Yunir Yunir5avrkpqwtx

Yunir H81 Micro ATX Motherboard User Manual

Model: Yunir5avrkpqwtx | Brand: Yunir

1. Product Overview

The Yunir H81 Micro ATX Motherboard is designed to support 4th generation Intel Core i3, i5, i7, E3 V3 series, and G series processors (e.g., Core i7 4790K, i5 4690K, i3 4160T, E3 1280 v3, G3260T, G1830). It features an LGA 1150 socket, dual-channel DDR3 memory support, and high-speed M.2 NVMe/NGFF interfaces, providing a stable and efficient foundation for your personal computer build.



Figure 1: Top-down view of the Yunir H81 Micro ATX Motherboard, showcasing the LGA 1150 socket, RAM slots, and various connectors.

2. Key Features

- **LGA 1150 Socket:** Supports 4th generation Intel Core i3, i5, i7, E3 V3 series, and G series processors.
- **Dual-Channel DDR3 Memory:** Two 240-pin DDR3 SDRAM desktop memory slots, unbuffered, supporting effective frequencies of 1066, 1333, and 1600MHz, with a maximum capacity of 16GB.
- **High-Speed M.2 Interface:** Features a high-speed M.2 hard disk interface with a jumper cable, supporting both NVMe and NGFF modes for flexible high-speed storage options.
- **Storage and Expansion Slots:** Includes 2 SATA 2.0 (3GB/s) ports and 1 SATA 3.0 (6GB/s) port. Expansion slots include 1 PCI Express x16 slot, 1 PCI Express x1 slot, and 1 M.2 slot.
- **I/O Interfaces:** Provides 4 USB 2.0 ports, 2 USB 3.0 ports, 1 VGA port, 1 HD Multimedia Interface compatible interface, 1 RJ45 port, and a 3-in-1 sound interface (line in, line out, microphone).
- **Durable Design:** Constructed with an 8-layer PCB for enhanced stability and durability.

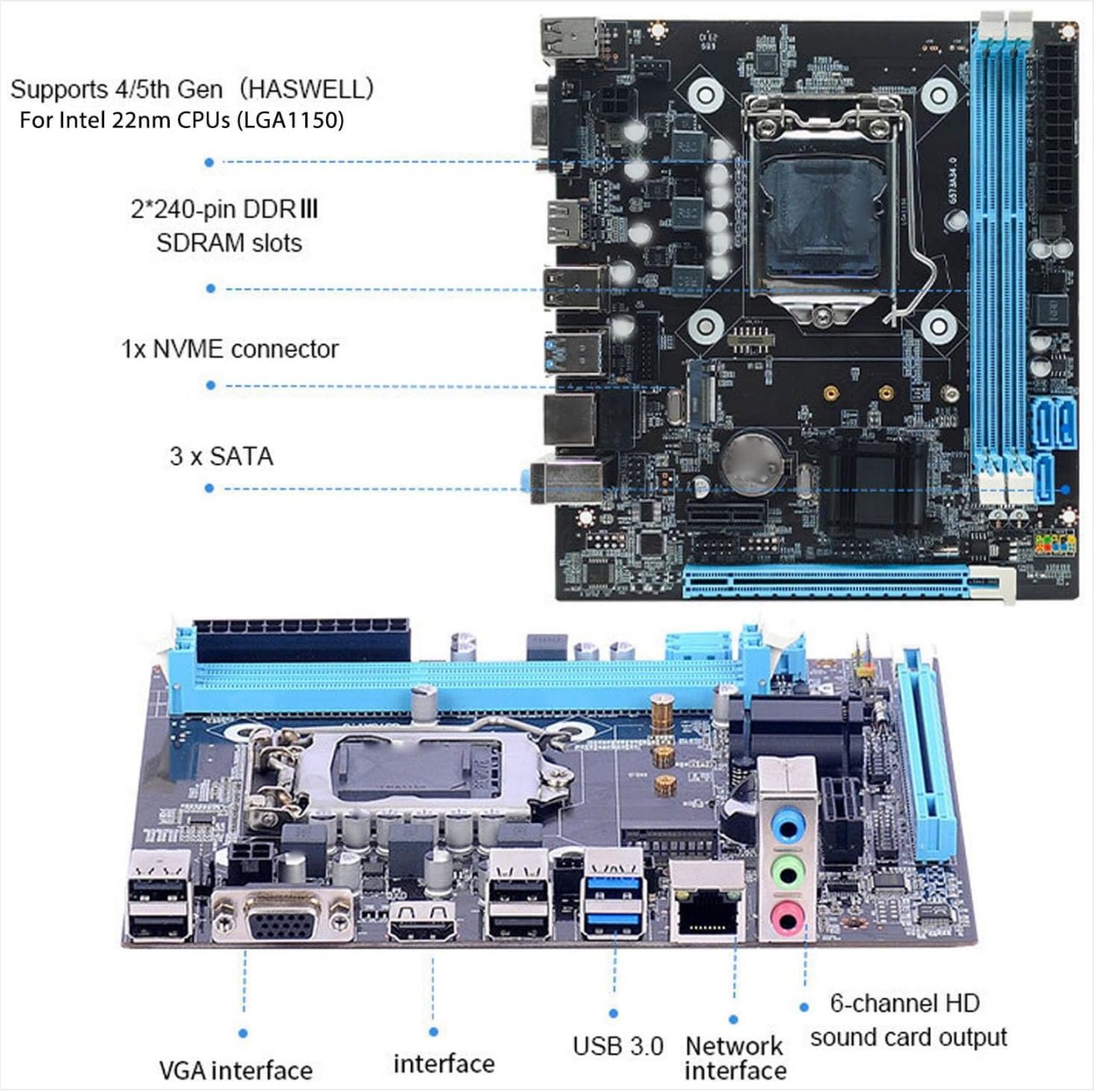


Figure 2: Diagram of the Yunir H81 Motherboard highlighting key components and interfaces, including CPU socket, RAM slots, SATA ports, and I/O panel connections.

Video 1: An overview of the H81 Gaming Motherboard, showcasing its various features and ports.

3. Setup and Installation

3.1 Safety Precautions

- Always disconnect power from your computer before installing or removing any components.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to prevent electrostatic discharge (ESD) damage to components.
- Handle the motherboard by its edges and avoid touching sensitive components or circuits.

3.2 Component Installation

1. **Install the CPU:** Open the CPU socket lever, align the CPU with the socket (matching the golden triangle on the CPU to the triangle on the socket), gently place the CPU into the socket, and close the lever to secure it.
2. **Install the CPU Cooler:** Apply thermal paste (if not pre-applied) and install the CPU cooler according to its

manufacturer's instructions. Connect the cooler's fan cable to the CPU_FAN header on the motherboard.

3. **Install RAM Modules:** Open the clips on the DDR3 memory slots. Align the RAM module with the slot, ensuring the notch on the module matches the key in the slot. Press down firmly on both ends until the clips snap into place.
4. **Install M.2 SSD (Optional):** If using an M.2 SSD, insert it into the M.2 slot at an angle, then gently push it down and secure it with the provided screw. Ensure the jumper setting is correct for NVMe or NGFF mode.
5. **Mount the Motherboard:** Install the I/O shield into your computer case. Carefully align the motherboard with the standoffs in the case and secure it with screws.
6. **Connect Power Cables:** Connect the 24-pin ATX main power connector and the 4-pin CPU power connector from your power supply to the motherboard.
7. **Connect Storage Devices:** Connect your SATA hard drives or SSDs to the SATA ports on the motherboard using SATA data cables. Connect the power cables from your power supply to these devices.
8. **Connect Front Panel Cables:** Connect the power switch, reset switch, HDD LED, and power LED cables from your case's front panel to the corresponding headers on the motherboard. Refer to the motherboard's silkscreen for correct polarity.
9. **Install Expansion Cards (Optional):** If using a dedicated graphics card or other PCIe expansion cards, insert them into the appropriate PCIe slots and secure them.



Figure 3: A person carefully installing a motherboard into a computer case, demonstrating the physical installation process.

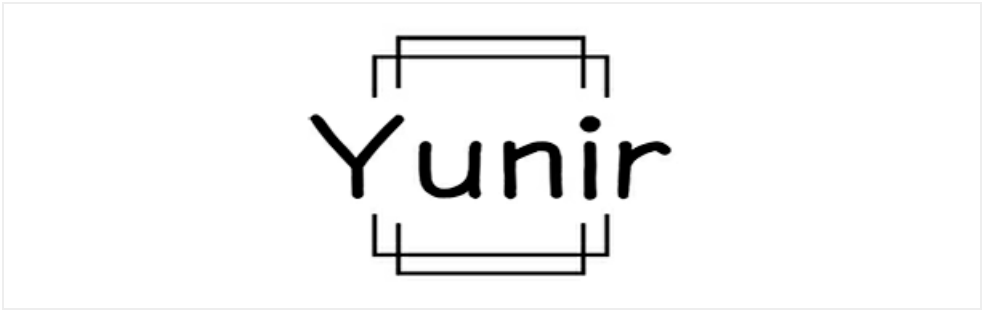


Figure 4: Detailed instructions for connecting the main board front panel wiring, including HDD LED, Power LED, Reset SW, and Power SW connectors.

4. Operating Instructions

4.1 First Boot

After all components are installed and connected, power on your computer. The system should initiate the boot process. If no display appears, refer to the troubleshooting section.

4.2 BIOS/UEFI Setup

During startup, press the designated key (usually DEL or F2) to enter the BIOS/UEFI setup utility. Here you can configure system settings, boot order, and monitor hardware status. Save changes before exiting.

4.3 Driver Installation

After installing your operating system, install the necessary drivers for the motherboard chipset, audio, LAN, and any other integrated components. These drivers are typically provided on a support CD or can be downloaded from the manufacturer's website.

5. Maintenance

- **Keep it Clean:** Regularly clean dust from inside your computer case, especially around the CPU cooler and motherboard components, to ensure optimal airflow and prevent overheating. Use compressed air and anti-static brushes.
- **BIOS/UEFI Updates:** Periodically check the Yunir website for BIOS/UEFI updates. Updates can improve system stability, compatibility, and performance. Follow the update instructions carefully to avoid damaging the motherboard.
- **Cable Management:** Ensure all cables are neatly routed and secured to prevent interference with airflow and accidental disconnections.

6. Troubleshooting

- **No Power/No Boot:**
  - Check all power connections (24-pin ATX, 4-pin CPU, GPU, storage).
  - Ensure the power supply is switched on.
  - Verify front panel power switch connection.
- **No Display:**
  - Ensure monitor is connected and powered on.
  - Check if RAM modules are properly seated. Try reseating them or testing one module at a time.
  - If using a dedicated graphics card, ensure it's properly seated and connected to power. Try connecting the

monitor to the integrated graphics port (VGA/HDMI) if available.

- **Component Not Recognized:**
  - Reseat the component (RAM, M.2 SSD, PCIe card).
  - Check BIOS/UEFI settings to ensure the component is enabled or detected.
  - Ensure correct drivers are installed for the operating system.
- **System Instability/Crashes:**
  - Check CPU and GPU temperatures. Ensure cooling is adequate.
  - Run memory diagnostic tools to check for faulty RAM.
  - Ensure all drivers are up to date.

7. Specifications

Feature	Specification
Brand	Yunir
Model Name	Yunir5avrkpqwtx
CPU Socket	LGA 1150
Compatible Processors	Intel Celeron, Intel Pentium, 4th Gen Core i3/i5/i7, E3 V3 series, G series
Chipset Type	Intel H81
RAM Memory Technology	DDR3
Memory Clock Speed	1066, 1333, 1600 MHz
Max RAM Capacity	16GB (2 x 8GB)
Storage Interfaces	2 x SATA 2.0 (3GB/s), 1 x SATA 3.0 (6GB/s), 1 x M.2 (NVMe/NGFF)
Expansion Slots	1 x PCI Express x16, 1 x PCI Express x1, 1 x M.2
I/O Ports	4 x USB 2.0, 2 x USB 3.0, 1 x VGA, 1 x HD Multimedia Interface, 1 x RJ45, 1 x 3-in-1 Audio Jack
Form Factor	Micro ATX
Item Weight	1.08 pounds
Package Dimensions	10.08 x 7.83 x 1.89 inches



Figure 5: Close-up view of the rear I/O panel, showing USB ports, VGA, HDMI, LAN, and audio jacks.

8. Warranty and Support

This Yunir H81 Micro ATX Motherboard comes with a standard manufacturer's warranty. For specific warranty terms, technical support, or service inquiries, please refer to the documentation included with your product or visit the official Yunir support website. Keep your purchase receipt for warranty claims.