

# AMD 2U Dual-socket Standard Server Specification

## 1. Product Type

2U rack server

## 2. Product Introduction

As Gooxi's self-developed 2U AMD dual-socket standard server, this type adopts Gooxi **G2DERO-B** motherboard, which is a standard E-ATX server motherboard. It supports 2 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 PCIe4.0/3.0 expansion slots, suitable for artificial intelligence, virtualization, cloud computing, big data processing, distributed storage, enterprise market and telecom applications.

## 3. Features

- ◆ 2 high-performance AMD EPYC 7003/7002/7001 series processors
- ◆ 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 power
- ◆ 16 RECC DDR4 memory slots, the maximum frequency supports 2933MHz

## 4. Product Pictures



PCIe Expansion Form 1

PCIe Expansion Form 2

PCIe Expansion Form 3



PCIe expansion form 4

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

## 5. Product Specifications

Product Series	ASR201-D08R/NV		ASR201-D12RE/NV
Product type	2U 8-bay		2U 12-bay
Size	695*433.4*87.6mm (D*W*H)		
Processor	Supports 2 AMD EPYC 7003 (Milan series); Compatible with AMD EPYC 7002 (Rome series) processors, AMD EPYC 7001 (Naples series)		
Memory	16 DDR4 memory slots, support 2133/2400/2666/2933 MHz; The maximum capacity is 256GB per single memory, and the whole server supports maximum 4TB		
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: widthways 2 full-height, double-width + 2 half-height PCIe slots Form 2: 10 PCIe half-height slots Form 3: widthways 1 full-height, double-width + 9 half-height PCIe slots Form 4: widthways 1 full-height, double-width + 3 half-height PCIe slots		
Safety	TPM module		
Power supply	Support AC 220V 550W, 800W, 1200W, 1600W, 2200W redundant power supply (adapt according to the actual power) Support HVDC 240V~336V 550V, 800V, 1300V Support LVDC-48V 550V, 800V, 1300V		
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 humidity	Temperature: 5°C~35°C/ Humidity: 20%~80%RH non-condensing
Storage temperature and humidity	Short-term storage ( $\leq 72$ H): temperature -40°C~70°C/ humidity 20%~90%RH non-condensing (including packaging) Long-term storage ( $> 72$ H): temperature 20°C~28°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 PCIe3.0/4.0

## 6. Ordering Information

Type	PN	Model	Description
Barebones	81200023 0.22.002.0023	ASR201-D08R1	Gooxi AMD platform 2U 8-bay model, directly connected to the backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports widthways 2 high-performance GPU cards, 2* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	81200020 0.22.002.0020	ASR201-D08R2	Gooxi AMD platform 2U 8-bay model, directly connected to the backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports 10* PCIe x 16slot; standard 800W redundant power supply
Barebones	81200021 0.22.002.0021	ASR201-D08R3	Gooxi AMD platform 2U 8-bay model, directly connected to the backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots;

			Front 2* USB3.0 interfaces, the rear of the system supports 1 high-performance GPU card, 9* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	81200022 0.22.002.0022	ASR201-D08R4	Gooxi AMD platform 2U 8-bay model, directly connected to the backplane, supports 8* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 2* USB3.0 interfaces, the rear of the system supports 1 high-performance GPU card, 3* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100317 0.22.002.0317	ASR201-D12RE1	Gooxi AMD platform 2U 12-bay model, expansion backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces, the rear of the system supports widthways 2 high-performance GPU cards, 2* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100318 0.22.002.0318	ASR201-D12RE2	Gooxi AMD platform 2U 12-bay model, expansion backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 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	80100327 0.22.002.0327	ASR201-D12RE3	Gooxi AMD platform 2U 12-bay model, expansion backplane, supports 12* 3.5/2.5-inch SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces, the rear of the system supports 1 high-performance GPU card, 9* PCIe x8 (x16 slot); standard 800W redundant power supply
Barebones	80100328 0.22.002.0328	ASR201-D12RE4	Gooxi AMD platform 2U 12-bay model, expansion backplane, supports 12* 3.5/2.5-inch

			SATA/SAS hard drives, standard E-ATX motherboard supports 2* AMD7003/7002/7001 full-series CPUs, 16* DIMM memory slots; Front 1* VGA and 2* USB3.0 interfaces, the rear of the system supports widthways 1 high-performance GPU card, 3* PCIe x8 (x16 slot); standard 800W redundant power supply
<b>Optional Accessories</b>			
Rear hard disk module	33120071 4.00.101.0011	RMC2112-695-DM	Gooxi 2U rear 2* 2.5-inch hard disk module, including backplane and 2.5-inch hard disk box, excluding power cord and Sata cable
Rear hard disk module	33120072	RMC2112-695-DM-NV	Gooxi 2U rear 2* NVMe hard disk module, including backplane, 2.5-inch hard disk box and high-speed cable
Motherboard	22200368 1.21.222.0368	G2DERO-B (PCIe4.0)	Gooxi E-ATX dual-socket motherboard, supports 2 AMD7003/7002/7001 full-series CPUs, 16*DDR4 ECC memory, 2* MiniSAS interfaces, 1*M.2 interface, onboard 2* Gigabit Ethernet ports, 1* IPMI independent management network port, 1* VGA, 1* serial port, 10* PCIe4.0
Retimer card	33120080 4.00.312.0080	G0832RT-16X (full-height bracket)	PCIe signal enhancement card, PCIe x16 transfer out 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 transfer out 2 SFF 8654 interfaces, with half-height bracket
HBA card	22200171T 1.23.222.1001	G3008H	Gooxi self-developed LSI 3008 chipset, 12Gb/s SAS card
Network card	22200243 1.23.222.0243	G710	Gooxi self-developed Intel XL710 chip, standard PCIe 3.0x8 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