

4X4 BOX 8040 Series

4X4 BOX-8840U, 4X4 BOX-8640U
Fanned BOX

ASRock
— Industrial —



KEY FEATURES

- AMD Ryzen™ 8040U-Series
- 2 x 262-pin SO-DIMM DDR5 5600 MHz, up to 96GB (48GB per DIMM)
- 2 x USB4, 1 x USB 3.2 Gen2, 2 x USB 2.0, 2 x M.2 Key M, 1 x M.2 Key E (WiFi-6E Module)
- 1 x Realtek Gigabit LAN, 1 x Realtek 2.5 Gigabit LAN
- Supports Quad display, 2 x HDMI 2.1, 2 x DP 1.4a (from Type C)
- 19V Power Adapter
- 117.5 x 110.0 x 49mm (4.63" x 4.33" x 1.93"), Fanned Barebone

SPECIFICATIONS

Processor System

CPU	AMD Ryzen™ 8040U-Series - 4X4 BOX-8840U (AMD Ryzen™ 7 8840U, 8Cores, Max Speed up to 5.1GHz) - 4X4 BOX-8640U (AMD Ryzen™ 5 8640U, 6Cores, 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 7680 x 4320@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/WLAN	1 x Wi-Fi 6E 802.11ax + BT 5.2
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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 LAN2: Realtek RTL8111H with 10/100/1000 Mbps
Connector	2 x RJ-45

Storage

M.2	1 x M.2 (KEY M, 2242/2280) with PCIe Gen4x4 for SSD 1 x M.2 (KEY M, 2242) with PCIe Gen4x4 for SSD
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Front I/O

USB	1 x USB 3.2 Gen2 (Type-A) 2 x USB4 (Supports DP1.4a display output)
Audio	1 (headphone & microphone jack)

Rear I/O

HDMI	2 x HDMI 2.1
Ethernet	1 x 1 Gigabit LAN, 1 x 2.5 Gigabit LAN
USB	2 x USB 2.0
DC Jack	1

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

Mechanical

Mounting	VESA mount
Dimensions (L x W x H)	117.5 x 110.0 x 49mm (4.63" x 4.33" x 1.93")
Weight	Net Weight: 1kg

Others

OS Support	Windows 10/11
TPM	AMD FW TPM
Certifications	CE, FCC
Packing List	1 x 19V/120W Power Adapter (Ryzen 7) 1 x 19V/90W Power Adapter (Ryzen 5) 1 x VESA mount bracket

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