

HUNSN BM14

HUNSN BM14 Fanless Mini PC User Manual

Model: BM14

INTRODUCTION

This manual provides detailed instructions for the setup, operation, and maintenance of the HUNSN BM14 Fanless Mini PC. The BM14 is a compact, high-performance barebone system designed for various applications, from desktop computing to server tasks. As a barebone unit, it requires the installation of system memory (RAM), a storage drive (SSD/HDD), and an operating system to become fully functional.

Please read this manual thoroughly before proceeding with installation and operation to ensure proper use and to maximize the lifespan of your device.

PACKAGE CONTENTS

Verify that all items listed below are present in your package:

- HUNSN BM14 Mini PC unit
- Power supply adapter
- Power cord
- Vertical stand
- WiFi antennas (2 units)
- Warranty card

If any items are missing or damaged, please contact your vendor or HUNSN customer support immediately.

SPECIFICATIONS

Feature	Detail
Model Number	BM14
Material	Aluminum
CPU	Intel Core i7 1165G7 / 1185G7 Processor (one supplied)

Memory (RAM)	2 x SODIMM DDR4-3200 slots, Max. 64GB
Storage	1 x mSATA SSD, 1 x M.2 2280 NVME SSD, 1 x 2.5 Inch SATA SSD/HDD
Audio Card	ALC892
Network Card	Intel I219-V
Wireless Connectivity	WiFi 802.11ac (2.4/5Ghz), Bluetooth 4.0/4.2
I/O Ports	DP, HDMI, 4 x USB 3.0, 4 x USB 2.0, LAN, Spk (Speaker), Mic (Microphone)
Power Input	DC100-240V AC/50-60Hz, DC 12V7A
Operating Temperature	0°C ~ 70°C (32°F ~ 158°F)
Storage Temperature	-20°C ~ 80°C (-4°F ~ 176°F)
Relative Humidity	10% ~ 90% non-condensing
Dimensions	225 x 185 x 45mm
Weight	2.5 kg
TDP	15W
Cooling System	Fanless
Supported OS	Windows 10/11, Linux Ubuntu
Special Functions	Diskless boot, Restore AC Power Loss, Dual screen DP/HDMI (simultaneous/synchronous different display), HDMI 1.4 4K@60Hz, DP 1.2 4K@60Hz (DP to VGA transfer only)

SETUP INSTRUCTIONS

The HUNSN BM14 is a barebone system. Follow these steps to install the necessary components and prepare your Mini PC for first use.

1. Installing RAM (Memory)

- Power Off:** Ensure the Mini PC is disconnected from the power source.
- Open Chassis:** Carefully open the chassis of the Mini PC. Refer to the product diagram for screw locations.
- Locate SODIMM Slots:** Identify the two SODIMM DDR4-3200 memory slots on the motherboard.
- Insert RAM:** Align the notch on the RAM module with the notch in the slot. Insert the module at a 45-degree angle and push down firmly until the clips on both sides snap into place.
- Close Chassis:** Securely close the chassis.

2. Installing Storage Drives

The BM14 supports mSATA SSD, M.2 2280 NVME SSD, and 2.5-inch SATA SSD/HDD.

1. **Power Off and Open Chassis:** Ensure the Mini PC is powered off and the chassis is open.

2. **Install M.2 NVME SSD:**

- Locate the M.2 2280 slot.
- Insert the M.2 SSD into the slot at an angle.
- Gently push down and secure it with the provided screw.

3. **Install mSATA SSD:**

- Locate the mSATA slot.
- Insert the mSATA SSD into the slot.
- Secure it with the provided screws.

4. **Install 2.5-inch SATA SSD/HDD:**

- Mount the 2.5-inch drive into the designated bay.
- Connect the SATA data and power cables to the drive and the motherboard.

5. **Close Chassis:** Securely close the chassis after installation.

3. Connecting Peripherals

Connect your display, keyboard, mouse, and other devices.

- **Display:** Connect your monitor to either the HDMI or DisplayPort (DP) output. For dual display, use both ports.
- **USB Devices:** Plug in your keyboard, mouse, and other USB peripherals into the available USB 2.0 or USB 3.0 ports.
- **Network:** For wired internet, connect an Ethernet cable to the LAN port. For wireless, attach the provided WiFi antennas to the connectors on the back panel.
- **Audio:** Connect speakers or headphones to the "Spk" port and a microphone to the "Mic" port if needed.
- **Power:** Connect the power adapter to the "DC IN" port on the Mini PC, then plug the power cord into an electrical outlet.



Image: Rear panel of the HUNSN BM14 Mini PC, illustrating the DP, HDMI, USB, LAN, and audio ports.



Image: Front panel of the HUNSN BM14 Mini PC, featuring USB ports and the power button.

4. Operating System Installation

After installing RAM and storage, you will need to install an operating system.

1. **Prepare Installation Media:** Create a bootable USB drive with your preferred operating system (e.g., Windows 10/11, Linux Ubuntu).
2. **Boot from USB:** Power on the Mini PC and repeatedly press the designated key (usually Del or F2) to enter the BIOS/UEFI settings. Configure the boot order to prioritize your USB installation media.
3. **Install OS:** Follow the on-screen instructions to install the operating system onto your installed storage drive.
4. **Install Drivers:** After OS installation, install any necessary drivers for optimal performance.

OPERATING INSTRUCTIONS

Powering On/Off

- **Power On:** Press the power button located on the front panel. The power indicator light will illuminate.
- **Power Off:**
 - *Standard Shutdown:* Use the operating system's shutdown function.
 - *Forced Shutdown:* Press and hold the power button for 5-7 seconds until the device powers off. Use this only when the system is unresponsive.
- **Restore AC Power Loss:** The BM14 supports automatic power-on after a power failure. This feature can usually be configured in the BIOS/UEFI settings.

Display Configuration

The Mini PC supports single or dual display setups using the HDMI and DisplayPort (DP) outputs.

- **Single Display:** Connect your monitor to either the HDMI or DP port.
- **Dual Display:** Connect two monitors, one to the HDMI port and one to the DP port. The system supports simultaneous display or independent displays. Configure display settings within your operating system.
- **DP to VGA:** The DisplayPort supports direct conversion to VGA using an appropriate adapter. *Note: DP to HDMI conversion is not supported.*
- **Resolution:** HDMI supports up to 4K (4096x2304) at 60Hz. DP supports up to 4K (7680x4320) at 60Hz.

Network Connectivity

- **Wired LAN:** Connect an Ethernet cable to the RJ45 LAN port for a stable wired network connection.
- **Wireless WiFi:** Ensure antennas are attached and the WiFi module is enabled in the operating system. Configure your wireless network connection through your operating system's network settings. The device supports 802.11ac on both 2.4GHz and 5GHz bands.
- **Bluetooth:** The integrated Bluetooth 4.0/4.2 allows connection to compatible wireless devices such as keyboards, mice, and audio peripherals.

MAINTENANCE

The HUNSN BM14 Mini PC features a fanless design, which significantly reduces maintenance requirements and ensures silent operation.

- **Cleaning:** Periodically clean the exterior of the Mini PC with a soft, dry cloth to remove dust. Avoid using liquid cleaners directly on the device. Ensure the cooling fins are free from obstructions to maintain optimal heat dissipation.
- **Environment:** Operate the Mini PC within the specified temperature and humidity ranges (0°C~70°C, 10%~90% non-condensing). Avoid placing the device in direct sunlight, near heat sources, or in excessively dusty or humid environments.
- **Software Updates:** Regularly update your operating system and drivers to ensure system stability and security.

TROUBLESHOOTING

If you encounter issues with your HUNSN BM14 Mini PC, 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 cord is not damaged.
- Test the outlet with another device.

- **No Display Output:**

- Check that the monitor is powered on and the video cable (HDMI/DP) is securely connected to both the Mini PC and the monitor.
- Ensure the correct input source is selected on your monitor.
- If using dual displays, try connecting only one monitor at a time to isolate the issue.
- Verify RAM modules are correctly seated.

- **System Not Booting / OS Issues:**

- Confirm that the storage drive (SSD/HDD) is properly installed and connected.
- Check BIOS/UEFI settings to ensure the boot order is correct and the storage drive is detected.
- If the operating system is corrupted, you may need to reinstall it.

- **No Network Connection:**

- For wired LAN, ensure the Ethernet cable is connected and the router/modem is working.
- For WiFi, ensure antennas are attached and the WiFi module is enabled in the operating system. Check network settings and password.

- **System Instability / Crashes:**

- Ensure RAM and storage drives are compatible and correctly installed.
- Update all drivers and the operating system to the latest versions.
- Monitor system temperatures, although the fanless design minimizes overheating risks under normal loads.

If these steps do not resolve your issue, please consult the HUNSN support website or contact customer service.

WARRANTY AND SUPPORT

Your HUNSN BM14 Mini PC comes with a warranty. Please refer to the included warranty card for detailed terms, conditions, and duration of coverage.

For technical support, driver downloads, or further assistance, please visit the official HUNSN website or contact their customer service department. Keep your product model number (BM14) and purchase information readily available when seeking support.