

## MINISFORUM UM790 Pro

# MINISFORUM Venus Series UM790 Pro Mini PC Instruction Manual

Model: UM790 Pro

## 1. INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of your MINISFORUM Venus Series UM790 Pro Mini PC. This compact computer is equipped with an AMD Ryzen 9 7940HS processor, offering high performance for various applications. Please read this manual thoroughly before using the device to ensure proper functionality and longevity.

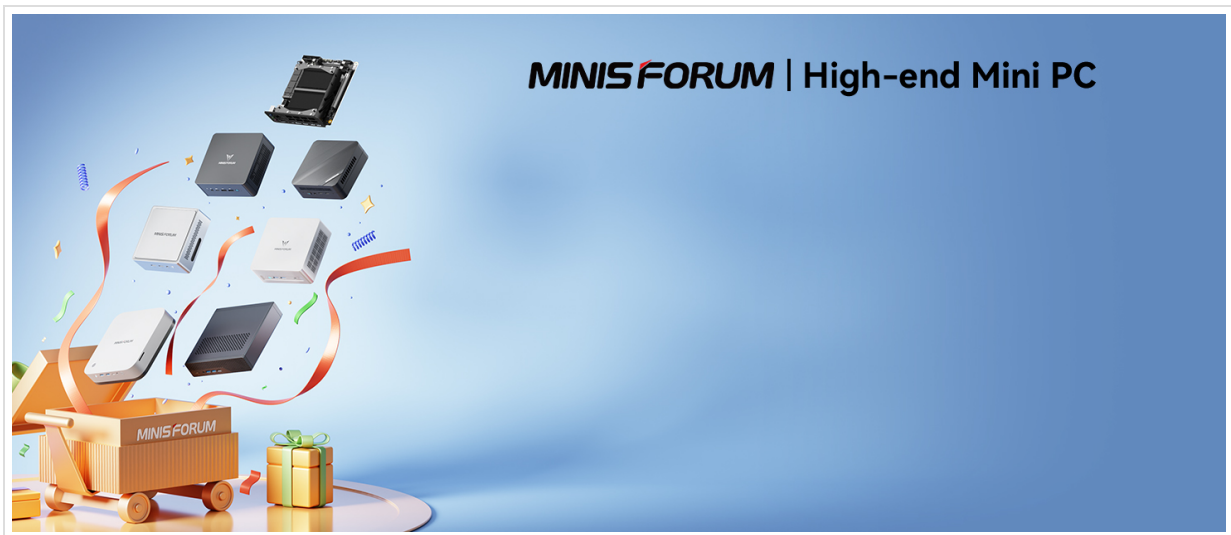


Image 1.1: The MINISFORUM UM790 Pro Mini PC in a typical desktop setup.

## 2. PACKAGE CONTENTS

Verify that all items listed below are present in your product packaging:

- 1x UM790 Pro Mini PC
- 1x HDMI Cable
- 1x Mount Support
- 1x US Power Adapter

- 1x User Manual (this document)

## 3. PRODUCT OVERVIEW

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### 3.1 External Components and Ports

The UM790 Pro Mini PC features a variety of ports for connectivity and expansion. Familiarize yourself with the port layout for proper connection of peripherals.



*Image 3.1: Front and Rear Port Layout.*

- **Front Ports:** Reset hole, Power button, USB4 (with Alt PD) x2, Audio jack x1
- **Rear Ports:** DC 19V power input, HDMI 2.1 x2, 2.5G LAN (RJ45) x1, USB 3.2 Gen2 Type-A x4

### 3.2 Internal Components

The UM790 Pro supports user-upgradable RAM and SSD storage. The internal layout includes slots for DDR5 SO-DIMM memory and M.2 2280 PCIe 4.0 SSDs.



Image 3.2: Internal view showing cooling system, RAM, and SSD slots.

## 4. SETUP

### 4.1 Initial Setup

1. **Install RAM and SSD:** If your model came without pre-installed RAM or SSD, refer to section 4.2 for installation instructions.
2. **Connect Display:** Connect your monitor(s) to the HDMI 2.1 or USB4 ports using appropriate cables. The device supports up to four displays simultaneously.
3. **Connect Peripherals:** Connect your keyboard, mouse, and other USB devices to the available USB 3.2 Gen2 Type-A ports.
4. **Connect Network:** For a wired connection, connect an Ethernet cable to the 2.5G LAN port. For wireless, ensure Wi-Fi antennas are properly connected (if external) or that the internal Wi-Fi module is functional.
5. **Connect Power:** Plug the US Power Adapter into the DC 19V input port on the Mini PC, then plug the adapter into a power outlet.

### 4.2 RAM and SSD Installation

The UM790 Pro supports DDR5 SO-DIMM RAM and M.2 2280 PCIe 4.0 SSDs. It features two DDR5 SO-DIMM slots (up to 64GB total) and two M.2 2280 PCIe 4.0 SSD slots (up to 2TB each).

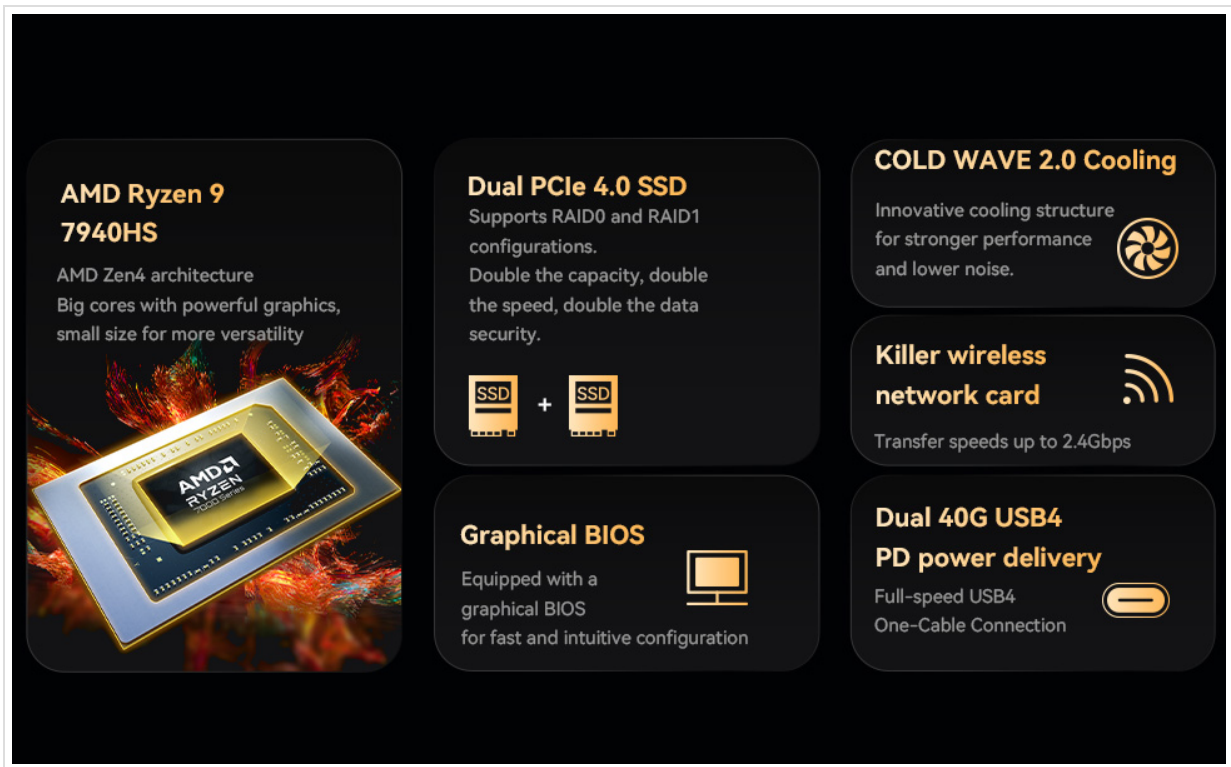


Image 4.1: Installing DDR5 RAM.

1. **Power Off:** Ensure the Mini PC is powered off and disconnected from the power adapter.
2. **Open Chassis:** Carefully open the Mini PC chassis. Refer to the quick start guide for specific instructions on opening your model.
3. **Install RAM:** Locate the DDR5 SO-DIMM slots. Align the notch on the RAM module with the notch in the slot. Insert the module at a 45-degree angle and push down until the retaining clips snap into place.
4. **Install SSD:** Locate the M.2 2280 PCIe 4.0 SSD slots. Insert the SSD into the slot at an angle, then gently push down and secure it with the provided screw.
5. **Close Chassis:** Reassemble the Mini PC chassis, ensuring all connections are secure.

## 5. OPERATING INSTRUCTIONS

### 5.1 Power On/Off

- **Power On:** Press the power button located on the front of the Mini PC. The power indicator light will illuminate.
- **Power Off:** To shut down the system, use the operating system's shutdown function. Alternatively, press and hold the power button for 5 seconds to force a shutdown (use only when necessary).

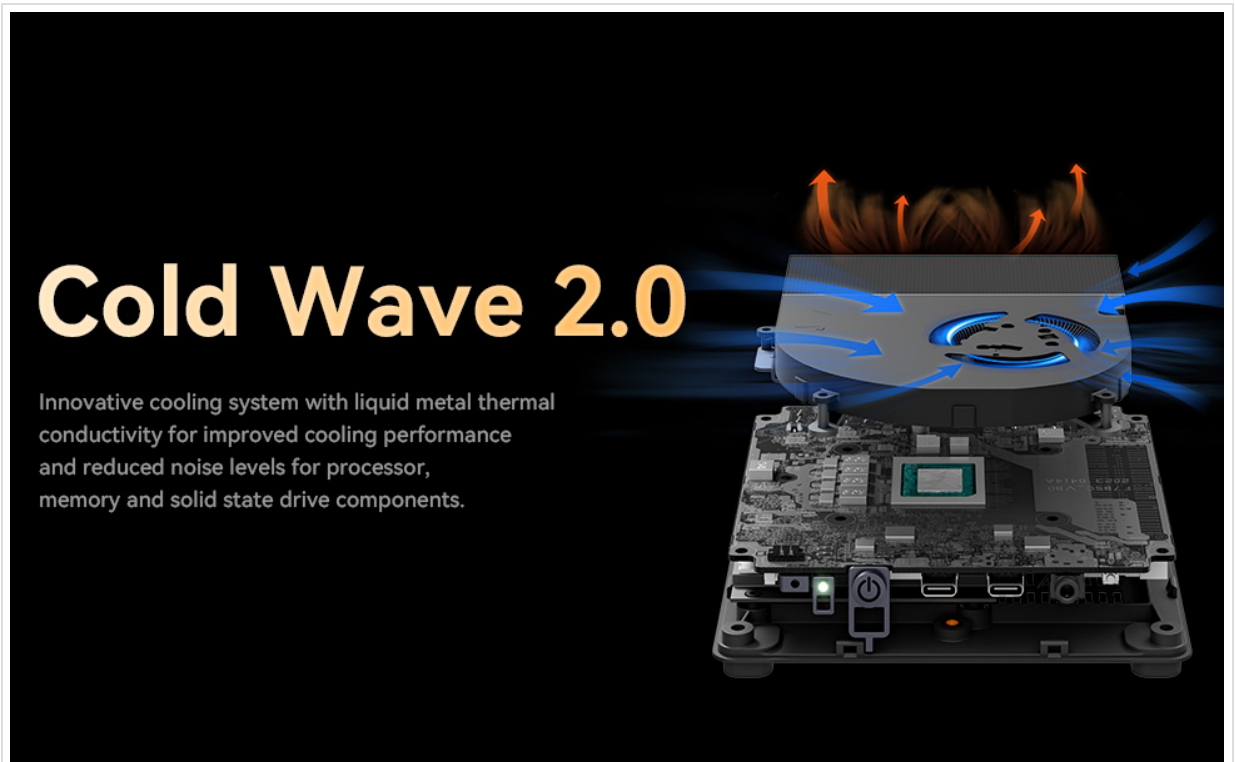
### 5.2 Display Configuration

The UM790 Pro supports up to four displays simultaneously, with two HDMI 2.1 ports (4K@120Hz) and two USB4 ports (8K@60Hz).



*Image 5.1: Quadruple Display Support.*

- Connect your monitors to the available HDMI and USB4 ports.
- Configure display settings (resolution, orientation, extended/duplicated desktop) within your operating system's display settings.
- The USB4 ports also support Power Delivery (PD), allowing a single cable to drive a 15W mobile display.



*Image 5.2: USB4 Port with Power Delivery.*

### 5.3 Network Connectivity

The Mini PC supports both wired and wireless network connections.

- **Wired:** Connect an Ethernet cable to the 2.5Gbps LAN port for high-speed internet access.

- **Wireless:** The device supports Wi-Fi 6 (802.11ax) for enhanced wireless performance and Bluetooth 5.2 for connecting wireless peripherals. Configure Wi-Fi settings through your operating system.

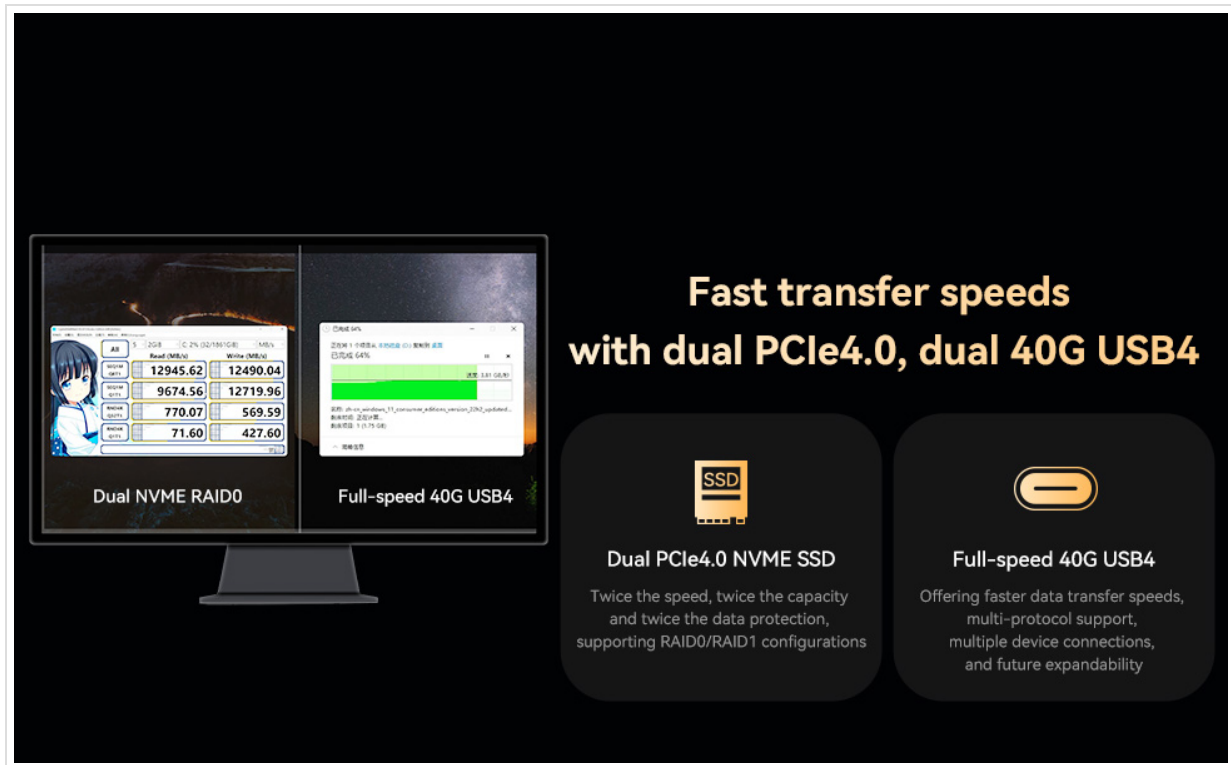


Image 5.3: Wi-Fi 6 and Network Capabilities.

## 5.4 BIOS Settings

Access the BIOS/UEFI settings during startup (typically by pressing Del or F2) to configure advanced features such as:

- **Auto Power On:** Automatically power on the device when power is restored.
- **PXE Boot:** Network boot functionality.
- **WOL (Wake On LAN):** Wake the device remotely over a network.
- **RTC Boot:** Schedule the device to power on at a specific time.

## 6. MAINTENANCE

### 6.1 Cleaning

Regular cleaning helps maintain optimal performance and extends the lifespan of your Mini PC.

- **Exterior:** Use a soft, dry cloth to wipe the exterior of the device. Avoid liquid cleaners.
- **Vents:** Use compressed air to clear dust from the ventilation grilles to ensure proper airflow.

### 6.2 Cooling System

The UM790 Pro features a 'Cold Wave 2.0' cooling system designed for efficient heat dissipation. Ensure the device is placed in a well-ventilated area and that the vents are not obstructed.

## 7. TROUBLESHOOTING

Problem	Possible Solution
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Problem	Possible Solution
No power	Check power adapter connection, ensure outlet is functional. Press the power button firmly.
No display output	Verify monitor is powered on and input source is correct. Check HDMI/USB4 cable connections. Ensure RAM and SSD are properly installed.
Network connectivity issues	For wired: Check Ethernet cable. For wireless: Verify Wi-Fi is enabled and connected to the correct network. Restart router/modem.
System slow or unresponsive	Ensure sufficient RAM and SSD space. Check for background processes. Verify cooling system is not obstructed.

## 8. SPECIFICATIONS

Feature	Detail
Processor	AMD Ryzen 9 7940HS (8 Cores/16 Threads, up to 5.2GHz)
Graphics	AMD Radeon™ 780M (Integrated, Graphics Frequency 2800MHz)
RAM Support	DDR5 SO-DIMM, up to 64GB (2 slots)
Storage Support	2x M.2 2280 PCIe 4.0 SSD slots (up to 2TB each)
Video Output	2x HDMI 2.1 (4K@120Hz), 2x USB4 (8K@60Hz)
USB Ports	2x USB4 (DP 8K, Alt PD), 4x USB 3.2 Gen2 Type-A
Network	2.5Gbps LAN, Wi-Fi 6 (802.11ax), Bluetooth 5.2
Operating System	Supports Windows
Dimensions	Approximately 1 x 1 x 1 inches (Note: This dimension seems incorrect based on typical mini PC size, please refer to product packaging for accurate dimensions)
Weight	1 Kilogram

## 9. WARRANTY AND SUPPORT

The MINISFORUM Venus Series UM790 Pro Mini PC comes with a **2 Years Warranty** from the date of purchase. For technical support, warranty claims, or further assistance, please visit the official MINISFORUM website or contact their customer service department. Keep your proof of purchase for warranty validation.

**Online Resources:** [MINISFORUM Official Website](#)