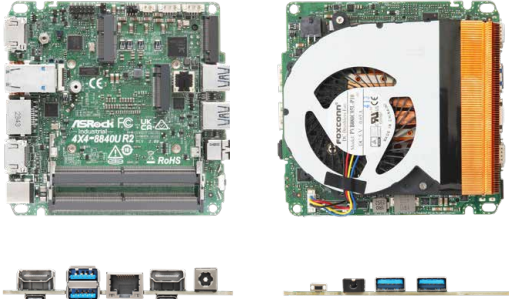


# 4X4 8040 R2 Motherboard Series

4X4-8840U R2, 4X4-8640U R2  
4X4 Motherboard



## KEY FEATURES

- AMD Ryzen™ 7 8840U/Ryzen™ 5 8640U
- 2 x 262-pin SO-DIMM DDR5 5600 MHz, up to 96GB (48GB per DIMM)
- 2 x USB4, 1 x USB 3.2 Gen2, 3 x USB 3.2 Gen1, 2 x USB 2.0, 1 x M.2 Key B, 1 x M.2 Key E, 1 x M.2 Key M, 1 x SATA3
- 1 x Realtek 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.1, 2 x DP 1.4a (from Type-C)
- 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)
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### Processor System

CPU	AMD Ryzen™ 8040U-Series AMD Ryzen™ 7 8840U (Max Speed up to 5.1GHz) AMD Ryzen™ 5 8640U (Max Speed up to 4.9GHz)
BIOS	AMI SPI 256 Mbit

### Memory

Technology	Dual Channel DDR5 5600 MHz
Capacity	96GB (48 GB per DIMM)
Socket	2 x 262-pin SO-DIMM

### Graphics

Controller	AMD Radeon™ Graphics
HDMI	HDMI 2.1 Max resolution up to 7680x4320@60Hz
DisplayPort	DisplayPort 1.4a Max resolution up to 4096x2160@60Hz
MultiDisplay	Max 4 display (included 2 outputs from Type-C)

### Expansion Slot

M.2	1 x M.2 (Key E, 2230) with PCIe Gen4 x1, USB 2.0 for Wireless 1 x M.2 (Key B, 2242) with PCIe x1, USB 3.2 Gen1, USB 2.0
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### Audio

Interface	Realtek ALC256, High Definition Audio
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### Ethernet

Controller/ Speed	LAN1: Realtek RTL8125BG with 10/100/1000/2500 Mbps
Connector	1 x RJ-45

### Front I/O

USB	1 x USB 3.2 Gen2 1 x USB 3.2 Gen1
Audio	1 (headphone & microphone jack)

### Rear I/O

HDMI	2 x HDMI 2.1
Ethernet	1 x 2.5 Gigabit LAN
USB	2 x USB 3.2 Gen1 (Type-A) 2 x USB4 (Type-C, 5V/3A, supports DP1.4a display output)
DC Jack	1

### Internal Connector

USB	2 x USB 2.0 (2 x 1.25 pitch header)
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### Storage

M.2	1 x M.2 (KEY M, 2280) with PCIe Gen4 x4 for SSD
SATA	1 x FPC vertical SATA Header

### Security

TPM	AMD FW TPM
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### 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	0°C - 70°C
Storage Temp	-40° C - 85° C
Operating Humidity	5% - 90%
Storage Humidity	5% - 90%

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