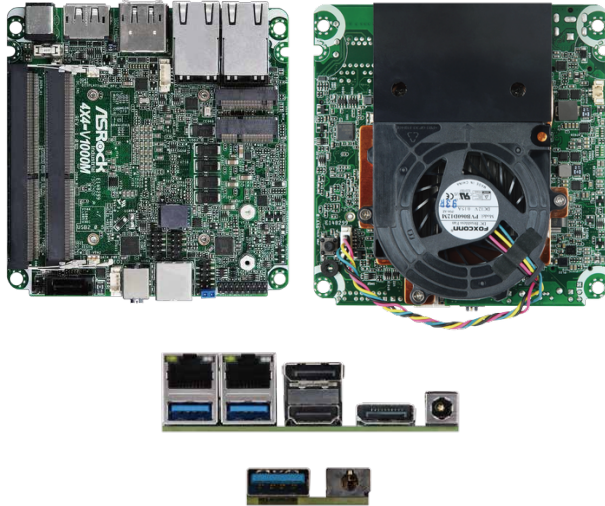




4X4-R1000/ 4X4-V1000M

4X4 Motherboard



KEY FEATURES

- AMD Ryzen™ Embedded R1000 SoC processors (4X4-R1000M, 4X4-R1000V)
- AMD Ryzen™ Embedded V1000 SoC processors (4X4-V1000M)
- 2 x 260-pin SO-DIMM up to 32GB DDR4 2400 MHz with ECC support (16GB per DIMM)
- 3 x USB 3.2 Gen2, 2 x USB 2.0, 1 x M.2 Key M, 1 x M.2 Key E, 1 x COM, 1 x SATA3
- 2 x Realtek 1 Gigabit LAN
- Supports triple display, 1 x HDMI 2.0, 2 x DP 1.2a
- TPM Header
- 12V DC-In

SPECIFICATIONS

Form Factor	4X4-R1000	4X4-V1000M
Dimensions	4X4 (4.09-in x 4.02-in)	
Processor System		
CPU	AMD Ryzen™ Embedded R-Series 4x4-R1000M (R1606G, DC, 2.6GHz, 12-25W) 4x4-R1000V (R1505G, DC, 2.4GHz, 12-25W)	AMD Ryzen™ Embedded V-Series (V1605B, QC, 2GHz, 12-25W)
Chipset	SoC	
Socket	N/A	
BIOS	AMI SPI 64 Mbit	

Memory	
Technology	Dual Channel DDR4 2400 MHz
Capacity	32 GB (16 GB per DIMM)
Socket	2 x 260-pin SO-DIMM

Graphics	
Controller	AMD Radeon™ Vega 3 Graphics AMD Radeon™ Vega 8 Graphics
HDMI	HDMI 2.0 Max resolution up to 4096x2160@60Hz
DisplayPort	DisplayPort 1.2a Max resolution up to 3840*2160@60Hz
VGA	N/A
LVDS	N/A
eDP	N/A
DVI	N/A
MultiDisplay	Triple Display

Expansion Slot	
PCIe	N/A
PCI	N/A
mini-PCIe	N/A
M.2	1 x Key E (2230) with PCIe x1 and USB 2.0 for Wireless
SIM Socket	N/A

Audio	
Interface	Realtek ALC233, High Definition Audio. Line-out, Mic-in

Ethernet	
Controller/ Speed	2 x Realtek RTL8111G-CG with 10/100/1000 Mbps
Connector	2 x RJ-45

Front I/O	
HDMI	N/A
DisplayPort	N/A
USB	1 x USB 3.2 (Gen2)
Audio	1 (Mic-in, Line-out)

Rear I/O	
HDMI	1 x HDMI 2.0
DisplayPort	2 x DP1.2a
VGA	N/A
DVI	N/A
Ethernet	2 x 1 Gigabit LAN
USB	2 x USB 3.2 (Gen2)
Audio	N/A
COM	N/A
PS2	N/A

Internal Connector	
USB	2 x USB 2.0 (1 x 2.00 pitch header)
COM	1 x COM (RS-232/422/485)
Parallel	N/A
GPIO	N/A
TPM	TPM Header
LVDS	N/A
eDP	N/A
VGA	N/A
SATA PWR Output	1
Speaker Header	N/A

Storage	
M.2	1 x M.2 (Key M, 2242/2260/2280) with PCIe4 and SATA3 for SSD *M.2 Key M 2280(optional support, by bracket)
mSATA	N/A
SATA	1 x SATA3 (6Gb/s), SATA3_1 shared with M.2_Key M
eMMC	N/A

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

Power Requirements	
Input PWR	12V DC-In (DC 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	0°C ~ 60°C
Storage Temp	-40° C ~ 85° C
Operating Humidity	5% ~ 90%
Storage Humidity	5% ~ 90%