

AMD 2U Single-socket Standard Server Specification

1. Product Type

2U rack server

2. Product Introduction

Gooxi self-developed 2U AMD single-socket standard server, this type adopts Gooxi **G2SERO-B** motherboard, which is a standard E-ATX server motherboard. It supports 1 AMD EPYC 7003 (Milan) series, compatible with 7002 (Rome) series and 7001 (Naples) series, 16 DIMM DDR4 memory slots, onboard 1 M.2 port, 2 Gigabit Ethernet ports, 1 RJ45 management network port, 10 PCIe expansion slots, suitable for artificial intelligence, virtualization, cloud computing, big data processing, distributed storage, enterprise market and telecom applications.

3. Features

- ◆ 1 high-performance AMD EPYC 7003/7002/7001 series processor
- ◆ Multi-modular rear window to meet multi-combination needs
- ◆ 10 PCIe high-speed expansion slots to provide rich expansion performance
- ◆ 2 full-height, double-width high-performance GPU cards to meet the needs of high computing strength
- ◆ 16 DIMM DDR4 memory slots, the maximum frequency supports 2933MHz

4. Product Pictures



Front View of 2U 8-bay Model



Front View of 2U 12-bay Model



Rear View of Double-width GPU



Rear View of 10 PCIe Slots



Rear View of Left Sideways Double-width



Right View of Left Sideways Double-width

Note: The product pictures are for reference only, please refer to the actual product

5. Product Parameters

Product series	ASR201-S08R ASR201-S08R-NV	ASR201-S12RE ASR201-S12R-NV
Product type	2U 8-bay	2U 12-bay
Size	695*433.4*87.6mm (D*W*H)	
Processor	Support 1 AMD EPYC 7003 (Milan series); Compatible with AMD EPYC 7002 (Rome series) processors, AMD EPYC 7001 (Naples series)	
Memory	16 DDR4 memory slots, support 2400/2666/2933 MHz	
Internal storage interface	1 M.2 (PCIe x4) interface, 2x MiniSAS HD interfaces	
External hard drive	Front: 8 hot-swap 3.5/2.5-inch SAS/SATA/U.2 hard drives; Rear option: one 2x2.5-inch hard drive module	Front: 12 hot-swap 3.5/2.5-inch SAS/SATA/U.2 hard drives; Rear option: one 2x2.5-inch hard drive module
External port	Front: 1 VGA, 2 USB3.0	
	Rear: 1 VGA, 1 COM port, 2 USB3.0, 1 management network port, 2 RJ45 network ports	
*PCIe extension form	Form 1: sideways 2 full-height, double-width + 2 half-height PCIe slots Form 2: 10 PCIe half-height slots (6 PCIe x8, 4 PCIe x16) Form 3: sideways 1 full-height, double-width + 9 half-height PCIe slots Form 4: sideways 1 full-height, double-width + 3 half-height PCIe slots	
Safety	TPM module	
Power supply	Support 550W, 800W, 1300W, 1600W, 2200W redundant power supply (adapt according to the actual power)	
Fan	Standard 4* 8038 hot-swap N+1 redundant fans; optional 4* 8056 hot-swap N+1 redundant fans	
IPMI	IPMI2.0	
Management port	1 RJ45 management network port	
Certification	CCC	
RoHS	RoHS 2.0	
Operating temperature and	Temperature: 5°C~35°C/ Humidity: 20%~80%RH non-condensing	

humidity	
Storage temperature and humidity	Short-term storage ($\leq 72\text{H}$): temperature $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ / humidity 20%~90%RH non-condensing (including packaging) Long-term storage ($> 72\text{H}$): temperature $20^{\circ}\text{C} \sim 28^{\circ}\text{C}$ / humidity 30%~70%RH non-condensing (including packaging)

*When installing AMD Milan/Rome/Naples series CPU, you need to flash the corresponding firmware

* Can choose PCIe4.0

6. Ordering Information

Type	PN	Model	Description
Barebones	80100350 0.22.002.0350	ASR201-S08R1	Gooxi AMD platform 2U 8-bay model, passive backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports sideways 2 high-performance GPU cards, 2* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100359 0.22.002.0359	ASR201-S08R2	Gooxi AMD platform 2U 8-bay model, passive backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports 10* PCIe x 16 slot; standard 800W redundant power supply
Barebones	80100359 0.22.002.0359	ASR201-S08R3	Gooxi AMD platform 2U 8-bay model, passive backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports installing 1 high-performance GPU card, 9* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100361 0.22.002.0361	ASR201-S08R4	Gooxi AMD platform 2U 8-bay model, passive backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports installing 1 high-performance GPU card, 3* PCIe x8 (x16 slot); standard 800W redundant power supply

Barebones	80100323 0.22.002.0323	ASR201-S12RE1	Gooxi single-socket AMD platform 2U 12-bay model, active backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces; the rear of the system supports sideways 2 high-performance GPU cards, 2* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100324 0.22.002.0324	ASR201-S12RE2	Gooxi single-socket AMD platform 2U 12-bay model, active backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces; the rear of the system supports 10* PCIe x16 slot (6* PCIe x8, 4* PCIe x16); standard 800W redundant power supply
Barebones	80100325 0.22.002.0325	ASR201-S12RE3	Gooxi single-socket AMD platform 2U 12-bay model, active backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces; the rear of the system supports sideways 1 high-performance GPU card, 9* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100326 0.22.002.0326	ASR201-S12RE4	Gooxi single-socket AMD platform 2U 12-bay model, active backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports single AMD7003/7002/7001 full-series CPU, 16* DIMM memory slots; and supports DDR4 RECC memory; Front 1* VGA and 2* USB3.0 interfaces; the rear of the system supports sideways 1 high-performance GPU card, 3* PCIe x8 (x16 slot); standard 800W redundant power supply

Note: The above barebones are equipped with PCIe3.0 motherboard, PCIe4.0 needs to be equipped separately.

Optional Accessories

Rear hard disk module	33120071 4.00.101.0011	RMC2112-695-DM	Gooxi 2U rear 2* 2.5-inch hard disk modules, including backplane and 2.5-inch hard disk box, excluding power cord and Sata cable
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Rear hard disk module	33120072 4.00.101.0012	RMC2112-675-DM-NV	Gooxi 2U rear 2* NVMe hard disk modules, including backplane, 2.5-inch hard disk box and high-speed cable
Retimer card	33120080 4.00.312.0080	G0832RT-16X (full-height bracket)	PCIe signal enhancement card, PCIe x16 to 2 SFF 8654 interfaces, including full-height bracket
Retimer card	33120081 4.00.312.0081	G0832RT-16X (half-height bracket)	PCIe signal enhancement card, PCIe x16 to 2 SFF 8654 interfaces, including half-height bracket
HBA card	4.00.104.0005	G3008H-PK	Gooxi self-developed LSI 3008 chipset, 12Gb/s SAS card
Network card	4.00.104.0013	G82599-PK	Gooxi self-developed Intel G82599 chip, standard PCIe3.0x8 dual optical port 10G network card
Network card	4.00.104.0008	G710-PK	Gooxi self-developed Intel XL710 chip, standard PCIe3.0x8 network card, 4* 10G optical ports
Fan module	33700016 4.00.370.0016	SL201-FM2	2U barebone fan module, including fan frame/label/rubber nail, and 1* 8056 fan (6PIN terminal, maximum speed 17000±%10RPM)
Fan module	33700017 4.00.370.0017	SL201-FM3	2U barebone fan module, including fan frame/label/rubber nail, and 1* 8056 fan (6PIN terminal, maximum speed 12700±%10RPM)
Guide rail	30100005 1.09.002.0001	C2907-648-3	675mm length
Power module	3.03.153.0052	GC550PMP	Gooxi 550W CRPS power module, 185x73.5x39mm; rated AC voltage 100V-240V, support 240V DC
Power module	3.03.153.0049	GC800PMP	Gooxi 800W CRPS power module, 185x73.5x39mm; rated AC voltage 100V-240V, support 240V DC
Power module	3.03.153.0047	GC1300PMP	Gooxi 1300W CRPS power module, 185x73.5x39mm; rated AC voltage 100V-240V, support 240V DC
Power module	3.03.153.0053	GC1600PMP	Gooxi 1600W CRPS power module, 185x73.5x39mm; rated AC voltage 100V-240V, support 240V DC
Power module	3.03.153.0054	GC2200PMP	Gooxi 2200W CRPS power module, 185x73.x40mm; rated AC voltage 100V-240V, support 240V DC

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