

1U1S 4/6-GPGPU SERVER PLATFORM



Transport HX GA88-B8021

B8021G88V2HR-2T-N / B8021G88V2HR-2T-RM-N

AMD
EPYC



Front View



- (2) 2.5" Hot-Swap SSD/HDDs devices

Back View



- (1+1) 1,600W ERP1U, 80 PLUS Platinum

1U1S GPGPU server platform designed for AI/Machine Learning and HPC

- Single Socket SP3
- (7) PCIe x16 slots support up to (6) single-width or (4) double-width GPU
- (16) DDR4 DIMM slots support RDIMM/LRDIMM 2666/2400 ECC memory
- (2) 10GbE + (1) Dedicate IPMI GbE ports
- Onboard BMC w/ IPMI and iKVM support
- (1+1) 1,600W RPSU, 80+ Platinum

Summary Table

SKU	Processor	Max. PCIe slot
B8021G88V2HR-2T-N	(1) AMD EPYC™ 7001	(6) PCIe x16 slots
B8021G88V2HR-2T-RM-N	(1) AMD EPYC™ 7001 / 7002	(7) PCIe x16 slots

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Specifications

Top View

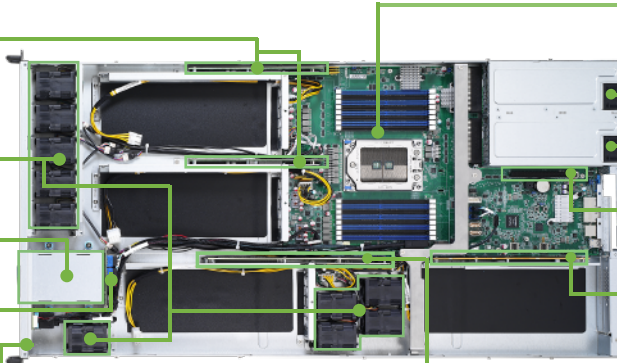
- Pre-install riser card
- (2) M5631-R16-1F-1 riser cards for (2) PCI-E Gen3 x16 slots

- System Fan
- Total (10) 4cm fans

- (2) 2.5" Hot-Swap SSD/HDDs

- HDD Backplane
- M1287G88-BP12-2

- Front panel board
- M1716G75-FPB



S8021GM2NR-2T

- (1) AMD EPYC™ 7001 Series Processor
- (16) DDR4 RDIMM/LRDIMM
- 2666/2400 slots
- (2) 10GbE + (1) Dedicate IPMI GbE ports

- (1+1) 1,600W RPSU
- 80 PLUS Platinum



Pre-install riser card

- (1) M2091-R riser card for
- (1) PCI-E Gen3 x16 slot

Pre-install riser card

- (1) M8021-R16-1L-1 riser card for
- (1) PCI-E Gen3 x16 slot

Pre-install riser card

- (1) M8021-R32-2L-2 riser card for
- (2) PCI-E Gen3 x16 slots

System	Form Factor	1U Rackmount
	Chassis Name	GA88
	Dimension (D x W x H)	34.84" x 17.24" x 1.71" (885 x 438 x 43.5mm)
	Motherboard	S8021GM2NR-2T #
	Motherboard Notification	# The motherboard not sold separately
	Gross Weight	26.5 kg (58.5 lbs)
	Net weight	13.5 kg (30 lbs)
Front Panel	Buttons	(1) RST, (1) PWR w/ LED, (1) UID
	LEDs	(1) PWR, (2) LAN, (1) UID, (1) BMC event
	I/O Ports	(2) USB 3.0 ports
External Drive Bay	Q'ty / Type	(2) 2.5" Hot-Swap SSD/HDDs
	HDD backplane support	SAS 12Gb/s, SATA 6Gb/s
System Cooling	Supported HDD interface	(2) SAS 12Gb/s & SATA 6Gb/s
	FAN	(10) 4cm fans
Power Supply	Type	RPSU
	Input Range	AC 100-127V/12A / AC 200-240V/9.48A
	Efficiency	80-PLUS Platinum
	Output Watts	1,600 Watts
Processor	Redundancy	1+1
	Q'ty / Socket Type	(1) AMD Socket SP3
	Supported CPU Series	(1) AMD EPYC™ 7001 Series Processor
Memory	Thermal Design Power (TDP) wattage	Max up to 180W
	Supported DIMM Qty	(16) DIMM slots
	DIMM Type / Speed	DDR4 ECC RDIMM/LRDIMM 2666/2400
	Capacity	Up to 2,048GB RDIMM/ 1,024GB LRDIMM/ 2,048GB LRDIMM 3DS *Actual memory speed depends on memory population topology
	Memory channel	8 Channels
Expansion Slots	Memory voltage	1.2V
	PCI-E	(4) PCI-E Gen3 x16 slots (FH / 10.5"L / DW) (1) PCI-E Gen3 x16 slot (FH / HL / SW)
	Pre-install TYAN Riser Card (PCI-E Gen3)	(1) M2091-R riser card (1) M8021-R16-1L-1 riser card (2) M5631-R16-1F-1 riser cards (1) M8021-R32-2L-2 riser card
	LAN	(2) 10GbE ports (1) GbE dedicated for IPMI
LAN	Port Q'ty	(2) 10GbE ports (1) GbE dedicated for IPMI
	Controller	Intel® X550-AT2
	PHY Controller	Realtek® RTL8211E

Storage	NVMe Connector (M.2)	(2) 22110/2280
	Connector type	D-Sub 15-pin
Graphic	Resolution	Up to 1920x1200
	Chipset	Aspeed AST2500
Input /Output	USB	(2) USB3.0 ports (@ front) (1) USB3.0 ports (@ rear)
	COM	(1) 2x12 pin-header
	VGA	(1) D-Sub 15-pin
TPM (Optional)	RJ-45	(2) 10GbE ports (1) GbE dedicated for IPMI
	TPM Support	Please refer to our TPM supported list.
System Monitoring	Chipset	Onboard Aspeed AST2500
	Voltage	Monitors voltage for CPU, memory, chipset & power supply
	Temperature	Monitors temperature for CPU & memory & system environment
	LED (On system front panel)	Over temperature warning indicator, Fan & PSU fail LED indicator
Server Management	Others	Watchdog timer support
	Onboard Chipset	Onboard Aspeed AST2500
	AST2500 iKVM Feature	24-bit high quality video compression, Supports storage over IP and remote platform-flash & USB 2.0 virtual hub
BIOS	AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) & 10/100/1000 Mb/s MAC interface
	Brand / ROM size	AMI / 32MB
Operating System	Feature	Hardware Monitor, Boot from USB device/PXE via LAN/Storage, Console Redirection, ACPI 6.1, SMBIOS 3.1/PnP/Wake on LAN, ACPI sleeping states S0, S5 & FAN speed control automatic
	OS supported list	Please refer to our AVL support list
Regulation	FCC (SDoC)	Class A
	CE (DoC)	Class A
	VCCI	Class A
	RCM	Class A
Operating Environment	CB/LVD	Yes
	Operating Temp.	10° C ~ 35° C (50° F ~ 95° F)
	Non-operating Temp.	- 40° C ~ 70° C (-40° F ~ 158° F)
RoHS	In/Non-operating Humidity	90%, non-condensing at 35° C
	RoHS 6/6 Complaint	Yes

(Specifications are subject to change without notice. Items pictured may only be representative.)

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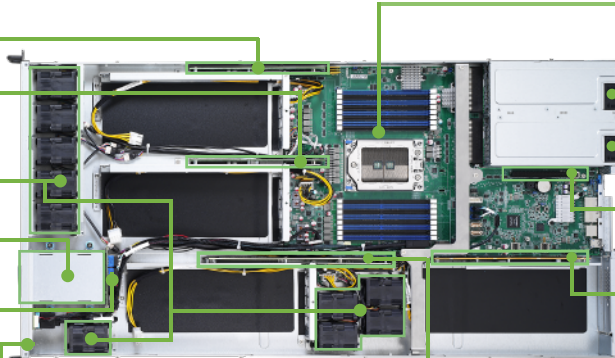
B8021G88V2HR-2T-RM-N

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Specifications

Top View

- Pre-install riser card
(1) M8021-R16-1L-1 riser cards for (1) PCI-E Gen3 x16 slot
- Pre-install riser card
(1) M5631-R16-1F-1 riser cards for (1) PCI-E Gen3 x16 slot
- System Fan
Total (10) 4cm fans
- (2) 2.5" Hot-Swap SSD/HDDs
- HDD Backplane
M1287G88-BP12-2
- Front panel board
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- S8021GM2NR-2T-RM**
(1) AMD EPYC™ 7001 / 7002 Series Processor
(16) DDR4 RDIMM/LRDIMM 2666/2400 slots
(2) 10GbE + (1) Dedicate IPMI GbE ports
- (1+1) 1,600W RPSU
80 PLUS Platinum
- Pre-install riser card
(1) M2091-R riser card for (1) PCI-E Gen3 x16 slot
- Pre-install riser card
(1) M8021-R32-2L-1 riser card for (2) PCI-E Gen3 x16 slots
- Pre-install riser card
(1) M8021-R32-2L-2 riser card for (2) PCI-E Gen3 x16 slots

System	Form Factor	1U Rackmount	Storage	NVMe Connector (M.2)	(2) 22110/2280 (PCI-E interface)	
	Chassis Name	GA88		Graphic	Connector type	D-Sub 15-pin
	Dimension (D x W x H)	34.84" x 17.24" x 1.71" (885 x 438 x 43.5mm)			Resolution	Up to 1920x1200
	Motherboard	S8021GM2NR-2T #		Input /Output	Chipset	Aspeed AST2500
	Motherboard Notification	# The motherboard not sold separately			USB	(2) USB3.0 ports (@ front) (1) USB3.0 ports (@ rear)
	Gross Weight	26.5 kg (58.5 lbs)		TPM (Optional)	COM	(1) 2x12 pin-header
Net weight	13.5 kg (30 lbs)	VGA	(1) D-Sub 15-pin			
Front Panel	Buttons	(1) RST, (1) PWR w/ LED, (1) UID	System Monitoring	RJ-45	(2) 10GbE ports (1) GbE dedicated for IPMI	
	LEDs	(1) PWR, (2) LAN, (1) UID, (1) BMC event		TPM Support	Please refer to our TPM supported list.	
External Drive Bay	I/O Ports	(2) USB 3.0 ports	Server Management	Chipset	Onboard Aspeed AST2500	
	Q'ty / Type	(2) 2.5" Hot-Swap SSD/HDDs		AST2500 iKVM Feature	24-bit high quality video compression, Supports storage over IP and remote platform-flash & USB 2.0 virtual hub	
System Cooling Configuration	HDD backplane support	SAS 12Gb/s, SATA 6Gb/s	BIOS	AST2500 IPMI Feature	IPMI 2.0 compliant baseboard management controller (BMC) & 10/100/1000 Mb/s MAC interface	
	Supported HDD Interface	(2) SAS 12Gb/s or SATA 6Gb/s		Operating System	Brand / ROM size	AMI / 32MB
Power Supply	FAN	(10) 4cm fans	Regulation		Feature	Hardware Monitor, Boot from USB device/PXE via LAN/Storage, Console Redirection, ACPI 6.1, SMBIOS 3.1/PnP/Wake on LAN, ACPI sleeping states S0, S5 & FAN speed control automatic
	Type	RPSU		Operating Environment		OS supported list
	Input Range	AC 100-127V/12A / AC 200-240V/9.48A	RoHS		FCC (SDoC)	Class A
	Efficiency	80-PLUS Platinum		CE (DoC)	Class A	
Processor	Output Watts	1,600 Watts	Expansion Slots	VCCI	Class A	
	Redundancy	1+1		RCM	Class A	
	Q'ty / Socket Type	(1) AMD Socket SP3	LAN	CB/LVD	Yes	
Supported CPU Series	(1) AMD EPYC™ 7001/7002 Series Processor	Operating Temp.		10° C ~ 35° C (50° F~ 95° F)		
Thermal Design Power (TDP) wattage	Max up to 180W	Non-operating Temp.		- 40° C ~ 70° C (-40° F ~ 158° F)		
Supported DIMM Qty	(16) DIMM slots	In/Non-operating Humidity		90%, non-condensing at 35° C		
Memory	DIMM Type / Speed	DDR4 ECC RDIMM/LRDIMM 2666/2400	PHY Controller	RoHS 6/6 Compliant	Yes	
	Capacity	Up to 2,048GB RDIMM/ 1,024GB LRDIMM/ 2,048GB LRDIMM 3DS *Actual memory speed depends on memory population topology		(Specifications are subject to change without notice. Items pictured may only be representative.)		
	Memory channel	8 Channels				
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