

ASUS PN54-S1

ASUS ExpertCenter PN54-S1 Mini PC Instruction Manual

1. PRODUCT OVERVIEW

The ASUS ExpertCenter PN54-S1 is a compact and efficient barebone mini PC designed for various applications, from business to everyday use. It features an AMD Ryzen 200 series processor and integrated Radeon 700M graphics, supporting up to four 4K displays. This model is a barebone unit, meaning it requires the installation of RAM and storage (SSD) to function. Its design emphasizes tool-less access for easy upgrades and maintenance, housed in a durable 0.6L chassis.

Key features include:

- Powerful AMD Ryzen 200 Series Processors for efficient multitasking.
- Integrated AMD Radeon 740M Graphics for 4K visuals across multiple displays.
- Ultrafast connectivity with Wi-Fi 7 and Bluetooth 5.4.
- Versatile I/O with 6 USB ports, dual 2.5G LANs, and dual DisplayPort.
- Tool-free design for quick component upgrades.
- Compact and durable 34mm chassis.

2. PACKAGE CONTENTS

Verify that all items are present in the package before proceeding with setup:

- ASUS ExpertCenter PN54-S1 Mini PC Unit
- VESA Mount Kit
- AC Power Adapter
- Power Cord



Image: The ASUS ExpertCenter PN54-S1 Mini PC shown with its packaging, AC power adapter, power cord, and VESA mount.

3. SETUP GUIDE

3.1. Installing RAM and Storage (SSD)

This is a barebone unit. Before initial use, you must install DDR5 SO-DIMM RAM and an M.2 NVMe SSD.

1. **Power Off and Disconnect:** Ensure the Mini PC is powered off and all cables are disconnected.
2. **Access Chassis:** Place the unit upside down. Locate the 'PUSH' tab on the bottom cover. Slide the tab to unlock and remove the bottom cover. The design allows for tool-less access.



Image: The bottom of the Mini PC, highlighting the 'PUSH' tab for tool-less chassis access.

3. **Install RAM:** Locate the DDR5 SO-DIMM slots. Gently insert the RAM module(s) into the slots at a 45-degree angle, then push down until the clips on both sides secure the module.
4. **Install M.2 SSD:** Locate the M.2 slot. Insert the M.2 SSD into the slot, then secure it with the provided screw.
5. **Reattach Cover:** Align the bottom cover and slide it back into place until it clicks, securing the chassis.

3.2. Connecting Peripherals

Connect your monitor(s), keyboard, mouse, and network cable (if using wired Ethernet).

- **Display:** Connect your monitor(s) to the DisplayPort or HDMI ports on the rear of the unit. The PN54-S1 supports up to four 4K displays.
- **USB Devices:** Connect your keyboard, mouse, and other USB devices to the available USB ports (USB 3.2 Gen 2 Type-A, USB 3.2 Gen 2 Type-C, USB 2.0) on the front and rear panels.
- **Network:** For a wired connection, connect an Ethernet cable to one of the dual 2.5G LAN ports. For wireless, ensure your Wi-Fi 7 antenna (if external) is connected or that the internal antenna has clear signal.

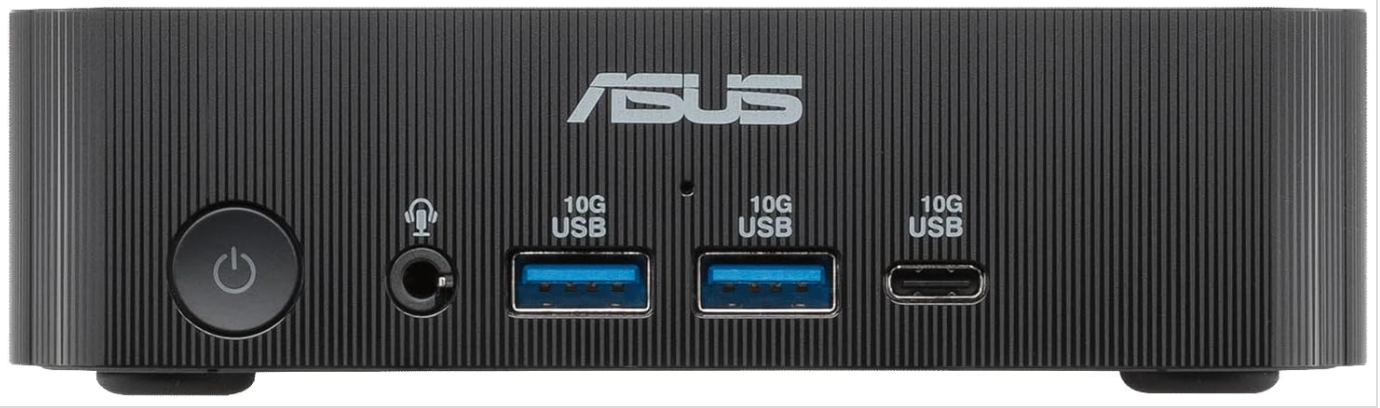


Image: Front panel of the Mini PC, showing the power button, audio jack, two USB 10G Type-A ports, and one USB 10G Type-C port.



Image: Rear panel of the Mini PC, featuring DisplayPort, 2.5G LAN, USB 2.0, USB 10G, HDMI, DC-in, and a 40G USB-C port with DisplayPort functionality.

3.3. Power Connection

Connect the AC power adapter to the DC-IN port on the rear of the Mini PC, then plug the power cord into an electrical outlet.

4. OPERATING INSTRUCTIONS

4.1. Powering On/Off

- **To Power On:** Press the power button located on the front panel. The power indicator light will illuminate.
- **To Power Off:** From your operating system, select the shutdown option. Alternatively, press and hold the power button for 4 seconds to force a shutdown (use only when necessary).

4.2. Display Configuration

The Mini PC supports multiple displays. After connecting your monitors, the operating system should automatically detect them. You can adjust display settings (resolution, orientation, extended/duplicated desktop) through your operating system's display settings.

4.3. Network Connectivity

- **Wired (LAN):** Once an Ethernet cable is connected to a 2.5G LAN port, the system should automatically establish a

wired network connection.

- **Wireless (Wi-Fi):** Access your operating system's network settings to connect to an available Wi-Fi 7 network. Enter the network password if required.

4.4. Bluetooth Devices

To connect Bluetooth 5.4 devices (e.g., headphones, keyboard, mouse), enable Bluetooth in your operating system settings and pair with the desired device.

5. MAINTENANCE

5.1. Internal Component Access

The tool-less chassis design allows for easy access to internal components for upgrades or maintenance. Refer to Section 3.1 for instructions on opening the chassis.

5.2. Cleaning

- **Exterior:** Use a soft, dry cloth to clean the exterior surfaces. Avoid abrasive cleaners or solvents.
- **Ventilation:** Periodically check the ventilation grilles for dust accumulation. Use compressed air to gently clear dust from the vents to ensure proper airflow and prevent overheating.

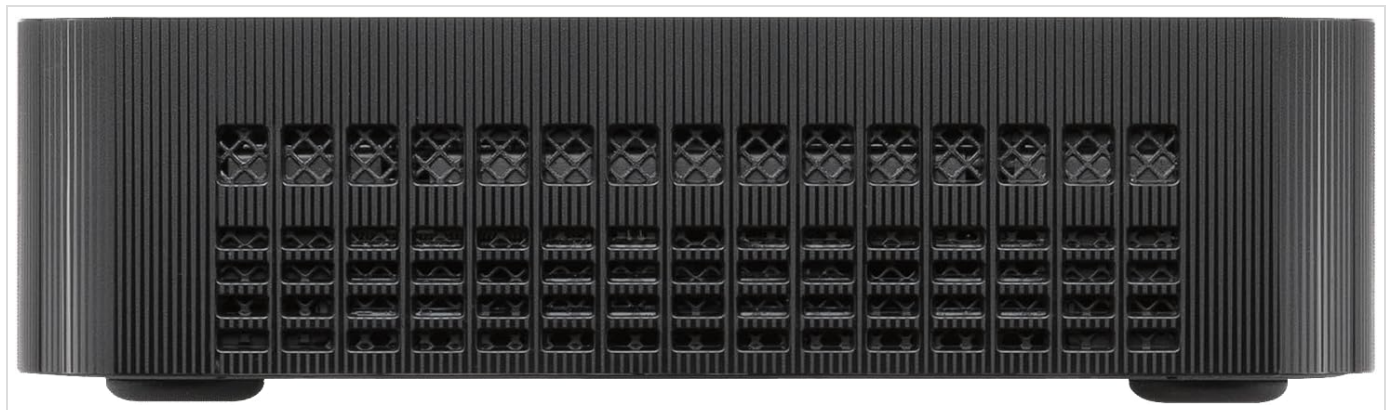


Image: Side view of the Mini PC, illustrating the ventilation grilles for heat dissipation.

6. TROUBLESHOOTING

If you encounter issues with your ASUS ExpertCenter PN54-S1, refer to the following common troubleshooting steps:

- **No Power:**
 - Ensure the power adapter is securely connected to both the Mini PC and a working electrical outlet.
 - Verify the power outlet is functional by testing it with another device.
- **No Display:**
 - Check that the monitor is powered on and the video cable (DisplayPort/HDMI) is securely connected to both the Mini PC and the monitor.
 - Ensure the correct input source is selected on your monitor.
 - If using multiple monitors, try connecting only one at a time to isolate the issue.
- **No Network Connection:**
 - **Wired:** Check the Ethernet cable connection and ensure your router/modem is working correctly.
 - **Wireless:** Verify Wi-Fi is enabled in your operating system and you are connected to the correct network with the correct password. Restart your router/modem if necessary.

- **Peripheral Not Detected:**
 - Try connecting the peripheral to a different USB port.
 - Ensure the peripheral's drivers are installed correctly in your operating system.
- **System Instability/Performance Issues:**
 - Ensure RAM and SSD are correctly installed (refer to Section 3.1).
 - Check for overheating by ensuring ventilation is clear (refer to Section 5.2).
 - Update your operating system and drivers to the latest versions.

7. SPECIFICATIONS

Feature	Specification
Brand	ASUS
Model Name	PN54-S1-BB5000ETL
CPU Model	AMD Ryzen 5 220
CPU Speed	3.2 GHz
Graphics Coprocessor	Integrated AMD Radeon Graphics (740M)
RAM Memory Technology	DDR5
RAM Memory Maximum Size	32 GB
Memory Speed	5600 MHz
Hard Disk Description	SSD (M.2 NVMe, PCIE x 4)
Wireless Connectivity	Wi-Fi 7 (802.11.be), Bluetooth 5.4
LAN	Dual 2.5G Ethernet
USB Ports	6 Total (USB 3.2 Gen 2, USB 2.0, USB-C with DisplayPort)
Video Output	DisplayPort, HDMI (Supports up to 4x 4K displays)
Maximum Display Resolution	3840x2160 pixels (4K)
Power Consumption	120 watts
Item Dimensions (LxWxH)	1.34 x 5.12 x 5.12 inches
Item Weight	1.2 pounds
Included Components	AC Power Adapter, Power Cord, VESA Mount

8. WARRANTY INFORMATION

The ASUS ExpertCenter PN54-S1 Mini PC comes with a**3-Year Manufacturer Warranty**. Please retain your proof of purchase for warranty claims. For detailed terms and conditions, refer to the warranty card included with your product or visit the official ASUS support website.

9. SUPPORT

For further assistance, technical support, or driver downloads, please visit the official ASUS support website:

www.asus.com/support

You may also find additional resources and FAQs on the product page for the ASUS ExpertCenter PN54-S1.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question