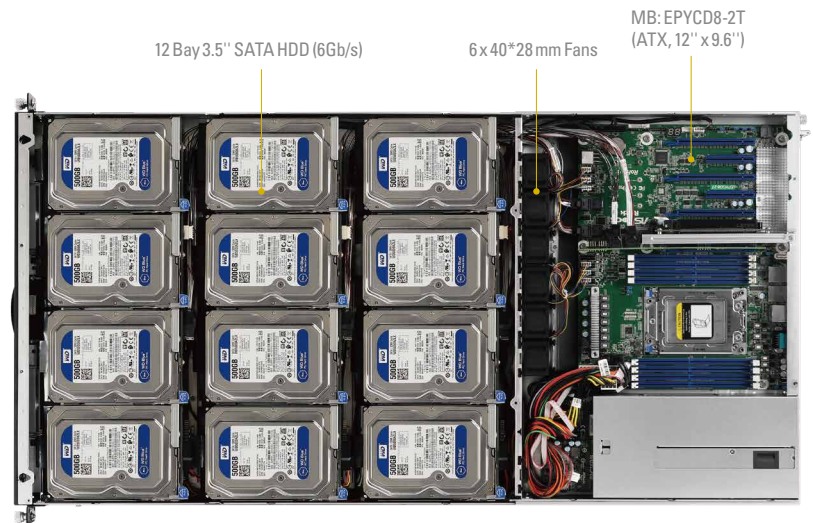
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1U/2U High Density Storage



10Gbase-T



Application

- High-density Web 2.0
- Cloud Datacenter Storage



2.5" SATA HDD up to 6Gb/s
2.5" 7mm NVMe HDD

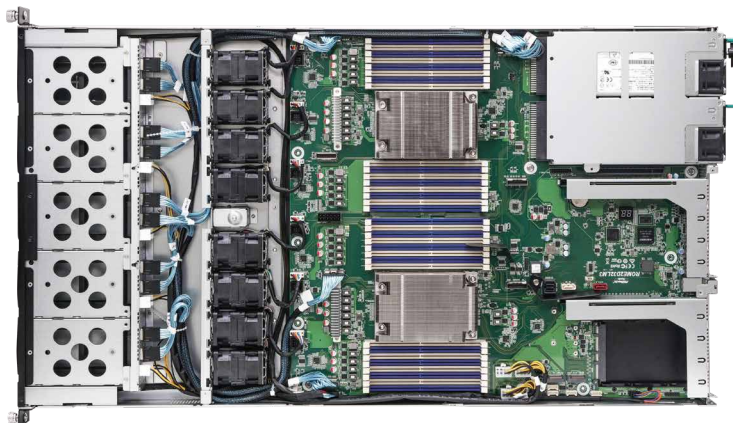


IPMI Dedicated LAN

Redundant PSU (700W) 2x USB3.1 Ports 1x Single-width PCIe x16 Card (by Riser Card)
2x RJ45 10G LAN by Intel® X550

		1U12XL-EPYC/2T	1U12XL-EPYC/2T2E
System Physical Status	Form Factor	1U Rackmount	1U Rackmount
	Chassis Model	1U12L	1U12L
	Chassis Dimension	860 x 438.5 x 43.2 mm (33.9" x 17.2" x 1.7")	860 x 438.5 x 43.2 mm (33.9" x 17.2" x 1.7")
	Support MB Size	ATX, 12"x9.6"(EPYCD8-2T)	ATX, 12"x9.6"(EPYCD8-2T)
CPU		Single Socket SP3(LGA4094) Supports AMD EPYC™ 7002/7001 Series Processors	Single Socket SP3(LGA4094) Supports AMD EPYC™ 7002/7001 Series Processors
Memory		8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933/2666/2400 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)	8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933/2666/2400 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Drive Bay/ Storage	External	2 Hot-swap 2.5" SATA drive bays [Front]	2 Hot-swap 2.5" NVMe drive bays [Front]
	Internal	12 Hot-swap 2.5" or 3.5" SATA/SAS drive bays 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor	12 Hot-swap 2.5" or 3.5" SATA/SAS drive bays 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor
Front Panel	Buttons	Power On/Off Button, UID Button, System Reset Button	Power On/Off Button, UID Button, System Reset Button
	LEDs	Power Status LED, LAN Activity LED, HDD Status LED	Power Status LED, LAN Activity LED, HDD Status LED
Ethernet	I/O Port	NA	NA
	Interface	10000/1000/100/10 Mbps	10000/1000/100/10 Mbps
Power Supply	LAN Controller	2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN Port by RTL8211E	2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN Port by RTL8211E
	Capacity	1U, Redundant	1U, Redundant
System Cooling	Output Watts	700W	700W
	Fan	6 x 40*28 mm System Fans	6 x 40*28 mm System Fans

1U10E-MILAN2



1U/2U High Density Storage



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OCP NIC 3.0



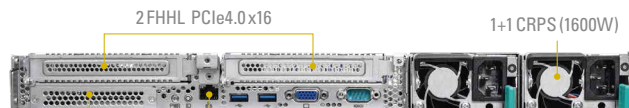
Storage

Application

- All-flash storage server
- Database processing
- Virtualization
- E-commerce



10 Hot-swap 2.5" NVMe drive bays



1 OCP 3.0 PCIe4.0 x16 IPMI

2 FHHL PCIe4.0 x16

1+1 CRPS(1600W)

1U10E-MILAN2

CPU	Socket	1+1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	16+16 DDR4 288-pin (2DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	800 x 438 x 43.5 mm (31.5" x 17.2" x 1.7")
Front Panel	Buttons	Power, Reset
	LEDs	Power, HDD
	I/O	2 Type-A (USB3.2 Gen1)
Rear IO	RJ45	1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1DB9 (COM), 1 UID w/ LED, 1 Power button
Expansion Slots	Rear	2 FHHL PCIe4.0 x16 [CPU0] [CPU1] 1 OCP3.0 PCIe4.0 x16 [CPU0]
Drive Bay/ Storage	External	10 Hot-swap 2.5" NVMe (PCIe4.0 x4) drive bays
	Internal	1 M-key (PCIe3.0 x2); support 2280/2260/2242/2230 form factor [CPU0] 1 M-key (PCIe3.0 x4 or SATA 6Gb/s); support 2280/2242 form factor [CPU0]
Power Supply	Module	1+1, 1600W CRPS
System Cooling	Fan	8 PWM 40x56 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

2U2E-F/ROME2



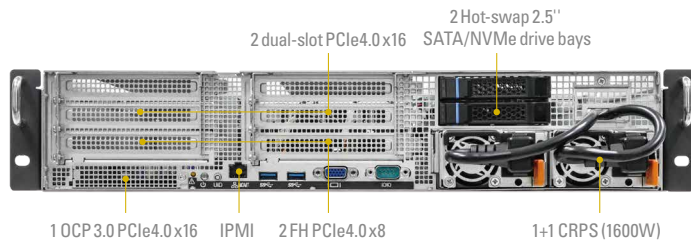
DDR4



PCI-E 4.0

Application

- Mobile Edge Computing
- AI Interface
- 5G O-RAN
- NFVi

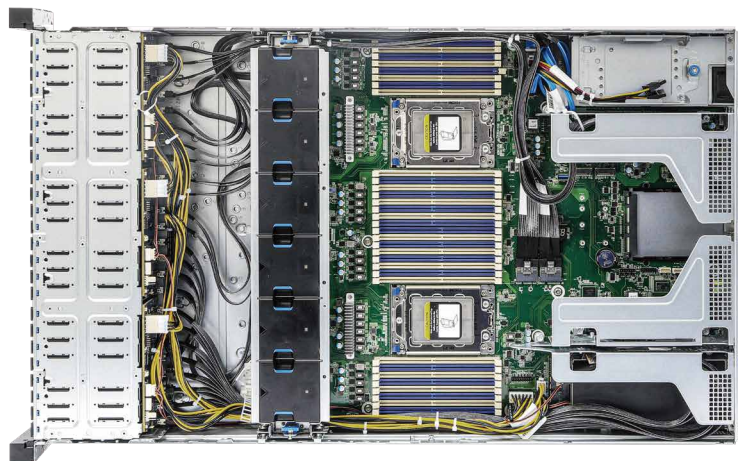


2U2E-F/ROME2

System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	615 x 438 x 87 mm (24.2" x 17.2" x 3.4")
CPU	Socket	1+1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	16+16 DDR4 288-pin (2DPC)
Front Panel	Buttons	Power w/ LED, UID w/ LED
	LEDs	System error LED
	I/O	2 USB 3.2 Gen1 ports, 1 DB15 (VGA), 1 DB9 (COM), 1 dedicated IPMI
Expansion Slots	Front	1 dual-slot PCIe4.0 x16 ^{Note1} [CPU0]
		1 dual-slot PCIe4.0 x16 ^{Note1} [CPU1]
		1 OCP3.0 PCIe4.0 x16 [CPU0]
		1 FH PCIe4.0 x8 [CPU0]
		1 FH PCIe4.0 x8 [CPU1]
Drive Bay/Storage	External	2 Hot-swap 2.5" SATA/NVMe drive bays [Front]
	Internal	1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2242 form factor [CPU0] 1 M-key (PCIe3.0 x2), supports 2280/2260/2242/2230 form factor [CPU0]
Power Supply	Module	1+1 1600W CRPS
System Cooling	Fan	4 PWM 80 x 38 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: Please contact ASRock Rack for dual-slot cards compatibility.

2U24E-ROME2



1U/2U High Density Storage



3200



OCP NIC 3.0



Storage

Application

- All-flash storage server
- Database processing
- Virtualization
- Cloud Computing
- High-end Enterprise server
- Hyperconverged Storage



24 Hot-swap 2.5" NVMe drive bays

2 fixed 2.5" SATA drive bays



1 CRPS (2000W) COM 1 IPMI 1 OCP NIC 3.0 2 RJ45 (1GbE) 1 CRPS (2000W)

2U24E-ROME2

CPU	Socket	1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	16+16 DDR4 288-pin (2DPC)
System Physical Status	Form Factor	2U Rackmount
	Chassis Dimension	770 x 438 x 86.4 mm (30.3" x 17.2" x 3.4")
Front Panel	Buttons	Power button, UID button, Reset button
	LEDs	Power Status, LAN Activity, HDD Activity, System Status
	I/O	1 Type-A (USB3.2 Gen1), 1 USB2.0 port
Rear IO	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2 1 dedicated IPMI
	USB	2 Type-A (USB3.2 Gen1)
	Others	1 DB15 (VGA), 1 RJ45 (COM)
Expansion Slots	Rear	1 FH PCIe4.0 x16 or 2 FH PCIe4.0 x8 1 FH PCIe4.0 x16 or 2 FH PCIe4.0 x8 1 OCP NIC 3.0 (PCIe4.0 x16, NCSI)
Drive Bay/ Storage	External	24 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays
	Internal	2 fixed 2.5" SATA drive bays
		1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor 1 M-key (PCIe4.0 x2 or SATA 6Gb/s), supports 2280/2242 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 2000W CRPS
System Cooling	Fan	6 PWM 60x38 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

4U36L2E-ROME2/2T

4U36L6E-MILAN2/2T



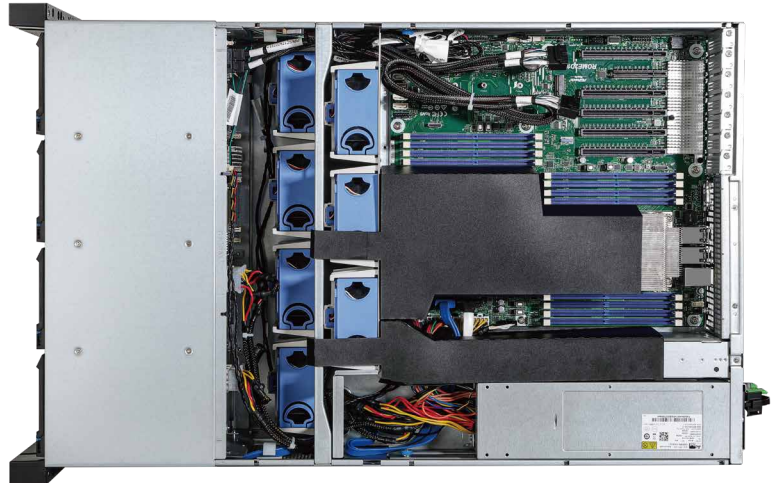
Storage



PCI-E 4.0

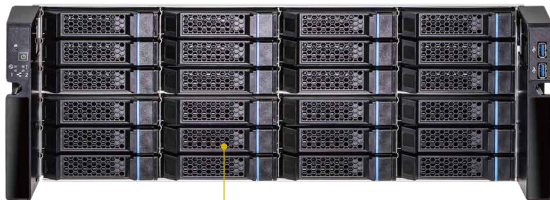


10Gbase-T



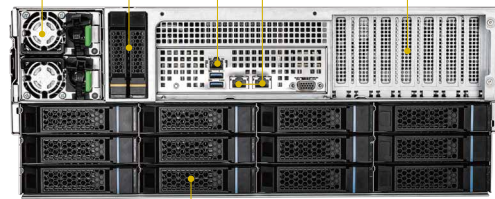
Application

- Corporate Database
- Enterprise Server



24 Hot-swap 3.5" SAS/SATA drive bays ^{Note1}

- 1+1 CRPS (1200W)
- 2 Hot-swap 2.5" NVMe drive bays
- IPMI
- 2 RJ45 (10GbE)
- 5 LP PCIe4.0 x16 + 1 LP PCIe4.0 x8



12 Hot-swap 3.5" SAS/SATA drive bays ^{Note1}

4U36L2E-ROME2/2T

4U36L6E-MILAN2/2T

CPU	Socket	1+1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors	
DIMM	Slot	8+8 DDR4 288-pin (1DPC)	
System Physical Status	Form Factor	4U Rackmount	
	Chassis Dimension	699 x 432 x 176 mm (27.5" x 17" x 6.9")	
Front Panel	Buttons	System reset, Power	
	LEDs	Power, LAN1 activity, LAN2 activity, System fail, HDD status	
	I/O	2 Type-A (USB3.2 Gen1)	
Rear IO	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2 1 dedicated IPMI	
	USB	2 Type-A (USB3.2 Gen1)	
	Others	1 UID button w/ LED, 1 DB15 (VGA)	
Expansion Slots	Rear	3 low-profile PCIe4.0 x16 [CPU0] 2 low-profile PCIe4.0 x16 [CPU1] 1 low-profile PCIe4.0 x8 [CPU1]	
Drive Bay/ Storage	External	24 Hot-swap 3.5" SAS/SATA drive bays ^{Note1} 12 Hot-swap 3.5" SAS/SATA drive bays ^{Note1} 2 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays	20 Hot-swap 3.5" SAS/SATA drive bays ^{Note1} 4 Hot-swap 3.5" SAS/SATA ^{Note1} or 4 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays 12 Hot-swap 3.5" SAS/SATA drive bays ^{Note1} 2 Hot-swap 2.5" NVMe (PCIe3.0 x4) drive bays
	Internal	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2242 form factor [CPU0] 1 M-key (PCIe4.0 x4), supports 22110/2280/2242 form factor [CPU0]	
Power Supply	Module	1+1, 80-PLUS Platinum, 1200W CRPS	
System Cooling	Fan	7 80x38 mm fans	
Management		ASPEED BMC AST2500	
Security		TPM by optional accessory	

Note1: Additional RAID/HBA card required to support the 36 Hot-swap 3.5" SAS/SATA drive bays

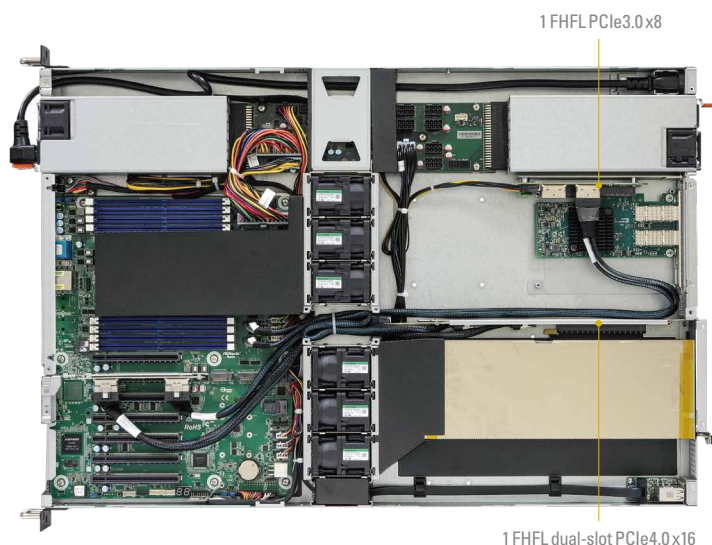
1U1G-MILAN/N



3200



PCI-E 4.0



Application

- Visualization
- Rendering
- Virtualization
- Deep Learning



1 PSU (1200/1300W)

IPMI



1 PSU (1200/1300W)

1U1G-MILAN/N

CPU	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	660.4 x 438.0 x 43.5 mm (26" x 17.2" x 1.7")
Front Panel	Buttons	Power, UID button w/ LED
	LEDs	System Fault LED
	I/O	2 Type-A (USB3.2 Gen1), 1 DB15 (VGA), 1 DB9 (COM), 1 dedicated IPMI
Rear IO	USB	2 Type-A (USB3.2 Gen1)
Expansion Slots	Rear	1 FHFL dual-slot PCIe4.0 x16 via 1U4G_SL2P_R_RDV
		1 FHFL PCIe3.0 x8 via 4UXG_SL2P
Drive Bay/ Storage	Internal	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
Power Supply	Module	1+1, 1200W/1300W CRPS
System Cooling	Fan	3 single-rotor 40x56 mm fans 3 dual-rotor 40x56 mm fans
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

1U4G-ROME

1U4G-ROME/2E



3200

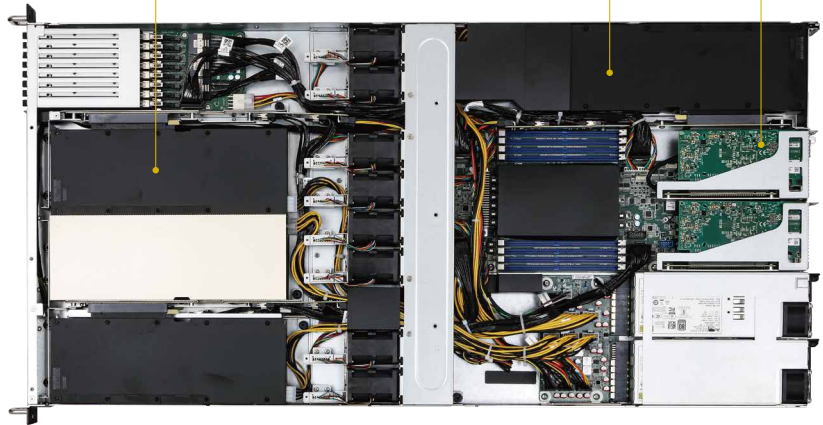


PCI-E 4.0

3 PCIe4.0x16
for dual slot cards

1 PCIe4.0x16
for a dual slot card

2 PCIe4.0x16
for low-profile cards



8 E1.S or M.2



2 Hot-swap 2.5" NVMe drive bays



Application

- High-performance Technical Computing
- Deep Learning
- Big Data Analytics
- Artificial Intelligence (AI)

2 RJ45 (1GbE)



1+1 CRPS (2000W)

		1U4G-ROME	1U4G-ROME/2E
CPU	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology) / 7002 series processors	
DIMM	Slot	8 DDR4 DIMM slots (1DPC)	
System	Form Factor	1U Rackmount	
Physical Status	Chassis Dimension	880 x 438 x 43.5 mm (34.6" x 17.2" x 1.7")	
Front Panel	Buttons	UID, Power, Reset	
	LEDs	System Fail, Power, LAN1, LAN2	
	I/O	1 Type-A (USB3.2 Gen1)	
Rear IO	RJ45	2 RJ45 (1GbE) by Intel i350-AM2 1 dedicated IPMI	
	USB	2 Type-A (USB3.2 Gen1)	
	Others	1 DB15 (VGA)	
Expansion Slots	Front	3 PCIe4.0 x16 for dual slot cards ^{Note1}	
	Rear	1 PCIe4.0 x16 for a dual slot card ^{Note1} 2 PCIe4.0 x16 for low-profile cards	
	Storage	External	8 E1.S or M.2 (PCIe4.0x4)
Power Supply	Module	1+1, 80-PLUS Platinum, 2000W CRPS	
System Cooling	Fan	8 dual-rotor 40x56 mm fans	
Management		ASPEED BMC AST2500	
Security		TPM 2.0 on board	

Note1: Active-cooled cards and cards with power connector on the top edge are not supported.

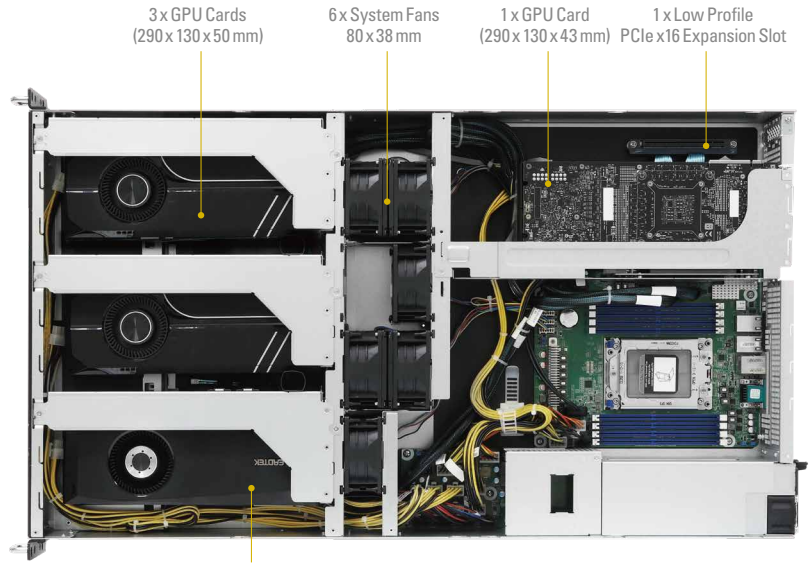
2U4G-ROME/2T



3200



10Gbase-T



3 x GPU Cards
(290 x 130 x 50 mm)

6 x System Fans
80 x 38 mm

1 x GPU Card
(290 x 130 x 43 mm)

1 x Low Profile
PCIe x16 Expansion Slot

Sufficient Space Design to Install Multiple Graphics Cards
has no Conflicts with PSUs

Application

- Artificial Intelligence
- Machine Learning
- HPC
- Virtualization

Front Panel



NVMe Capable

4 * 2.5" SATA (Default)



Redundant PSU
(2000W)

2 x RJ45 10G LAN
by Intel® X550

OCP2

Low Profile PCIe X16

2U4G-ROME/2T



System Physical Status	Form Factor	2U Rackmount
	Chassis Model	2U4G-ROME/2T
	Chassis Dimension	795 x 438 x 87.5 mm (31.3" x 17.2" x 3.4")
	Support MB Size	ATX, 12" x 9.6" (ROMED8QM-2T)
CPU		1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
Memory		8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Drive Bay/ Storage	External	3 Hot-swap 2.5" SATA drive bays [Front]
	Internal	1 Hot-swap 2.5" NVMe drive bay [Front] 1 Hot-swap 2.5" NVMe/SATA drive bay [Front] 1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor
Front Panel	Buttons	Power Button, UID Button
	LEDs	System LED, UID LED, Power LED, 2 x LAN LEDs (L1 , L2 LED)
	I/O Port	2 x USB 2.0 Ports
Ethernet	Interface	10000/1000/100/10 Mbps
	LAN Controller	2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN port
Power Supply	Capacity	2(1+1)
	Output Watts	2000W, 80-PLUS Platinum
System Cooling	Fan	6 x 80*38mm System Fans

2U4G-EPYC-2T

2U4G-EPYC



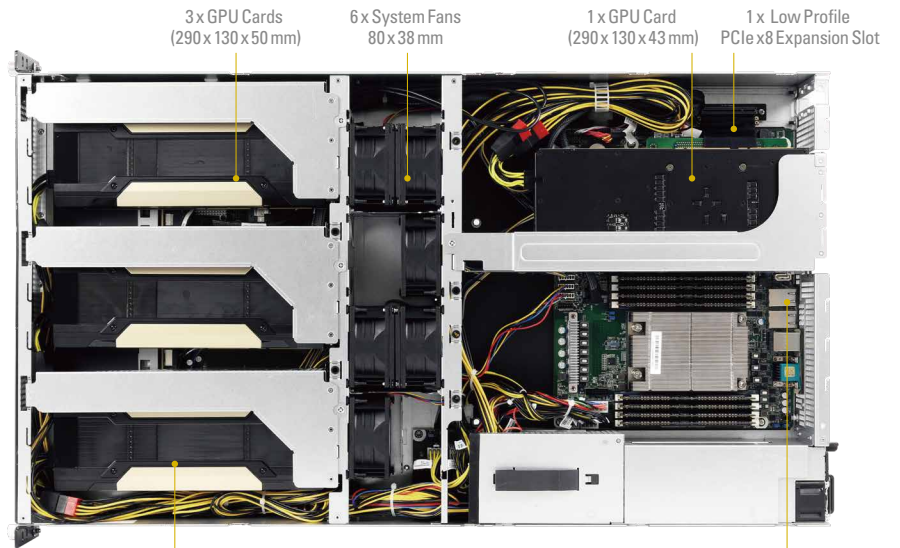
7000



2666



10Gbase-T



Sufficient Space Design to Install Multiple Graphics Cards has no Conflicts with PSUs

2 x 10GBase-T LAN ports (2U4G-EPYC-2T)

Application

- Artificial Intelligence
- Machine Learning
- HPC
- Virtualization

Front Panel



		2U4G-EPYC-2T	2U4G-EPYC
System Physical Status	Form Factor	2U Rackmount	2U Rackmount
	Chassis Dimension	795 x 438 x 87.5 mm (31.3" x 17.2" x 3.4")	795 x 438 x 87.5 mm (31.3" x 17.2" x 3.4")
	Support MB Size	ATX, 12" x 9.6"	ATX, 12" x 9.6"
Front Control Panel	Buttons	Power Button, UID Button	Power Button, UID Button
	LEDs	System LED, UID LED, Power LED, 2 x LAN LEDs (L1, L2 LED)	System LED, UID LED, Power LED, 2 x LAN LEDs (L1, L2 LED)
	I/O Ports	2 x USB 2.0 Ports	2 x USB 2.0 Ports
MB Tray	VGA Port	1 x D-Sub	1 x D-Sub
	Serial Port	1 x COM Port	1 x COM Port
	USB 3.0 Port	2 Ports	2 Ports
	LAN Port	RJ45:2(10G)+1(IPMI)	RJ45:2(1G)+1(IPMI)
	UID	1	1
GPGPU Support	GPGPU Watts	Max 300W Per Card (if Use Single Width Card, Max 150W)	
	GPU Card Quantity	4 x GPGPU/MIC Cards (Double Width) or 8 x GPU/PCIe Cards (Single Width)	
External Drive Bay	Front Side Drive Bay	4 x 2.5" SATA 6GB/s HDDs (1 x SATA3 HDD could support NVMe or SATA3 6GB/s HDDs) + 1 x NVMe	
Power Supply	Capacity	1+1 Redundant	1+1 Redundant
	Output Watts	2000W, 80-PLUS Platinum	2000W, 80-PLUS Platinum
System Cooling	Fan	6 x 80*38mm System Fans	6 x 80*38mm System Fans

4U8G-ROME2/2T

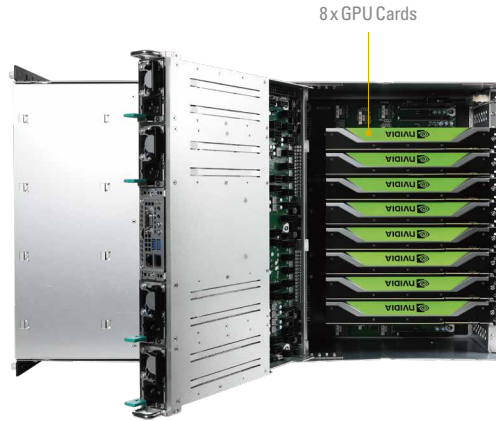
4U10G-ROME2/2T



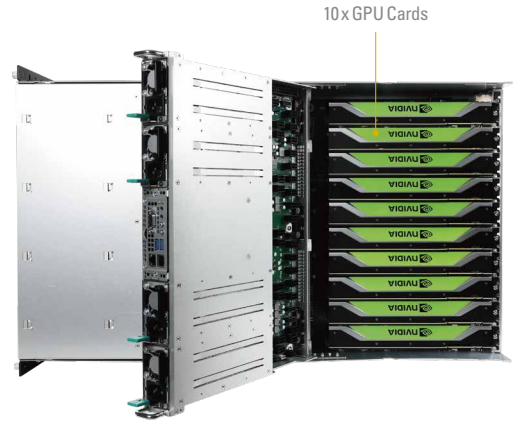
GPGPU



10Gbase-T



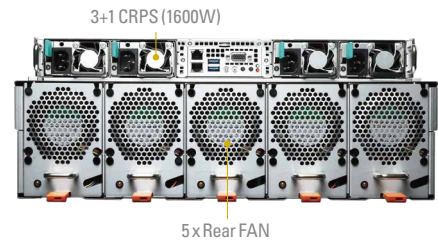
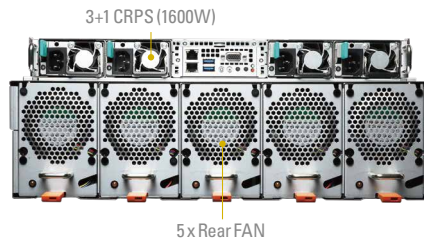
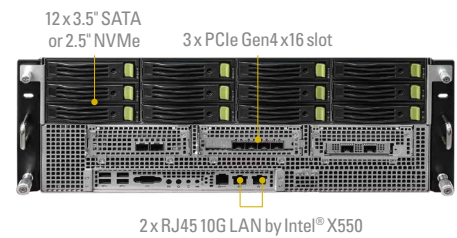
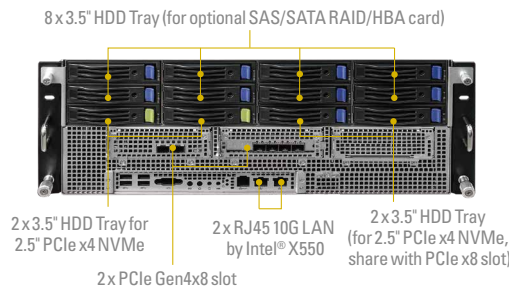
8x GPU Cards



10x GPU Cards

Application

- Deep learning
- Big data analytics
- HPC
- Machine learning



4U8G-ROME2/2T

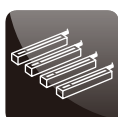
4U10G-ROME2/2T

System Physical Status		4U8G-ROME2/2T	4U10G-ROME2/2T
Form Factor		4U Rackmount	4U Rackmount
Chassis Model		4U8G	4U10G
Chassis Dimension		845 x 438 x 176.5mm (33.3" x 17.2" x 6.9") (D/W/H, w/o Front Panel) (with Rear FAN)	845 x 438 x 176.5mm (33.3" x 17.2" x 6.9") (D/W/H, w/o Front Panel) (with Rear FAN)
Support MB Size		SSI EEB 12" x 13" (ROME2D32GM-2T)	SSI EEB 12" x 13" (ROME2D32GM-2T)
CPU		1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors	1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory		32 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)	32 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Front Panel		Buttons LEDs I/O Port	Buttons LEDs I/O Port
		Power button w/ LED, Reset button, NMI button, UID button w/ LED System fault LED, HDD activity LED 2 x USB3.1 Ports	Power button w/ LED, Reset button, NMI button, UID button w/ LED System fault LED, HDD activity LED 2 x USB3.1 Ports
Ethernet		Interface LAN Controller	Interface LAN Controller
		10000/1000/100/10 Mbps 2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN port	10000/1000/100/10 Mbps 2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN port
External Drive Bay		Front Side Drive Bay	Front Side Drive Bay
		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, share with PCIe x8 slot) 3. 8 x 3.5" HDD Trays (for optional SAS/SATA RAID/HBA card)	12 x 3.5" HDD Trays supporting 3.5" SATA or 2.5" NVMe
Power Supply		Capacity Output Watts Efficiency	Capacity Output Watts Efficiency
		4 (3+1), CRPS 1600W 80-PLUS Platinum	4 (3+1), CRPS 1600W 80-PLUS Platinum

4U4G-EPYCD8-2T



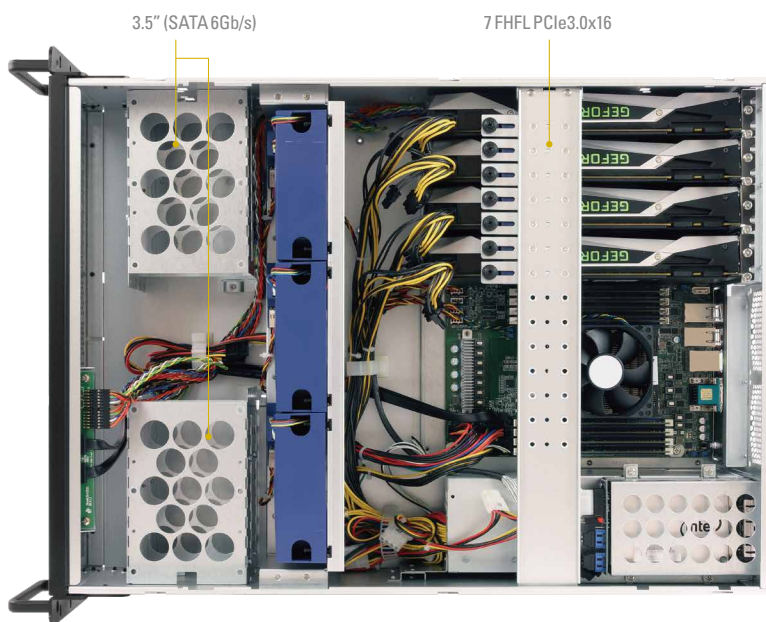
3200



4 Dual Slot
PCIe x16



10Gbase-T



Application

- Deep Learning
- Data Processing
- Mainstream Workstation



4U4G-EPYCD8-2T

System Physical Status	Form Factor	4U Rackmount
	Chassis Dimension	525x 430 x 174.8mm (20.7" x 16.9" x 6.9")
	Support MB	EPYCD8-2T
CPU		1 Socket SP3 (LGA4094), supports AMD EPYC™ 7002/7001 Series Processors
Memory	Capacity	8 DIMM Slots (1DPC); Supports DDR4 R-DIMM up to 3200MHz, 64GB/ LR-DIMM up to 3200MHz, 256GB
Expansion Slots	Rear	7 PCIe3.0 x16 single slot, supports 4 FHFL dual slot GPU cards
Storage	External	2 Hot-swap 2.5" SFF bays at rear
	Internal	8 internal 3.5" LFF bay at front
		2 M.2 (PCIe3.0x4 or SATA 6Gb/s)
Rear IO	RJ45	2 10GbE via X550-AT2, 1 Dedicated IPMI
	Others	2 USB3.2 Gen1, 1DB15 (VGA), 1 DB9 (COM)
Front Panel	Buttons	Power switch, System reset
	LEDs	Power status, HDD, LAN activity LEDs
	I/O Port	2 USB 2.0
Power Supply	Capacity	1+1, 80-PLUS Platinum, 1600W CRPS
System Cooling	Fan	3 120x38 mm PWM fans
		2 external 8038 fans (optional)

3U4X-ROME/2T



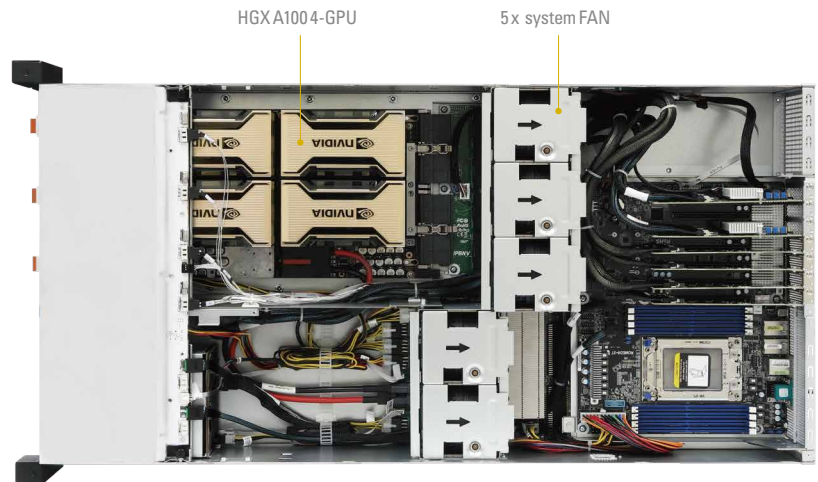
GPGPU



10Gbase-T

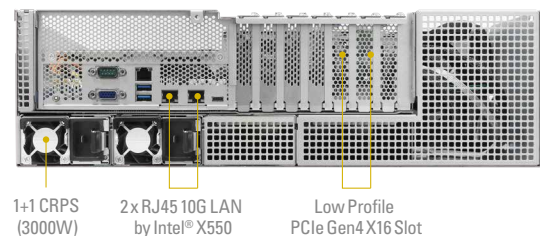
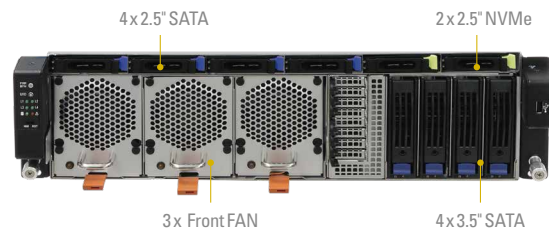


NVIDIA
HGX A100



Application

- Deep learning
- Big data analytics
- HPC
- Machine learning

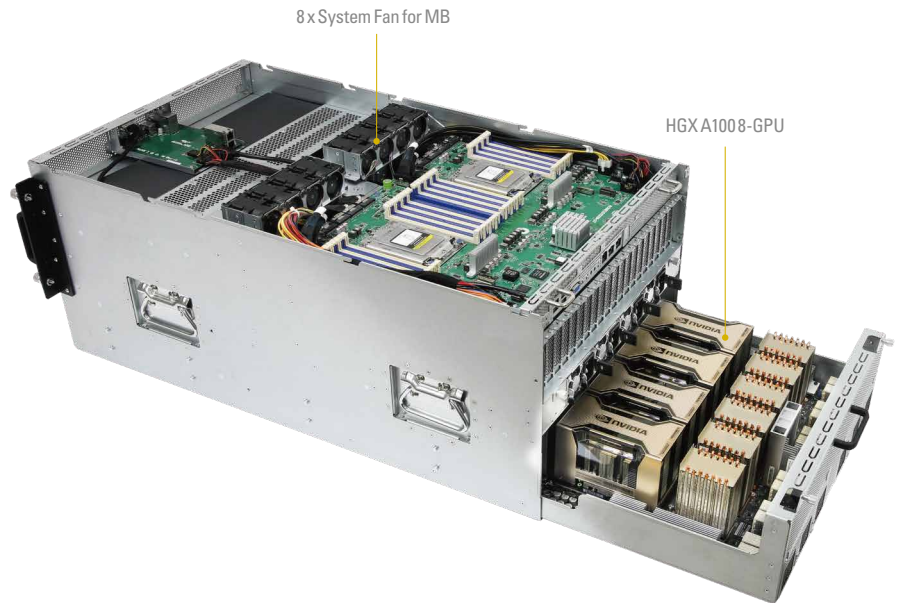


3U4X-ROME/2T

System Physical Status	Form Factor	3U Rackmount
	Chassis Model	3U4X
	Chassis Dimension	870 x 438 x 132.5mm (34.3" x 17.2" x 5.2")
	Support MB Size	ATX, 12" x 9.6" (ROMED8-2T)
CPU		1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory		8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Front Panel	Buttons	Power button, Reset button, NMI button, UID button w/ LED
	LEDs	System fault LED, HDD activity LED, LAN1, LAN2 LED
	I/O Port	1 x USB3.1 Ports
Ethernet	Interface	10000/1000/100/10 Mbps
	LAN Controller	2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN port
Drive Bay/ Storage	External	2 Hot-swap 3.5" NVMe (PCIe4.0 x4)/SATA drive bays [Front] 2 Hot-swap 3.5" SATA drive bays [Front]
	Internal	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor ^{Note1}
		1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor ^{Note1}
Power Supply	Capacity	2 (1+1), CRPS
	Output Watts	3000W
	Efficiency	80-PLUS Platinum

Note1: Share with SLOT2 by jumper

7U8X-ROME2/2T



GPGPU



10Gbase-T



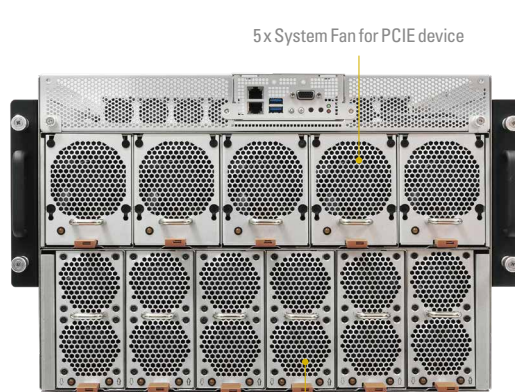
NVIDIA HGXA100



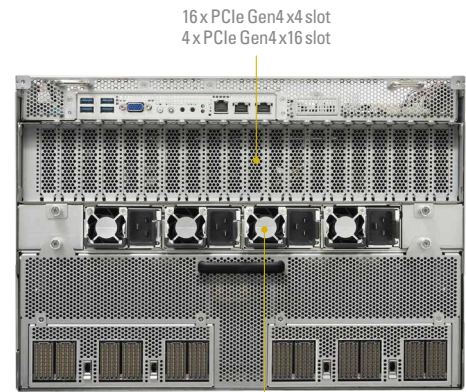
Deep Learning

Application

- Deep learning
- Big data analytics
- HPC
- Machine learning



12x System Fan for HGXA1008-GPU



3+1 CRPS (3000W)

7U8X-ROME2/2T

System Physical Status	Form Factor	7U Rackmount
	Chassis Model	7U8X-ROME2
	Chassis Dimension	782 x 430 x 307 mm (30.8" x 16.9" x 12.1")
	Support MB Size	Proprietary, 16.5" x 13.81"(ROME2D32GM-2T)
CPU		1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory		16+16 DIMM Slots (2DPC); Supports DDR4 R-DIMM up to 3200MHz, 64GB/ LR-DIMM up to 3200MHz, 256GB
Front Panel	Buttons	Power On Button, UID, NMI, System Reset Button
	LEDs	Power LED, UID LED, HDD LED, System LED
	I/O Ports	2 x USB 3.0 Port, 2 x LAN Port(RJ45 10GbE), 1 x VGA Port
Ethernet	Interface	10000/1000/100/10 Mbps
	LAN Controller	2 x RJ45 10GLAN by Intel® X550 1 x RJ45 Dedicated IPMI LAN port
Storage		16 x NVMe SSD (AIC type)
Power Supply	Capacity	4(3+1), CRPS
	Output Watts	3000W
	Efficiency	80-PLUS Platinum
System Cooling	Fan	8 x 40*56 mm PWM systems fans
		5 x 80*80 mm PWM systems fans
		12 x 60*76 mm PWM systems fans

1U2N2G-ROME/2T

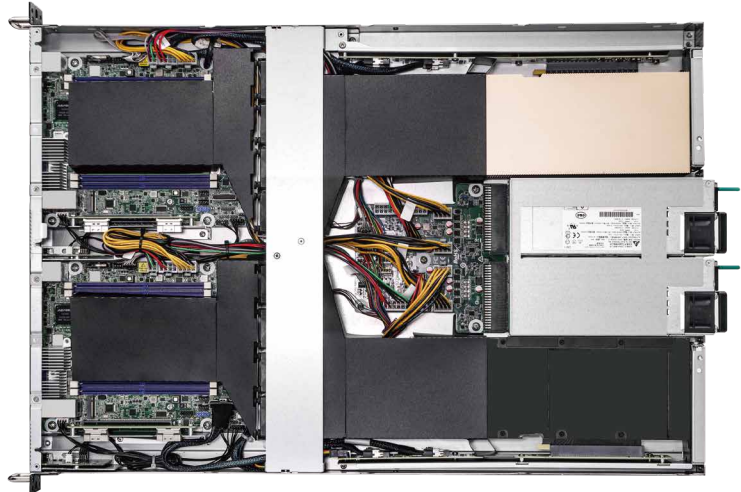


GPGPU
GPGPU

**DDR4
3200**
3200

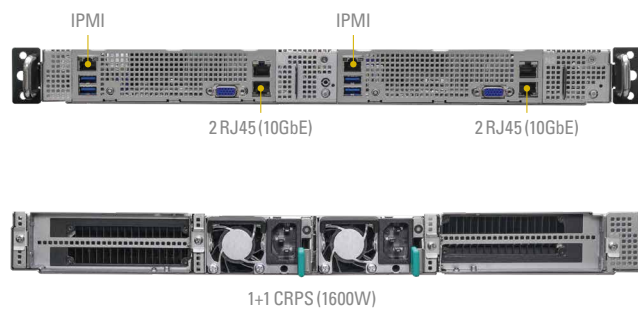
**PCI-E
4.0**
PCI-E4.0

10G
10Gbase-T



Application

- Visualization
- Rendering
- Virtualization
- Deep Learning



1U2N2G-ROME/2T

CPU (per node)	Socket	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM (per node)	Slot	4 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	1U Rackmount
	Chassis Dimension	650 x 438 x 43.5 mm (25.6" x 17.2" x 1.7")
Front Panel (per node)	Buttons	UID w/LED, Power w/LED
	LEDs	System Fail
	I/O	2 RJ45(10GbE) by Intel® X550-AT2, 1 dedicated IPMI 2 Type-A (USB3.2 Gen1), 1 DB15 (VGA)
Expansion Slots (per node)	Rear	1 FH dual-slot PCIe4.0x16
Storage (per node)	Internal	1 M-key (PCIe4.0x4 or SATA 6Gb/s), supports 2280 form factor
Power Supply	Module	1+1, 80-PLUS Platinum, 1600W CRPS
System Cooling	Fan	8 PWM 40x56 mm fans
Management (per node)		ASPEED BMC AST2500
Security (per node)		TPM by optional accessory

2U4N-F/ROME-M3



3200

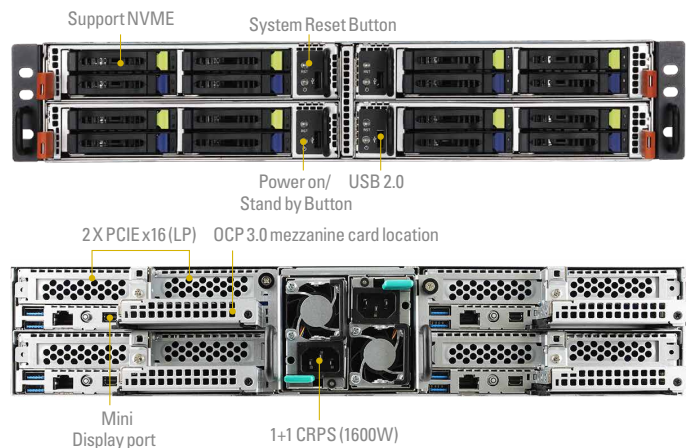


10Gbase-T



OCP NIC 3.0

High Performance and High-density Computing Nodes for HPC, Cloud Computing, Internet Security and Science



2U4N-F/ROME-M3

System Physical Status	Form Factor Chassis Model Chassis Dimension Support MB Size	2U Rackmount 2U4N-F 820 x 442.2 x 86.6mm (32.3" x 17.4" x 3.4") Half-Width (20"x6.5")(ROMED8HM3 x 4)
CPU		1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory Per Node		8 DIMM Slots, Supports Eight-Channel DDR4 3200/2933 R DIMM (Modules up to 64GB Supported), and LR DIMM (Modules up to 256GB Supported)
Front Panel	Buttons LEDs I/O Port	Power On/Standby Button (Per Node) in the Front System Reset Button (Per Node) in the Front UID Button (per Node) in the Rear HDD Act/Err/Locate LED Power LED (Front Panel Per Node) UID LED (Front Panel Per Node) 1 x USB 2.0 Port (Per Node)
MB Per Node	USB 3.1 Gen 1 VGA LAN Port	2 1 x Mini DisplayPort (need to bundle ASRockRack special cable for VGA) RJ45: 1(IPMI) LAN Ports with LED (ACT/LINK LED and SPEED LED)
Expansion slot	PCIe3.0 x16 OCP Mezzanine 3.0 M.2	2 Slots (Low Prole Card) 1 Slot 2 Slots (SATA/PCIe 4.0 x4, 2280/22110/30110)
Drive Bay	External	4 x 2.5" HDD/SSD per node (all SATA or 2 x NVME* + 2 x SATA)
Power Supply	Output Watts Efficiency	2 (1+1) 1600W CRPS 80-PLUS Platinum
System Cooling Per Node	Fan	4 x 40*56mm Fans

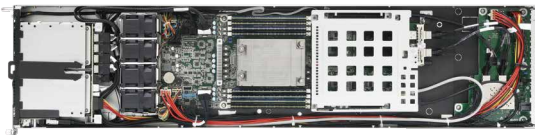
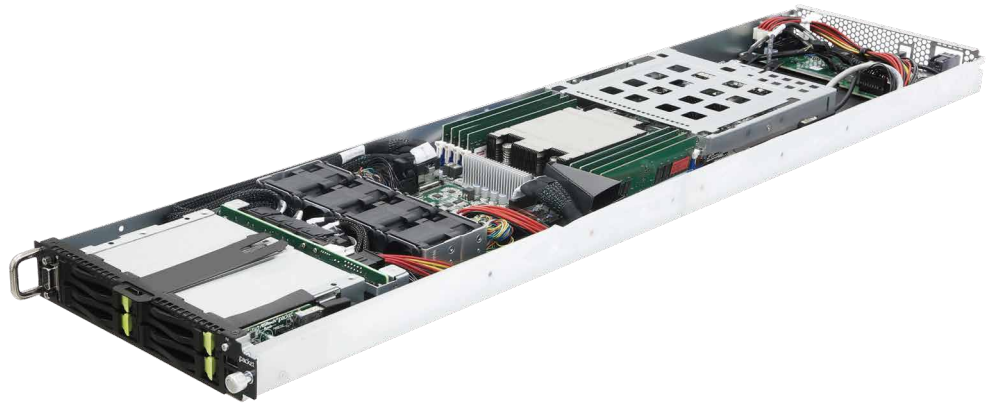
1U-Open19-m3.large.x86



25Gbase-T



3200



1U-Open19-m3.large.x86

System	Form Factor	1U Rackmount
	Chassis Model	Open19 chassis
	Dimensions	901.7 x 212.3 x 41.6 mm (35.5" x 8.4" x 1.6")
	Support MB	Half width, 6.5" x 17" (ROMED8HM3/N19)
	Node number	1
Front Panel	Buttons	Power button
Rear IO	USB 3.0	1
	VGA	1
Rear Panel	4 Port SFP28 Ethernet	1 Open19 Standard Data Connector
	12V DC-IN Port	1
External Drive Bay / Storage	Front Side Drive Bay	4 x 2.5" SATA3 HDD/SSD or 4 x NVME
Power Supply	Type	NA, 12V DC-IN Port
System Fan	Fan	4 x system fans (PF 4056 1BX)
Key part	CPU(SoC)	AMD 7502P 32C/64T, 2.5GHz
	DIMM	DDR4 3200 ECC RDIMM 32GB x 8
	LAN Card	2 x 25GbE, Broadcom N225 for OCP 3.0
	SSD	2 x 2.5" SATA3 SSD Intel® S4510 240G 2 x U.2 2.5" PCIe3 NVMe SSD (MICRON 3.84TB)
Processor System	CPU	Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory	Capacity	Eight-Channel DDR4 3200/2933/2666 RDIMM, LRDIMM, max. 512GB (RDIMM), 1024GB(LRDIMM); default DDR4 2666 ECC RDIMM 16GB x4

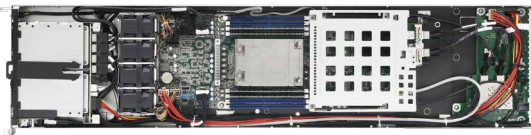
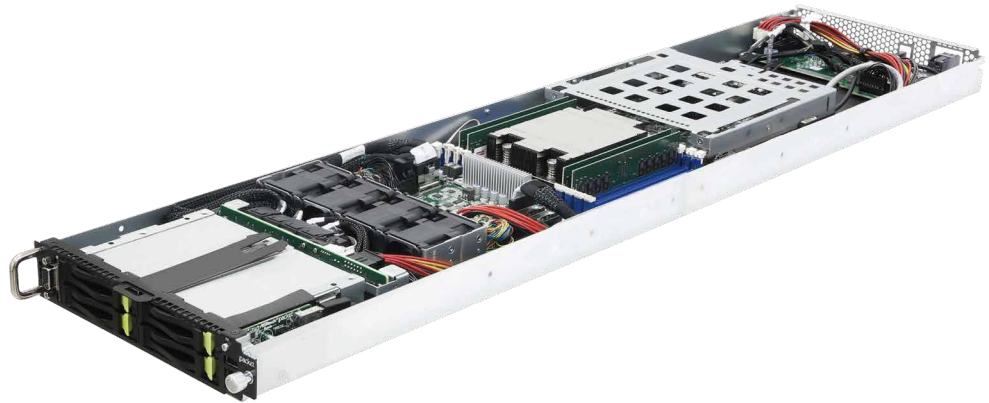
1U-Open19-c3.medium.x86



10Gbase-T



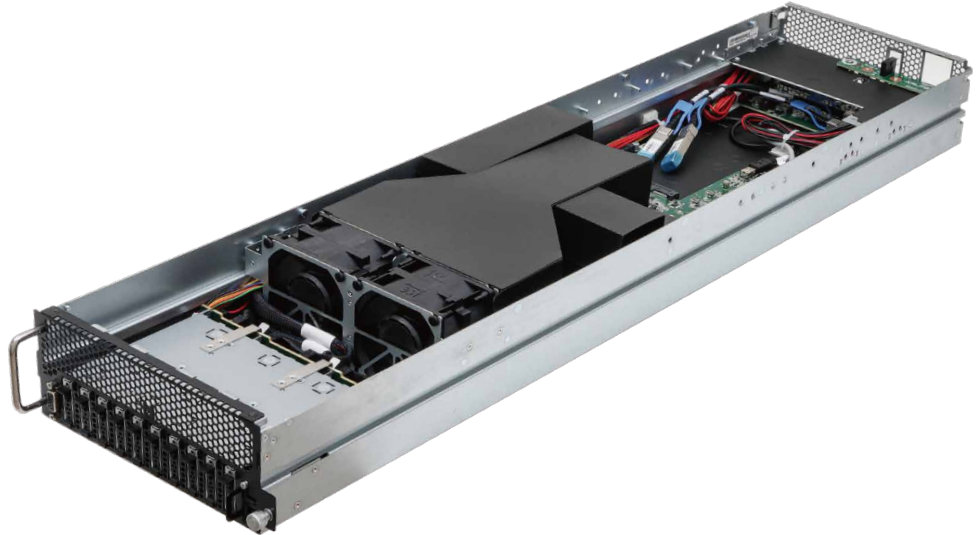
2666



1U-Open19-c3.medium.x86

System	Form Factor	1U Rackmount
	Chassis Model	Open19 chassis
	Dimensions	901.7 x 212.3 x 41.6 mm (35.5" x 8.4" x 1.6")
	Support MB	Half width, 6.5" x 17" (ROMED8HM3/N19)
	Node number	1
Front Panel	Buttons	Power button
Rear IO	USB 3.0	1
	VGA	1
Rear Panel	4 Port SFP28 Ethernet	1 Open19 Standard Data Connector
	12V DC-IN Port	1
External Drive Bay / Storage	Front Side Drive Bay	4 x 2.5" SATA3 HDD/SSD or 4 x NVME
Power Supply	Type	NA, 12V DC-IN Port
System Fan	Fan	4 x system fans (PF 4056 1BX)
Key part	CPU(SoC)	AMD 7402P 24C/48T, 2.8GHz
	DIMM	DDR4 2666 ECC RDIMM 16GB x4
	LAN Card	2 x 10GbE, Intel® x710-DA2 for OCP 3.0
	SSD	2 x 2.5" SATA3 SSD Intel® S4510 240G 2 x 2.5" SATA3 SSD Intel® S4510 480G
Processor System	CPU	Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
System Memory	Capacity	Eight-Channel DDR4 3200/2933/2666 RDIMM, LRDIMM, max. 512GB (RDIMM), 1024GB(LRDIMM); default DDR4 2666 ECC RDIMM 16GB x4

2U-Open19-m3.xlarge.x86



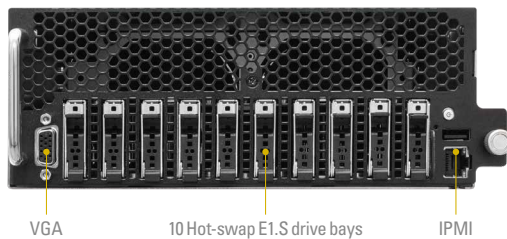
1U/2U High Density Storage



3200



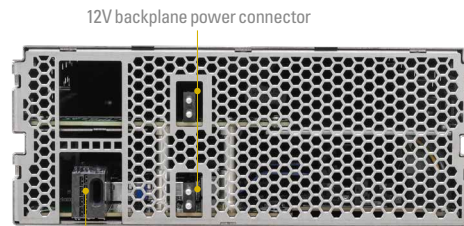
25Gbase-T



VGA

10 Hot-swap E1.S drive bays

IPMI



12V backplane power connector

Backplane data connector

2U-Open19-m3.xlarge.x86

CPU	Socket	1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	OPEN19 brick (1/2 wide 2RU)
	Chassis Dimension	901.7 x 212.3 x 83.6 mm (35.5" x 8.4" x 3.3")
Front Panel	Buttons	Power button w/ LED
	I/O	1 Type-A (USB3.2 Gen1), 1 DB15 (VGA), 1 dedicated IPMI
Rear Panel	Data connector	1 Open19 Backplane data connector (4x2 IMPEL), supports up to 4x25GbE with NCSI (depending on OCP NIC 3.0 card installed)
	Backplane power connector	1 Open19 12V backplane power connector
Expansion Slots	Internal	1 dual-slot FHFL PCIe4.0 x16 or 2 FHFL single-slot PCIe4.0 x16 ^{Note1}
Storage	External	10 Hot-swap E1.S (PCIe3.0 x4) drive bays
	Internal	2 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor
System Cooling	Fan	2 system fans (80x56 mm)
Power Supply	Module	NA, 12V DC-IN Port
Key part	CPU	1 x AMD EPYC 7713P
	DIMM	8 x DDR4 3200 64GB RDIMM
	LAN card	1 x Intel® E810-XXVDA2x25G
	SSD	1 x M.2 240GB SSD 2 x Intel® SSD DC P4511 Series (4.0TB, EDSFF S 5.9mm PCIe 3.1 x4, 3D2, TLC)
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

Note1: Please consult with sales team for the riser card selection

2U-Open19-SKU MILAN2



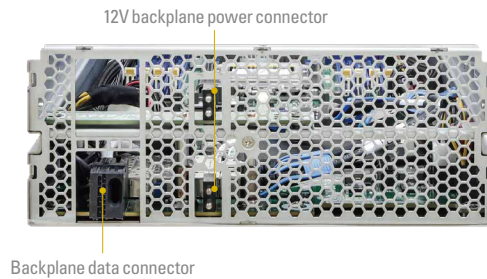
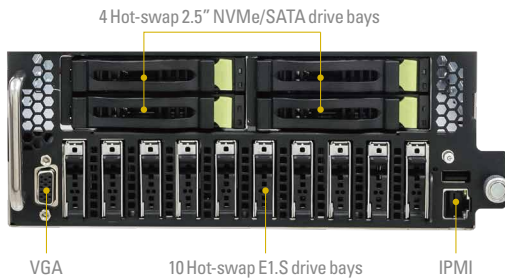
1U/2U High Density Storage



3200



PCI-E4.0

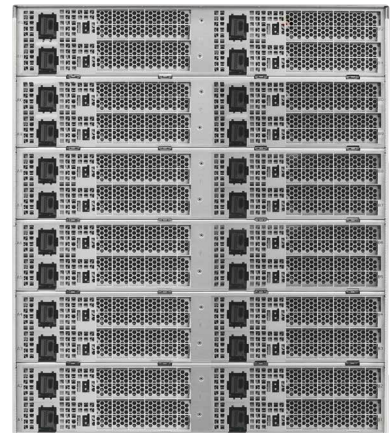
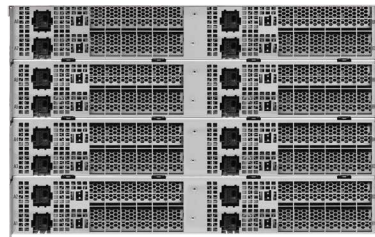


2U-Open19-SKU MILAN2

CPU	Socket	1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors
DIMM	Slot	8+8 DDR4 288-pin (1DPC)
System Physical Status	Form Factor	OPEN19 brick (½ wide 2RU)
	Chassis Dimension	901.7 x 212.3 x 83.6 mm (35.5" x 8.4" x 3.3")
Front Panel	Buttons	Power button w/ LED
	I/O	1 Type-A (USB3.2 Gen1), 1 DB15 (VGA), 1 dedicated IPMI
Rear Panel	Data connector	1 Open19 Backplane data connector (4x2 IMPEL), supports up to 4x25GbE with NCSI (depending on OCP NIC 3.0 card installed)
	Backplane power connector	1 Open19 12V backplane power connector
Storage	External	10 Hot-swap E1.S (PCIe3.0 x4) drive bays 4 Hot-swap 2.5" NVMe (PCIe4.0 x4)/SATA drive bays
	Internal	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260 form factor [CPU0]
System Cooling	Fan	2 system fans (80 x 56 mm)
Power Supply	Module	NA, 12V DC-IN Port
Management		ASPEED BMC AST2500
Security		TPM by optional accessory

8RU cage

12RU cage



	8RU cage	12RU cage
System	Open19 form factor	Open19 form factor
Form Factor	8RU cage, fixed divider wall	12 RU cage, fixed divider wall
Chassis Model	938.3mm x 482.1mm x 355mm (L/W/H, w/o ear)	938.6mm x 482.1mm x 533mm (L/W/H, w/o ear)
Dimensions		

About ASRock Rack

ASRock Rack Inc., established in 2013, specialized in the field of Cloud Computing server hardware. Inheriting ASRock's design concepts, Creativity, Consideration and Cost-effectiveness, the company is dedicated bringing the Server Industry out of the box thinking with the passion to innovate. Leveraged by ASRock's growing momentum and distribution channels, this young and vibrant company targets at the booming market of cloud computing and commits to serve the market with user friendly, eco-friendly, Do-It-Yourself Server hardware, featuring flexible and reliable products.

Barebones Series

Leveraging the Versatile Portfolio, ASRock Rack Barebones Series provide the solutions for Cloud, AI, Deep Learning and 5G with high density and multi-node of computing, storage and networking with lower TCO and greater efficiency.

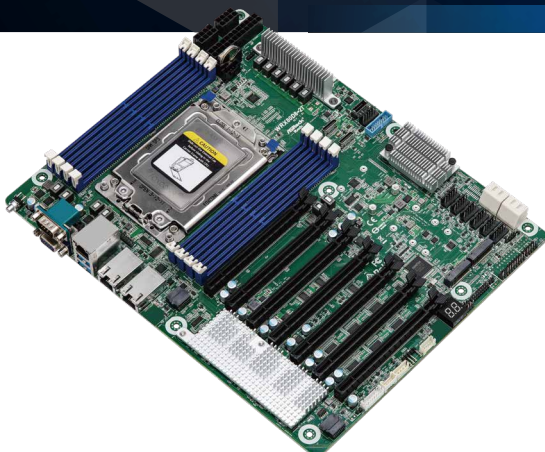
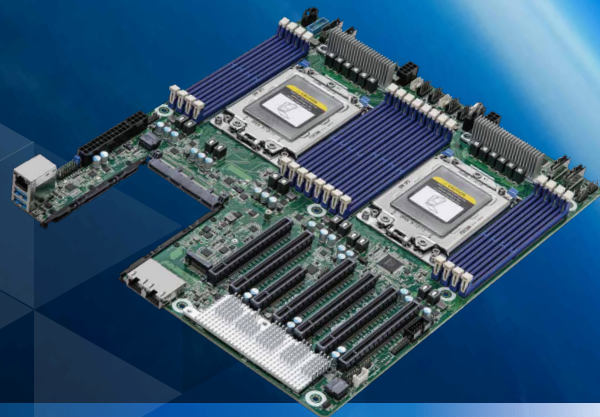


OPEN 19

The Open19 project is an industry specification that defines a cross-industry common server form factor; with the open standard technology and wide levels of adoption, the Open19 creates more flexible and economic for data center and edge solutions as well as the operators of all sizes.

Server Motherboards

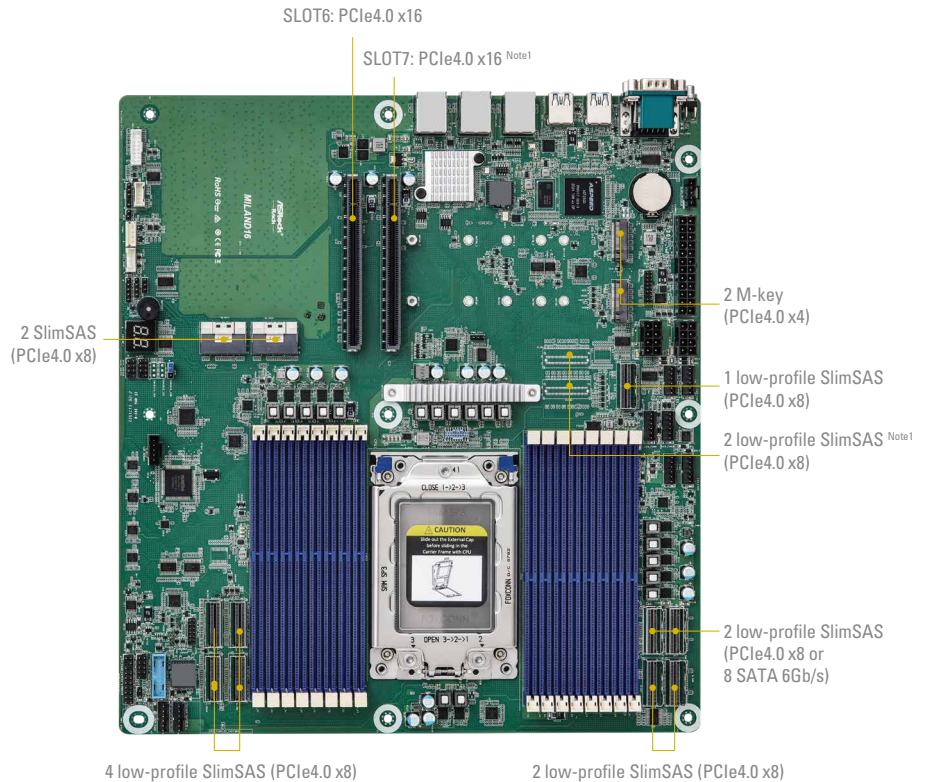
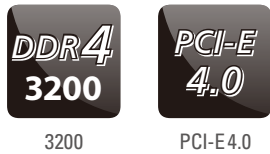
With the best performance, product lifetime, and optimized resource utilization, ASRock Rack Server Motherboards are famous and popular among industry investment, especially for the flexibility and versatility.



Workstation Motherboards

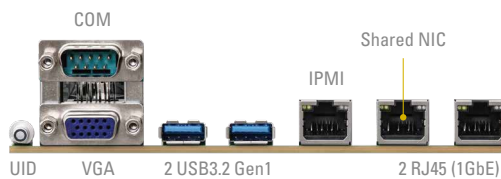
Featuring reliable, quiet, and power-efficient, these workstations are best tools for the content creators.

MILAND16



Application

- All-flash storage server
- Cloud computing



		MILAND16
Form Factor		EEB (12" x 13")
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology) series processors System on chip
Memory	Capacity	16 DDR4 288-pin DIMM Slots (2DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	SLOT7: PCIe4.0 x16 ^{Note1} SLOT6: PCIe4.0 x16 2 low-profile SlimSAS ^{Note1} (PCIe4.0 x8) 2 SlimSAS (PCIe4.0 x8), 7 low-profile SlimSAS (PCIe4.0 x8) 2 low-profile SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s)
Storage	M.2 SATA port	2 M-key (PCIe4.0 x4), supports 22110/2280/2260/2242/2230 form factor 16 SATA 6Gb/s: 2 SlimSAS
Network	RJ45	2 RJ45 (1GbE) by Intel® i350-AM2
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 DB9 (COM) 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules

Note1: SLOT7 shared lanes with SLIM1 and SLIM2; SLIM1 and SLIM2 support possible by depopulating SLOT7 and other BOM change

ROMED16QM3



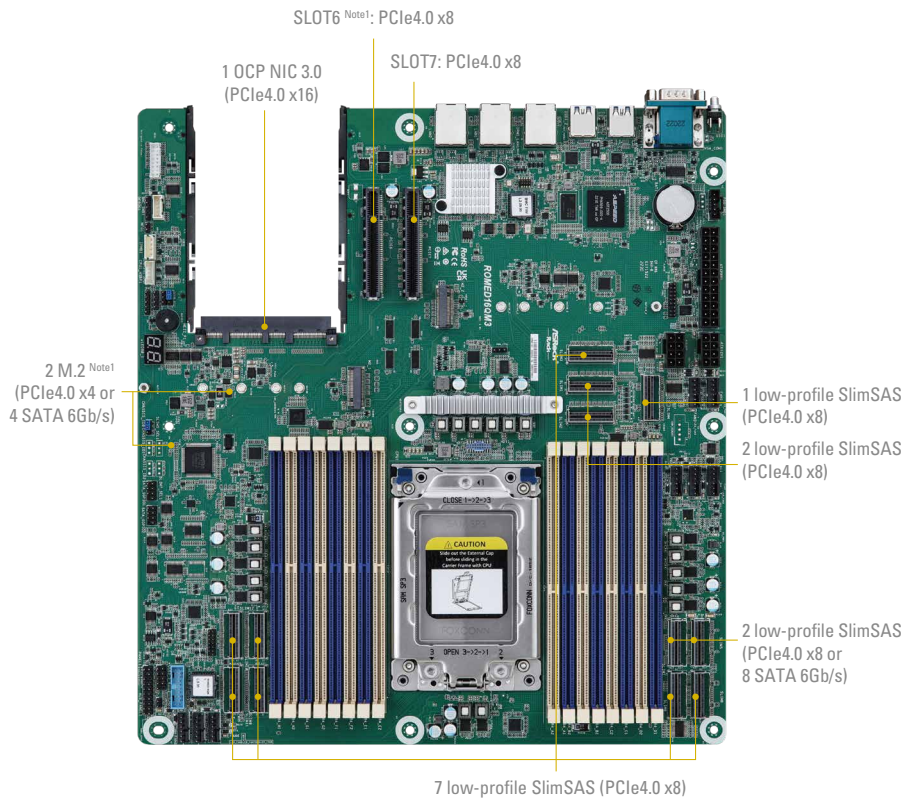
3200



PCI-E 4.0

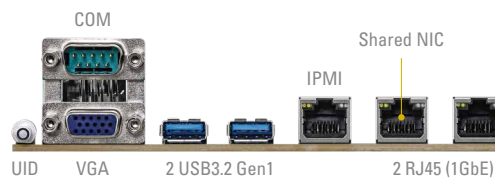


OCP NIC 3.0



Application

- CSP
- All-flash storage server



		ROMED16QM3
Form Factor		EEB (12" x 13")
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	16 DDR4 288-pin DIMM Slots (2DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	SLOTT7: PCIe4.0 x8, SLOTT6: PCIe4.0 x8 ^{Note1} 10 low-profile SlimSAS (PCIe4.0 x8) 2 low-profile SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s)
Storage	M.2 SATA port	2 M-key ^{Note1} (PCIe4.0 x4 or 4 SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor 24 SATA 6Gb/s: 2 SlimSAS, 2 M.2
Network	RJ45 OCP NIC	2 RJ45 (1GbE) by Intel® I350-AM2 1 OCP NIC 3.0 (PCIe4.0 x16)
Management	BMC Dedicated IPMI	ASPEED AST2500: IPMI 2.0 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 rear DB9 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules

Note1: SLOT6 share lanes with 2 M.2, both M.2 sockets will disable when SLOT6 is occupied

ROMED8-2T/BCM

ROMED8



4094



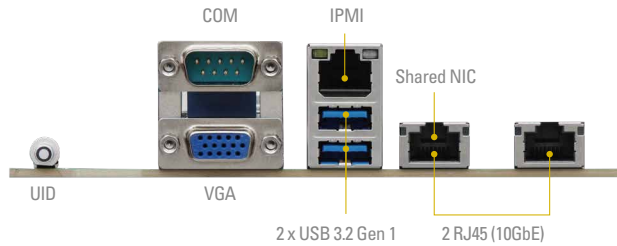
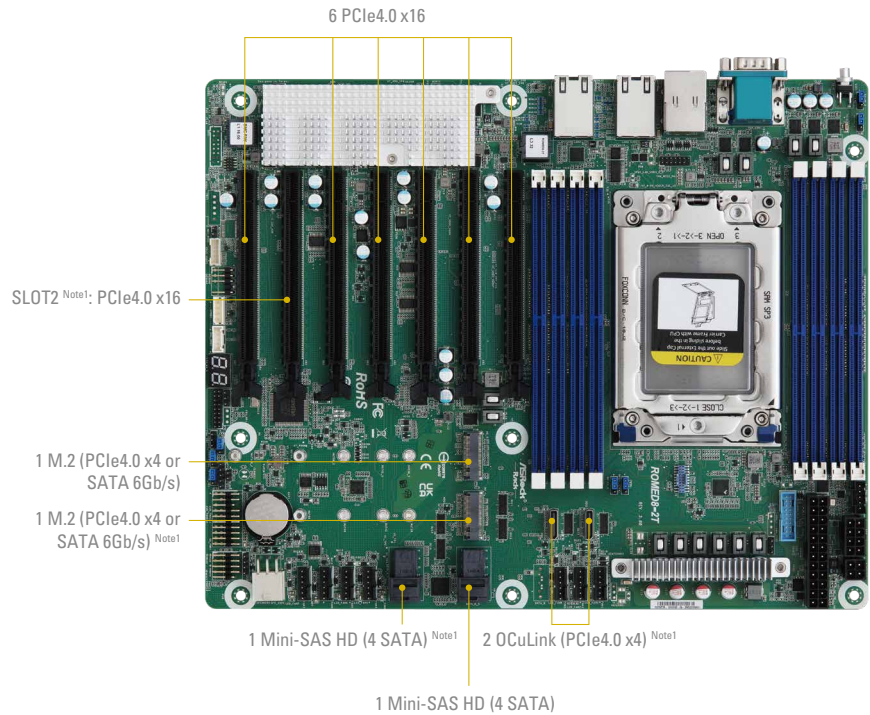
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10Gbase-T



PCI-E 4.0



Application

- Mainstream Server/ Workstation
- Web Hosting

		ROMED8-2T/BCM	ROMED8
Form Factor			ATX (12" x 9.6")
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip	
Memory	Capacity	8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz	
Expansion	PCIe slot Others	7 PCIe4.0 x 16 2 OCuLink (PCIe4.0 x4) ^{Note1}	
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor ^{Note1} 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor 10 SATA 6Gb/s: 2 Mini-SAS HD ^{Note1} , 2 M.2	
Network	RJ45	2 RJ45 (10GbE) by BCM57416	2 RJ45 (1GbE) by BCM5720L
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E	
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header 1 DB9 (COM) 1 DB15 (VGA)	
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules	

Note1: SLOT2 (by jumper setting)

- PCIe4.0 x16
- PCIe4.0 x8 when requiring more than 1 M.2 and/or Mini-SAS HD
- No function when requiring OCuLink

ROMED8-2T

ROMED8-NL



4094



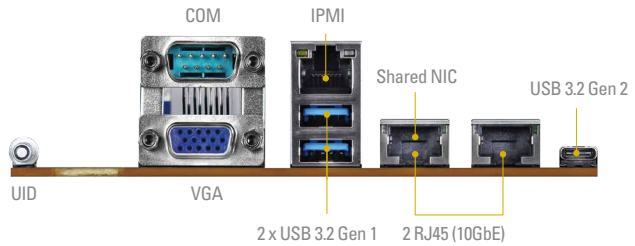
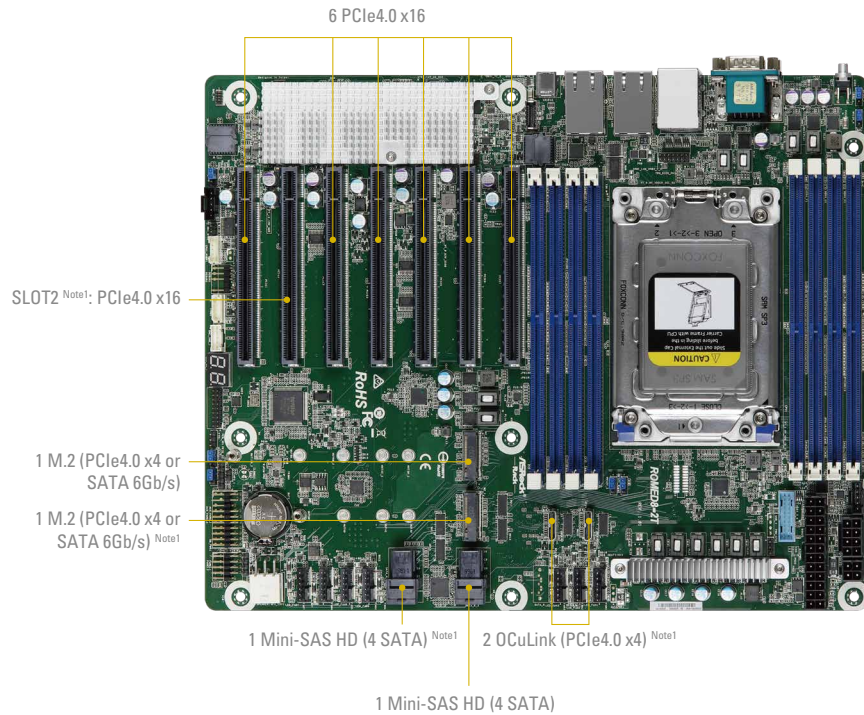
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10Gbase-T



PCI-E 4.0



Application

- Mainstream Server/ Workstation
- Web Hosting

		ROMED8-2T	ROMED8-NL
Form Factor		ATX (12" x 9.6")	
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip	
Memory	Capacity	8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz	
Expansion	PCIe slot Others	7 PCIe4.0 x 16 2 OCuLink (PCIe4.0 x4) ^{Note1}	
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor ^{Note1} 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor 10 SATA 6Gb/s: 2 Mini-SAS HD ^{Note1} , 2 M.2	
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	N/A
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E	
I/O	USB COM port Video	2 USB3.2 Gen2 ports: 1 rear Type C, 1 via Type C header 4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header 1 DB9 (COM) 1 DB15 (VGA)	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules	

Note1: SLOT2 (by jumper setting)

- PCIe4.0 x16
- PCIe4.0 x8 when requiring more than 1 M.2 and/or Mini-SAS HD
- No function when requiring OCuLink

ROMED8U-2T



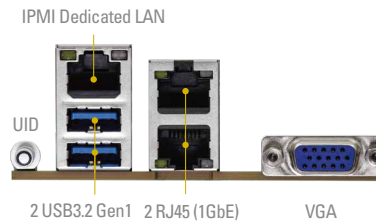
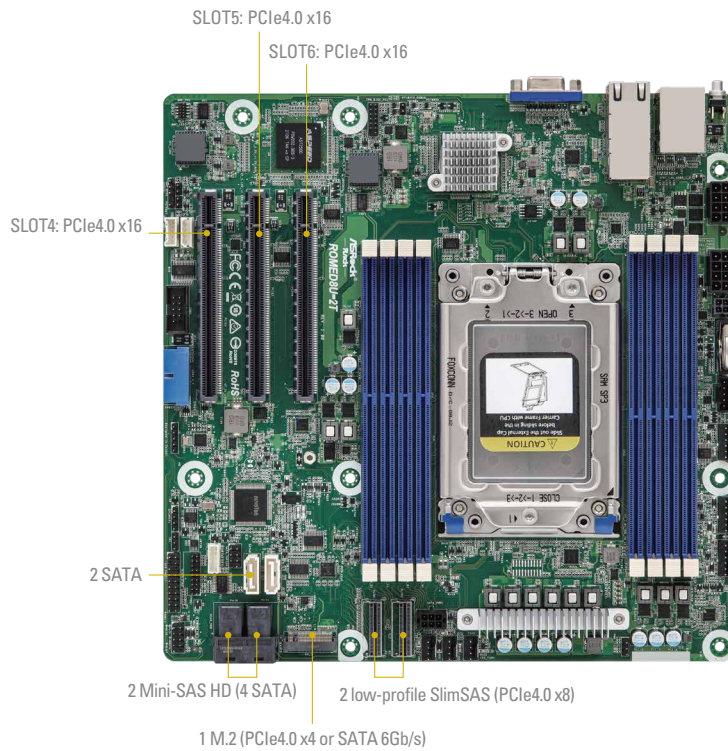
3200



PCI-E 4.0



10Gbase-T



Application

- Compact storage server
- Enterprise NAS
- High-end workstation

		ROMED8U-2T
Form Factor		Micro-ATX (9.6" x 9.6")
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	3 PCIe4.0 x16 2 low-profile SlimSAS (PCIe4.0 x8)
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280 form factor 11 SATA 6Gb/s: 2 Mini-SAS HD, 2 SATA 7-pin, 1 M.2
Network	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 (9-pin) header 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules

ROMED6U-2L2T



4094



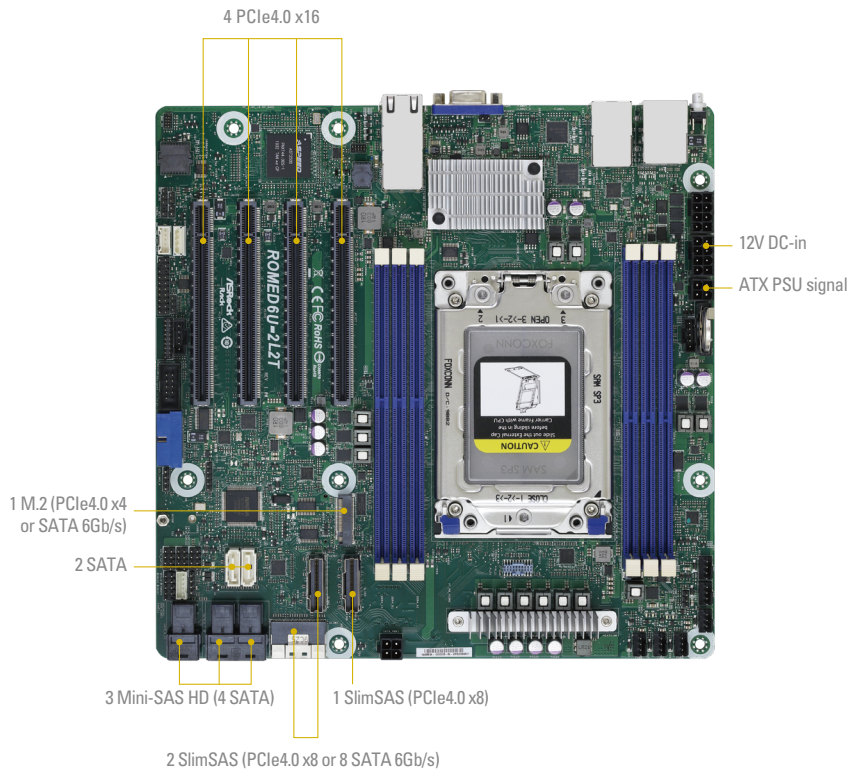
Storage



PCI-E 4.0



True 4 PCIe x16 slot



Application

- Storage Server
- Enterprise NAS
- Compact GPU tower



		ROMED6U-2L2T
Power source		Supports ATX PSU or 12V DC-in
Form Factor		Micro-ATX (9.6" x 9.6")
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	6 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	4 PCIe4.0 x16 2 SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) 1 SlimSAS (PCIe4.0 x8)
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280 form factor 1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2260 form factor, back side [BTO] 31 SATA 6Gb/s: 2 SlimSAS, 3 Mini-SAS HD, 2 SATA 7-pin, 1 M.2
Network	RJ45	2 RJ45 (10GbE) by Intel® X710-AT2 2 RJ45 (1GbE) by Intel® i210
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 (9-pin) header 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) TPM modules

ROMED4ID-2T



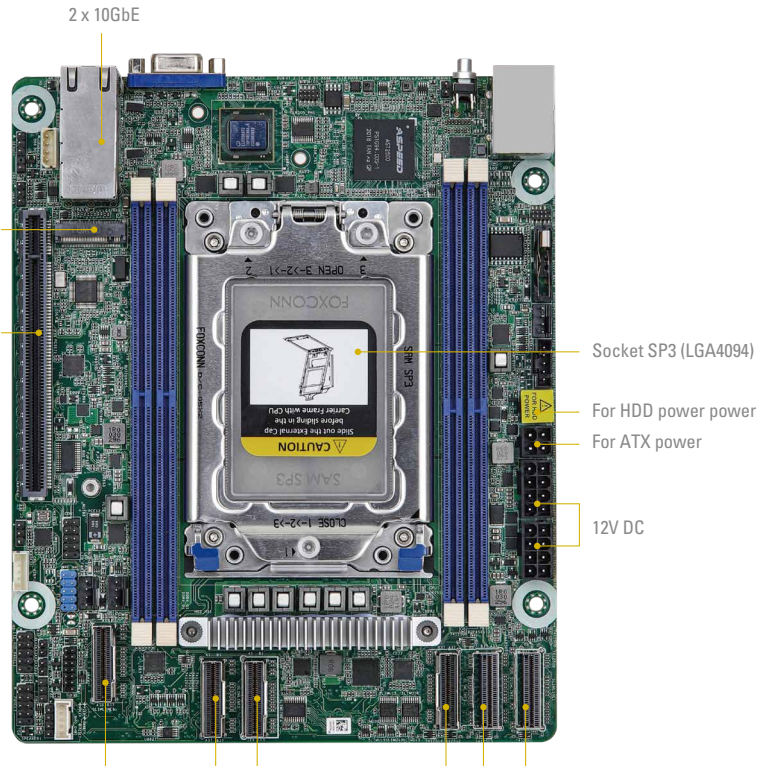
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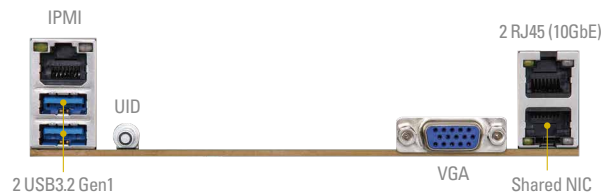


10Gbase-T



Application

- Edge Server
- Multi-node server



		ROMED4ID-2T
Form Factor		Deep mini-ITX (6.7" x 8.2")
Processor System	CPU FCH	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	4 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	1 PCIe.4.0 x16 4 SlimSAS (PCIe.4.0 x8), 2 low-profile SlimSAS (PCIe.4.0 x8 or 8 SATA 6Gb/s)
Storage	M.2 SATA port	1 M-key (PCIe.4.0 x4 or SATA 6Gb/s), supports 2280 form factor 17 SATA 6Gb/s: 2 SlimSAS, 1 M.2
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2
Management	BMC Dedicated IPMI	ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	2 USB3.2 Gen1 ports: 2 rear Type A 2 USB2.0 ports: 2 via 9-pin header 1 (9-pin) header 1 DB15 (VGA)
Security	TPM	Supports 13-pin (SPI) TPM modules

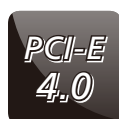
ROMED8HM3



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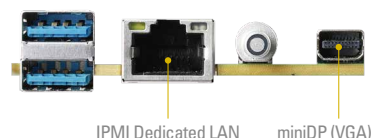
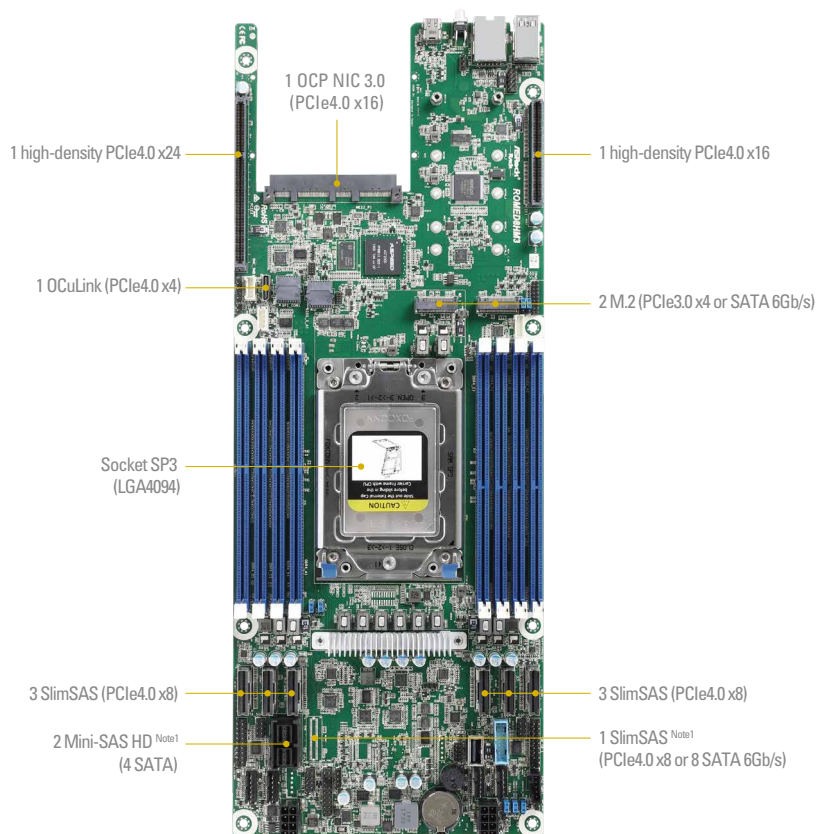
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PCI-E 4.0

Application

- Edge Server
- Multi-node Server



		ROMED8HM3
Form Factor		Half-Width (6.5" x 17")
Processor System	CPU FCH	1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot OCP Others	1 high density PCIe 4.0 x24, 1 high-density PCIe 4.0 x16 1 OCP NIC 3.0 (PCIe4.0 x16) 1 OCuLink (PCIe4.0 x4), 1 SlimSAS ^{Note1} (PCIe4.0 x8 or 8 SATA 6Gb/s) , 6 SlimSAS (PCIe4.0 x8)
Storage	M.2 SATA port	2 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 22110/2280/2260/2242/2230 form factor 10 SATA 6Gb/s: 2 Mini-SAS HD ^{Note1} , 2 M.2
Network	RJ45	-
Management	BMC Dedicated IPMI	ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header 1 USB2.0 port: 1 via vertical Type A 1 (9-pin) header 1 Mini-DisplayPort (VGA)
Security	TPM	Supports 17-pin (LPC) TPM modules

Note1: SlimSAS7 (BTO) share lanes with Mini-SAS HD

ROMED8QM-2T

ROMED8QM-NL



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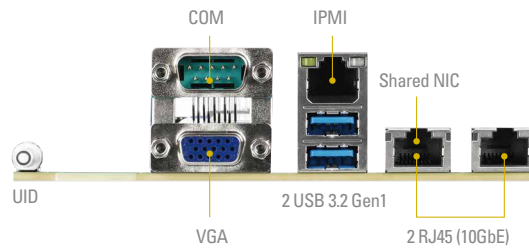
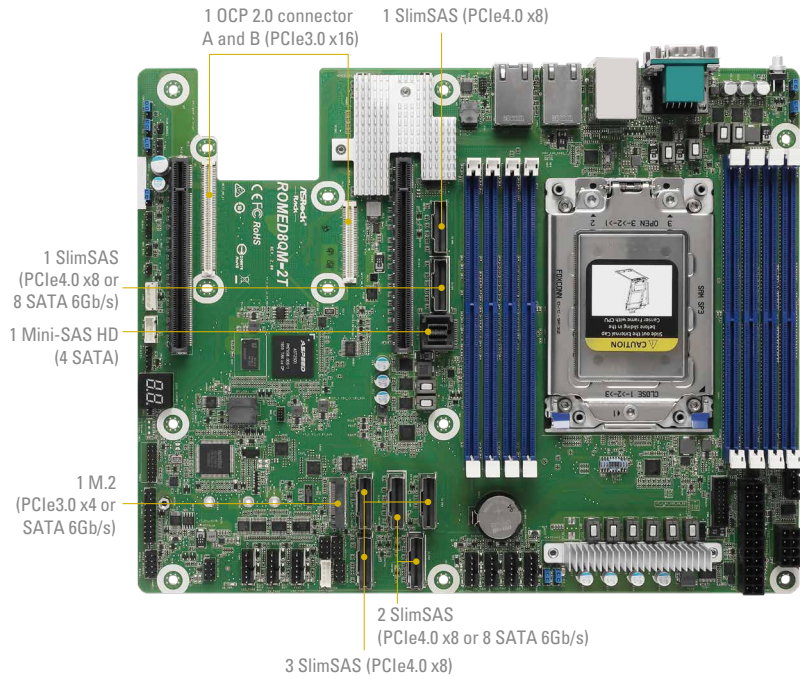
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10Gbase-T



PCI-E 4.0



Application

- NVMe Storage Server
- Web Hosting
- General Purpose Server

		ROMED8QM-2T	ROMED8QM-NL
Form Factor		ATX (12" x 9.6")	
Processor System	CPU FCH	1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip	
Memory	Capacity	8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 2933MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz	
Expansion	PCIe slot Others	2 PCIe4.0 x16 3 SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) 4 SlimSAS (PCIe4.0 x8)	
Storage	M.2 SATA port	1 M-key (PCIe3.0 x4 or SATA 6Gb/s), supports 2280/2242 form factor 29 SATA 6Gb/s: 3 SlimSAS, 1 Mini-SAS HD, 1 M.2	
Network	RJ45 OCP NIC	2 RJ45 (10GbE) by Intel® X550-AT2	N/A
Management	BMC Dedicated IPMI	1 OCP 2.0 connector A and B (2 PCIe3.0 x8) ASPEED AST2500 1 RJ45 via Realtek RTL8211E	
I/O	USB COM port Video	4 USB.3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header 1 DB9 (COM) 1 DB15 (VGA)	
Security	TPM	Supports 17-pin (LPC) TPM modules	

EPYCD8-2T

EPYCD8



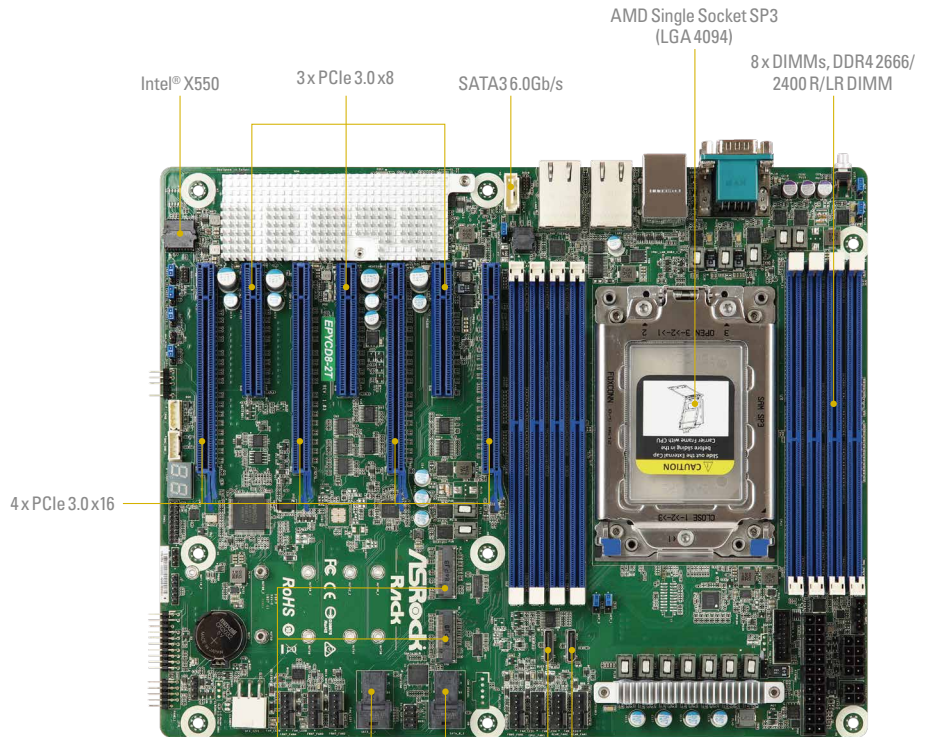
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10Gbase-T



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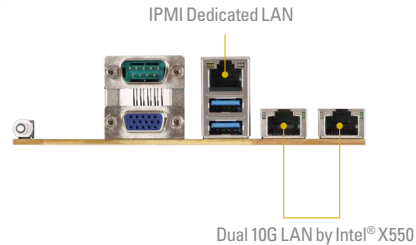


Application

- Cloud and Virtualization Applications
- Database Processing & Storage
- High End Enterprise Server

SKU Option

	EPYCD8	EPYCD8-2T
LAN Controller	Intel® i350	Intel® X550

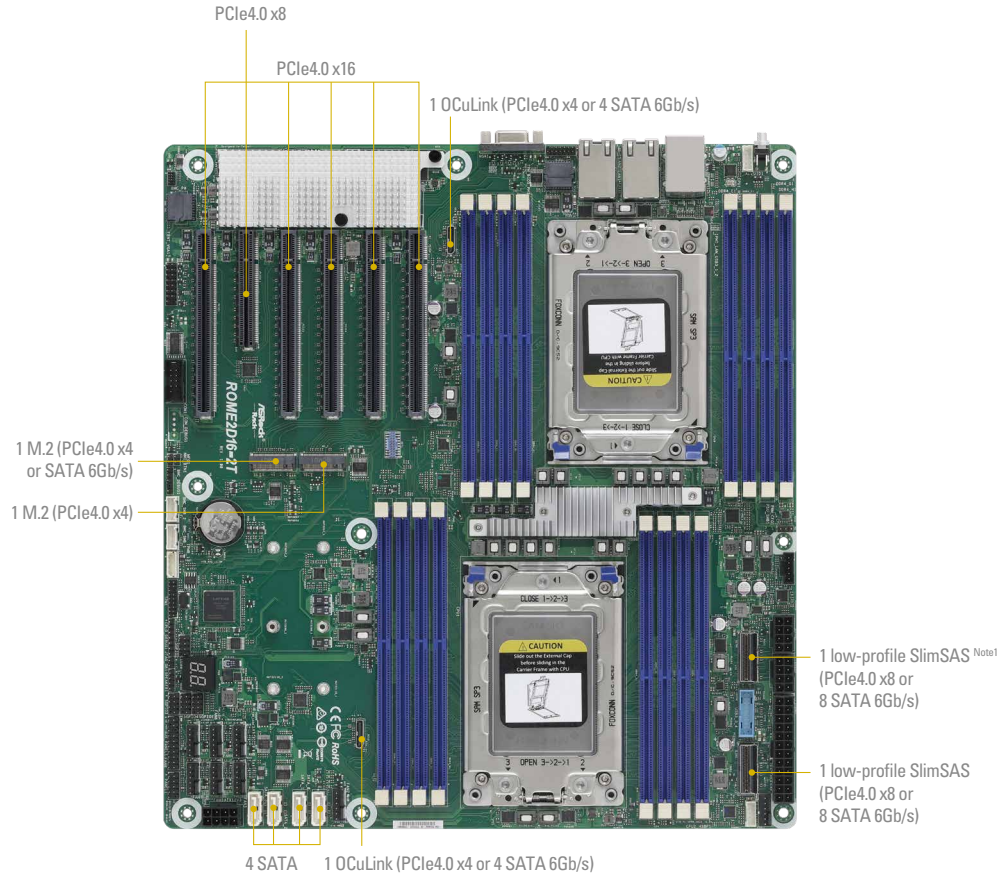


		EPYCD8	EPYCD8-2T
Form Factor		ATX(12" x9.6")	
Processor System	CPU	1 Socket SP3 (LGA4094), Supports AMD EPYC™ 7002/7001 series processor family	
	FCH	System on chip	
Memory		8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 32GB each, max. 3200MHz LRDIMM up to 64GB each, max. 2666MHz	
Storage	SATA controller	9 x SATA3 6.0 Gb/s (from 2x mini SAS HD), 1 SATA DOM	
Expansion Slots		4x PCIE3.0x16, 3x PCIE3.0x8	
Ethernet	LAN Controller	Intel® i350	Intel® X550
	LAN Port	RJ45:2+1(IPMI)	RJ45:2(10G)+1(IPMI)
System management	BMC Controller	ASPEED 2500: IPMI (Intelligent Platform Management Interface) 2.0 with Ickvm, vMedia support	
	IPMI Dedicated LAN	1 x Realtek RTL8211E for dedicated management LAN	
USB 3.0		4 USB3.0 ports: 2 rear Type A, 2 via 19-pin header	
M.2		2(M2_1: 2230/2242/2260/2280, SATA/PCIE(X4); M2_2:2230/2242/2260/2280/22110, SATA/PCIE(X4))	

ROME2D16-2T

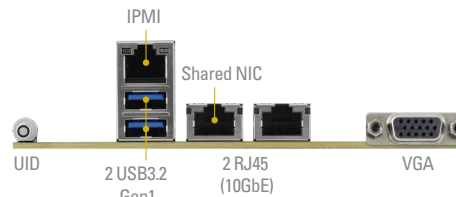
ROME2D16-2L+

ROME2D16-NL



Application

- Mainstream server for SMB
- High-end workstation/ industrial application
- Tier2/3 CSPs
- Security appliances

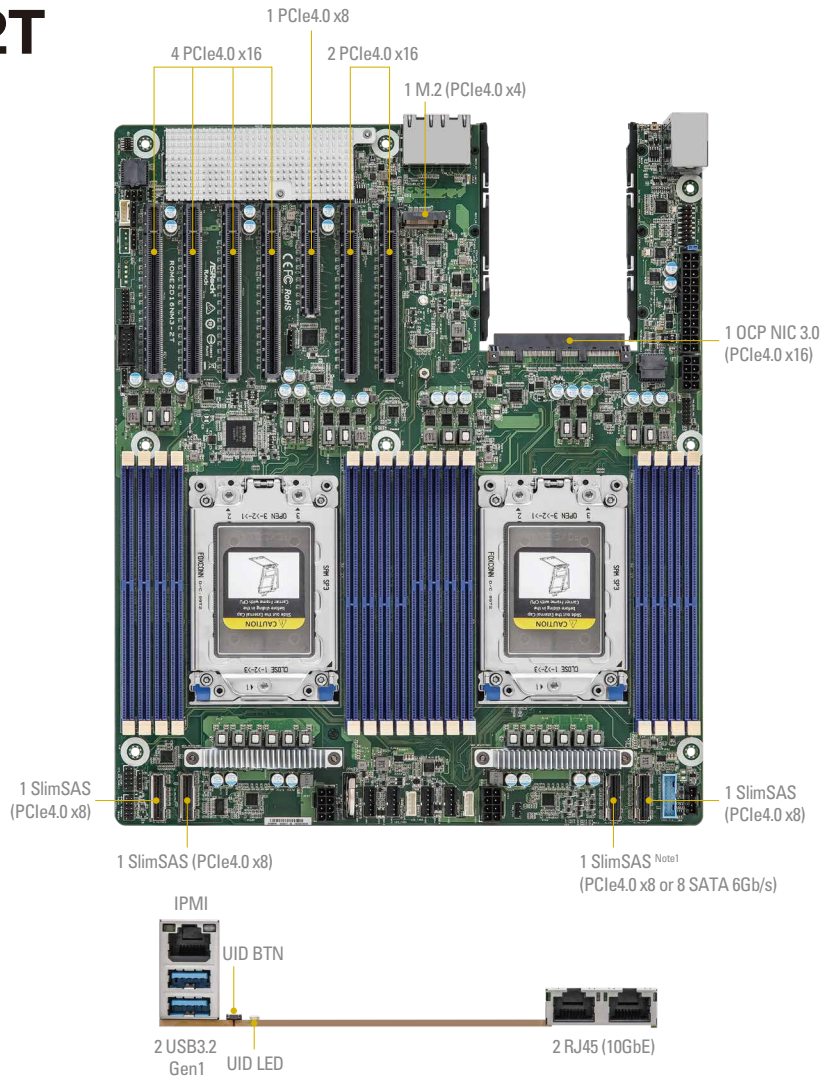


		ROME2D16-2T	ROME2D16-2L+	ROME2D16-NL
Form Factor			EEB (12" x 13")	
Processor System	CPU FCH	1+1 SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip		
Memory	Capacity	8+8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz		
Expansion	PCIe slot	3 PCIe4.0 x16 [CPU0] 2 PCIe4.0 x16 [CPU1] 1 PCIe4.0 x8 [CPU1]		
	Others	2 OCuLink (PCIe4.0 x4 or 4 SATA 6Gb/s) [CPU0, CPU1] 1 low-profile SlimSAS ^{Note1} (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0] 1 low-profile SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU1]		
Storage	M.2	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280/2242 form factor [CPU0] 1 M-key (PCIe4.0 x4), supports 22110/2280/2242 form factor [CPU0]		
	SATA port	21 SATA 6Gb/s: 1 SlimSAS, 2 Oculink, 4 SATA 7-pin, 1 M.2		
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	2 RJ45 (1GbE) by Intel i350	N/A
Management	BMC	ASPEED AST2500		
	Dedicated IPMI	1 RJ45 via Realtek RTL8211E		
I/O	USB	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header		
	COM port	1 DB9 (COM), 1 (9-pin) header		
	Video	1 DB15 (VGA), 1 (15-pin) header		
Security	TPM	Supports 17-pin (LPC) or 13-pin (SPI) TPM modules		

Note1: SlimSAS from CPU0 support PCIe only while installing 2 processors

ROME2D16NM3-2T

ROME2D16NM3-NL



Application

- Software-defined application
- HCI

		ROME2D16NM3-2T	ROME2D16NM3-NL
Form Factor		EEB (12" x 14.2")	
Processor System	CPU FCH	1+1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip	
Memory	Capacity	8+8 DDR4 288-pin DIMM Slots (1DPC), supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz	
Expansion	PCIe slot Others	2 PCIe4.0 x16 [CPU0] 1 PCIe4.0 x8 [CPU0] 4 PCIe4.0 x16 [CPU1] 1 SlimSAS ^{Note1} (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0] 1 SlimSAS (PCIe4.0 x8) [CPU0] 2 SlimSAS (PCIe4.0 x8) [CPU1]	
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4) or 4 SATA 6Gb/s, supports 2280/2242 form factor [CPU0] Up to 12 SATA 6Gb/s: 1 SlimSAS, 1 M.2	
Network	RJ45 OCP NIC	2 RJ45 (10GbE) by Intel® X710-AT2	N/A 1 OCP NIC 3.0 (PCIe4.0 x16) [CPU0]
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E	
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 (9-pin) header 1 (15-pin) header	
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules	

Note1: SLIM1 support PCIe only while installing 2 processors

ROME2D32LM3



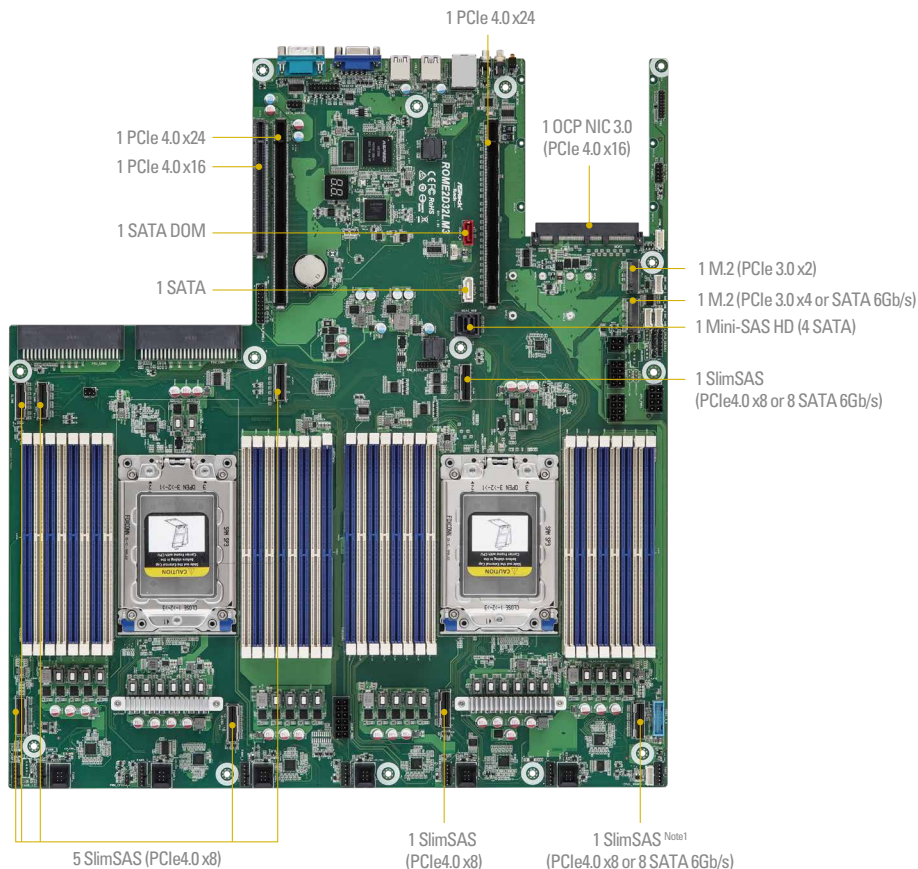
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OCP NIC 3.0



Application

- HCI
- I/O Virtualization
- Mission Critical



		ROME2D32LM3
Form Factor		Proprietary L-shape (18.8607" x 17.0149")
Processor System	CPU FCH	1+1 Socket SP3 (LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	16+16 DDR4 288-pin DIMM Slots (2DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	1 PCIe4.0 x24 [CPU0] 1 PCIe4.0 x24, 1 PCIe4.0 x16 [CPU1] 1 SlimSAS (PCIe4.0 x8) [CPU0], 2 SlimSAS ^{Note1} (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0], 5 SlimSAS (PCIe4.0 x8) [CPU1]
Storage	M.2 SATA port	1 M-key (PCIe 3.0 x4 or SATA 6Gb/s), supports 2280/2242 form factor 1 M-key (PCIe 3.0 x2), supports 2280/2260/2242/2230 form factor 15 SATA 6Gb/s: 1 SlimSAS, 1 Mini-SAS HD, 1 SATA DOM, 1 SATA 7-pin, 1 M.2
Network	OCP NIC	1 OCP NIC 3.0 (PCIe4.0 x16) [CPU0]
Management	BMC Dedicated IPMI	ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type-A, 2 via 19-pin header 1 DB9 (COM) 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules

Note1: SLIM1 support PCIe only while installing 2 processors

ROME2D32TM3



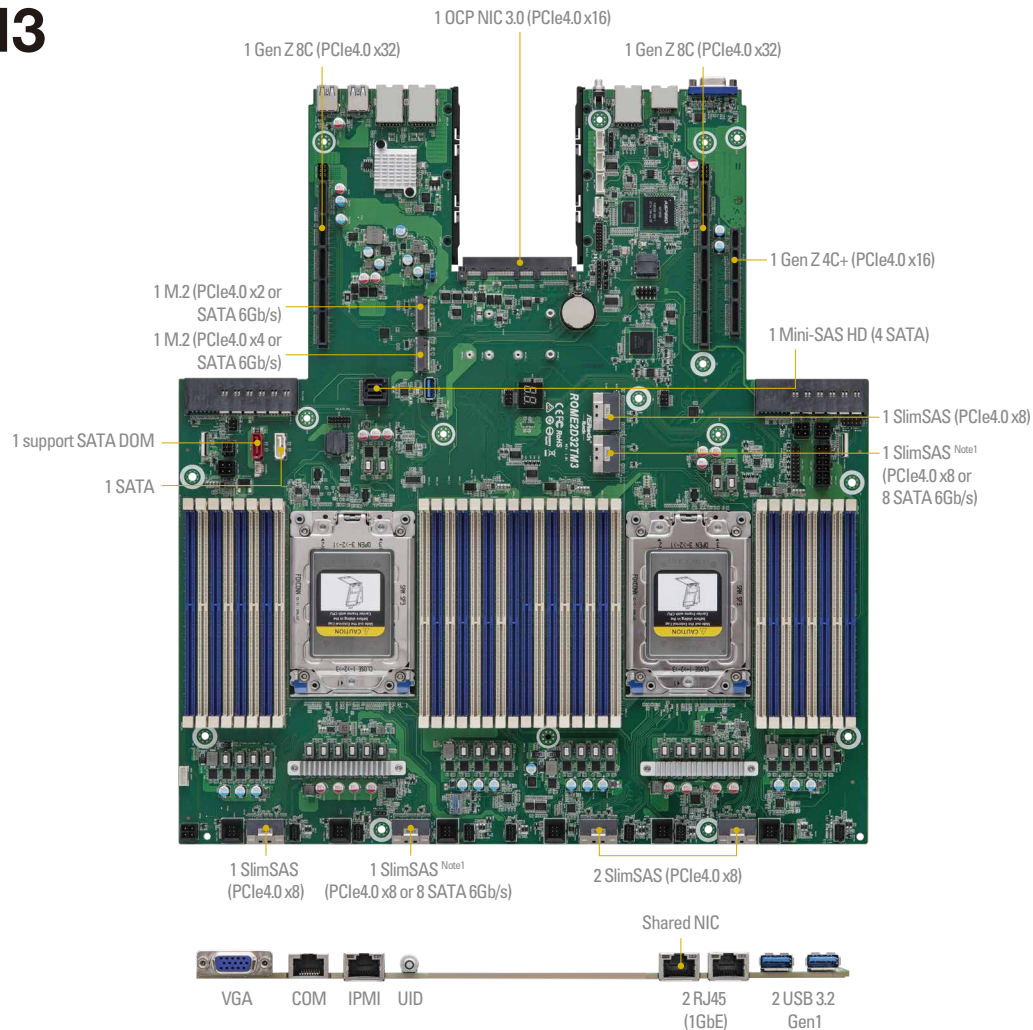
OCP NIC 3.0



3200



PCI-E 4.0



Application

- Software-defined application
- E-commerce
- HCI

		ROME2D32TM3
Form Factor		Proprietary T-shape (18.8607" x17.0149")
Processor System	CPU FCH	1+1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	16+16 DDR4 288-pin DIMM Slots (2DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	1 Gen Z 8C (PCIe4.0 x32) [CPU0] 1 Gen Z 8C (PCIe4.0 x32) [CPU1] 1 Gen Z 4C+ (PCIe4.0 x16) [CPU1] 1 SlimSAS (PCIe4.0 x8) [CPU0] 2 SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0] [CPU1] ^{Note1} 3 SlimSAS (PCIe4.0 x8) [CPU1]
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 2280/2260/2242/2230 form factor [CPU0] 1 M-key (PCIe4.0 x2 or SATA 6Gb/s), supports 2280/2242 form factor [CPU0] 8 SATA 6 Gb/s: 1 MiniSAS-HD, 1 SATA 7-pin, 1 SATA DOM, 2 M.2
Network	RJ45 OCP NIC	2 RJ45 (1GbE) by Intel® i350-AM2 1 OCP NIC 3.0 (PCIe4.0 x16) [CPU0]
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	3 USB3.2 Gen1 ports: 2 rear Type-A, 1 via vertical Type-A 1 RJ45 (COM) 1 DB15 (VGA)
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules

Note1: SLIM2 support PCIe only while installing 2 processors. Please contact ASRock Rack for the cable supporting SATA interface

ROME2D32GM-2T

ROME2D32GM-NL



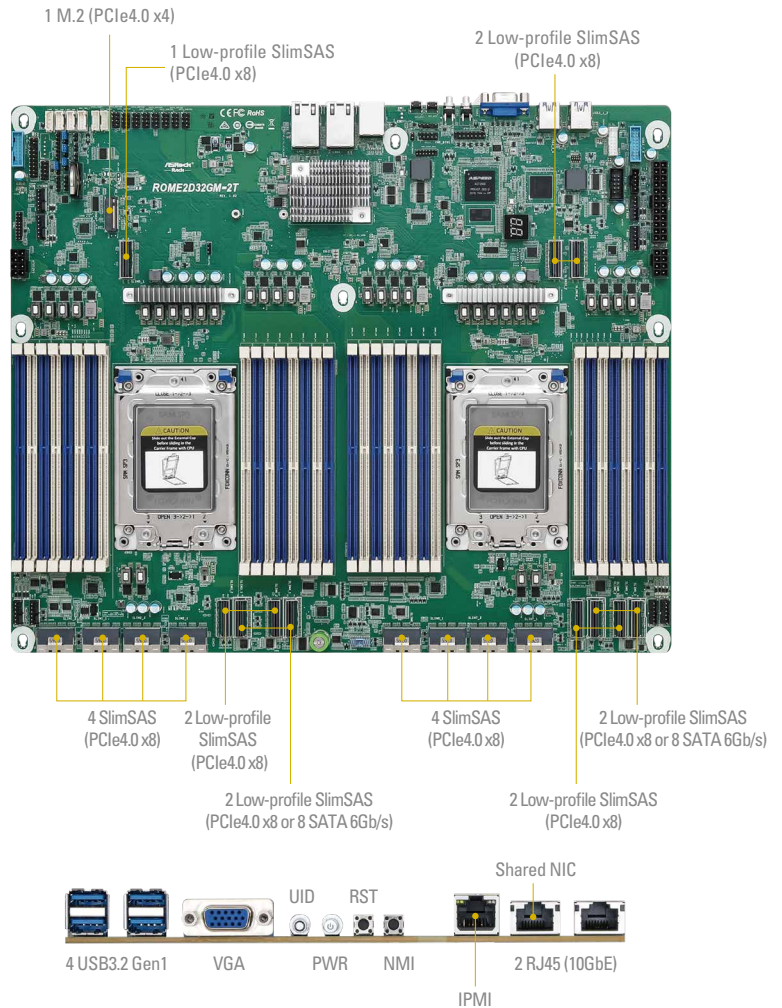
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10Gbase-T



Application

- All Flash NVMe Storage Server
- GPGPU Computing
- High-end Network Appliance

		ROME2D32GM-2T	ROME2D32GM-NL
Form Factor		Proprietary (16.53" x 14.56")	
Processor System	CPU FCH	1+1 Socket SP3 (LGA4094); Supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip	
Memory	Capacity	16+16 DDR4 288-pin DIMM Slots (2DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz	
Expansion	PCIe slot Others	N/A 4 SlimSAS (PCIe4.0 x8) [CPU0] 2 low-profile SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0] 3 low-profile SlimSAS (PCIe4.0 x8) [CPU0] 4 SlimSAS (PCIe4.0 x8) [CPU1] 2 low-profile SlimSAS (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU1] 4 low-profile SlimSAS (PCIe4.0 x8) [CPU1]	
Storage	M.2 SATA port	1 M-key (PCIe4.0 x4), supports 22110/2280 form factor [CPU0] 32 SATA 6Gb/s: 4 low-profile SlimSAS	
Network	RJ45	2 RJ45 (10GbE) by Intel® X550-AT2	N/A
Management	BMC Dedicated IPMI	ASPEED AST2500 1 RJ45 via Realtek RTL8211E	
I/O	USB COM port Video	8 USB3.2 Gen1 ports: 4 rear Type-A, 4 via 19-pin headers 1 (9-pin) header 1 DB15 (VGA), 1 (15-pin) header	
Security	TPM	Supports 17-pin (LPC) and 13-pin (SPI) TPM modules	

ROME2D16HM3



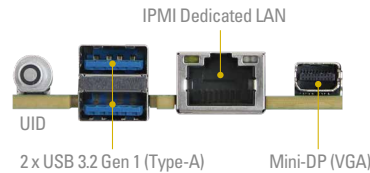
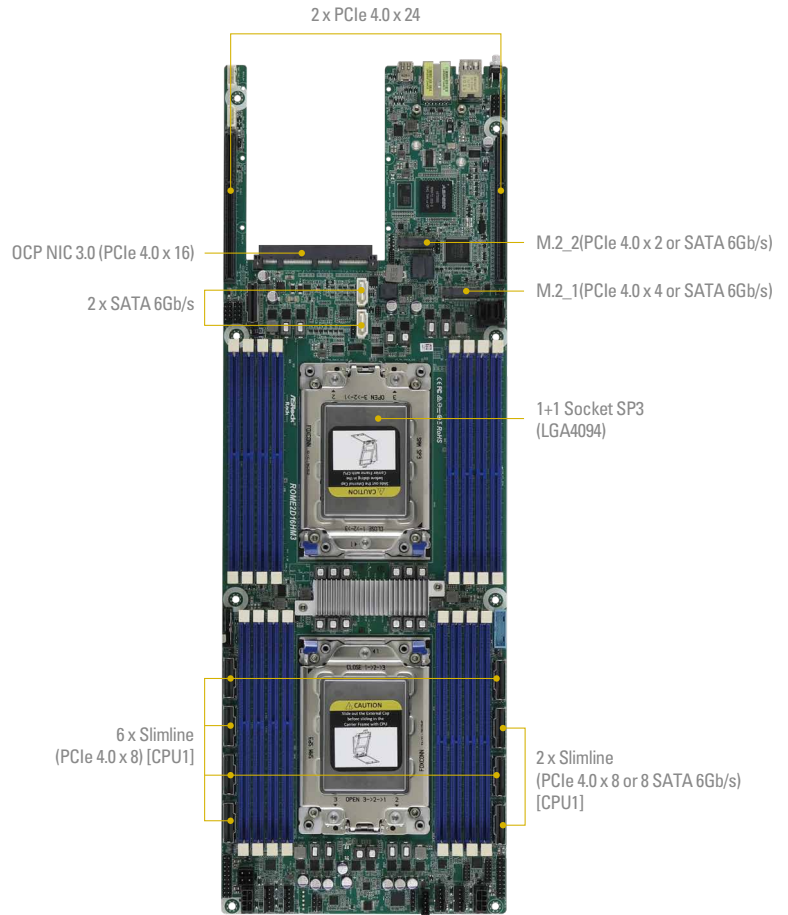
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3200



OCP NIC 3.0



Application

- Multi-node server
- HPC
- HCI
- Telco
- MEC

		ROME2D16HM3
Form Factor		Half-width, 6.6" x 20"
Processor System	CPU FCH	1+1 Socket SP3(LGA4094), supports AMD EPYC™ 7003 (with AMD 3D V-Cache™ Technology)/7002 series processors System on chip
Memory	Capacity	8+8 DDR4 288-pin DIMM Slots (1DPC); Supports: RDIMM up to 64GB each, max. 3200MHz LRDIMM up to 128GB each, max. 3200MHz RDIMM/LRDIMM-3DS up to 256GB each, max 3200MHz
Expansion	PCIe slot Others	2 high density PCIe4.0 x24 [CPU0] 6 Slimline (PCIe4.0 x8), 2 Slimline (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU1] 1 Slimline (PCIe4.0 x8 or 8 SATA 6Gb/s) [CPU0]
Storage	M.2	1 M-key (PCIe4.0 x4 or SATA 6Gb/s), supports 22110/2280 form factor [CPU0] 1 M-key (PCIe4.0 x2 or SATA 6Gb/s), supports 2280/2260 form factor [CPU0]
	SATA port	28 SATA 6Gb/s: 3 SlimSAS, 2 M.2, 2 SATA 7-pin ^{Note1}
Network	OCP NIC	1 OCP NIC 3.0 (PCIe4.0 x16) [CPU0]
Management	BMC Dedicated IPMI	ASPEED AST2500 : IPMI (Intelligent Platform Management Interface) 2.0 1 RJ45 via Realtek RTL8211E
I/O	USB COM port Video	4 USB3.2 Gen1 ports: 2 rear Type A, 2 via 19-pin header 1 (9-pin) header 1 Mini-DispalyPort (VGA)
Security	TPM	Supports 13-pin (SPI) TPM modules

Note1: Enabled when M2_1 populated with SATA device



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