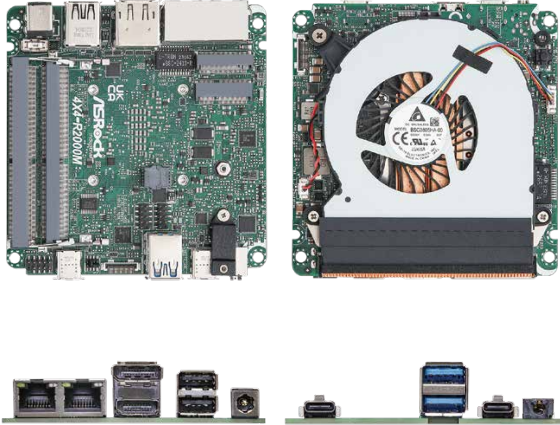


# 4X4-R2000M

4X4 Motherboard



## KEY FEATURES

- AMD Ryzen™ Embedded R-Series R2314
- 2 x 260-pin ECC/non-ECC SO-DIMM DDR4 2666 MHz, up to 64GB (32GB per DIMM)
- 4 x USB 3.2 Gen2, 4 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E,
- 1 x COM, 1 x SATA3
- 1 x Realtek 2.5 Gigabit LAN, 1 x Realtek 1 Gigabit LAN
- Supports Quad display, 1 x HDMI 2.0a, 3 x DP 1.2a (2 from Type-C)
- TPM 2.0 onboard IC
- 12V~24V DC-In

## SPECIFICATIONS

### Form Factor

Dimensions	4X4 (4.09-in x 4.02-in x 1.4-in, 10.4 cm x 10.2 cm x 3.6 cm)
------------	--

### Processor System

CPU	AMD Ryzen™ Embedded R-Series 4X4-R2000M (R2314, QC, Max Speed up to 3.5GHz)
Chipset	SoC
BIOS	AMI SPI 64 Mbit

### Memory

Technology	Dual Channel ECC/non-ECC DDR4 2666 MHz
Capacity	64GB (32 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

### Graphics

Controller	AMD Radeon™ Graphics
HDMI	HDMI 2.0a Max resolution up to 4096x2160@60Hz
DisplayPort	DisplayPort 1.2a, DP++ Max resolution up to 4096x2160@60Hz
MultiDisplay	Quad Display (Included 2 outputs from Type-C)

### Expansion Slot

M.2	1 x M.2 (Key E, 2230) with PCIe x1, USB 2.0 for Wireless
-----	--

### Audio

Interface	Realtek ALC256, High Definition Audio.
-----------	--

### Ethernet

Controller/ Speed	LAN1: Realtek RTL8125BG with 10/100/1000/2500 Mbps LAN2: Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

### Front I/O

USB	2 x USB 3.2 Gen2 (Type-A) 2 x USB 3.2 Gen2 (Type-C, 5V/3A, Supports DP1.2a display output)
Audio	1 (headphone & microphone jack)

### Rear I/O

HDMI	1 x HDMI 2.0a
DisplayPort	1 x DP1.2a
Ethernet	1 x 1 Gigabit LAN, 1 x 2.5 Gigabit LAN
USB	2 x USB 2.0
DC Jack	1

### Internal Connector

USB	2 x USB2.0 (1 x 2.00mm pitch header)
COM	1 x COM(RS-232/422/485)

### Storage

M.2	1 x M.2 (KEY M, 2242/2260/2280) with PCIe Gen3 x4 and SATA3 for SSD *M.2 Key M 2280(Supported by bracket)
SATA	1 x SATA3.0 (6.0 Gb/s)

### Security

TPM	TPM 2.0 onboard IC
-----	--------------------

### Watchdog Timer

Output	From Super I/O to drag RESETCON#
Interval	256 Segments, 0, 1, 2, ...,255sec

### Power Requirements

Input PWR	12V~24V DC-In Jack
Power On	AT/ATX Supported - AT : Directly PWR on as power input ready - ATX : Press button to PWR on after power input ready

### Environment

Operating Temp	-20°C ~ 70°C
Storage Temp	-40°C ~ 85°C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%

## Assured Systems

Assured Systems is a leading technology company with over 1,500 regular clients in 80 countries, deploying over 85,000 systems to a diverse customer base in 12 years of business. We offer high-quality and innovative rugged computing, display, networking and data collection solutions to the embedded, industrial, and digital-out-of-home market sectors.

### US

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +1 347 719 4508  
Support: +1 347 719 4508

1309 Coffeen Ave  
Ste 1200  
Sheridan  
WY 82801  
USA

### EMEA

[sales@assured-systems.com](mailto:sales@assured-systems.com)

Sales: +44 (0)1785 879 050  
Support: +44 (0)1785 879 050

Unit A5 Douglas Park  
Stone Business Park  
Stone  
ST15 0YJ  
United Kingdom

VAT Number: 120 9546 28  
Business Registration Number: 07699660