

Dpofirs Dpofirs1xngcoidpe

Dpofirs H310 LGA 1151 Micro ATX Motherboard User Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Dpofirs H310 LGA 1151 Micro ATX Motherboard. Please read this manual thoroughly before proceeding with installation to ensure proper setup and to maximize the performance and longevity of your system. This motherboard supports 8th and 9th generation Intel Core processors.

2. PRODUCT OVERVIEW

The Dpofirs H310 motherboard is designed for reliable performance in a compact Micro ATX form factor. It features an LGA 1151 socket, an Intel H310 chipset, dual-channel DDR4 memory support, and essential expansion slots for a versatile computing experience.

2.1 Key Features

- **CPU Socket:** LGA 1151, supporting 8th and 9th Generation Intel Core processors.
- **Chipset:** Intel H310.
- **Memory:** Dual Channel DDR4, supporting up to 32GB (2 x 16GB) at 2133/2400/2666MHz.
- **Storage:** 4 x SATA 6Gb/s connectors, 1 x NVME M.2 slot.
- **Expansion Slots:** 1 x PCI Express X16 slot, 1 x PCI Express X1 slot.
- **Rear I/O:** USB 3.0, USB 2.0, PS/2, VGA, DVI, HDMI, RJ45 (LAN), Audio Jacks.

2.2 Motherboard Layout

Below is an illustration of the motherboard, highlighting key components and connectors.

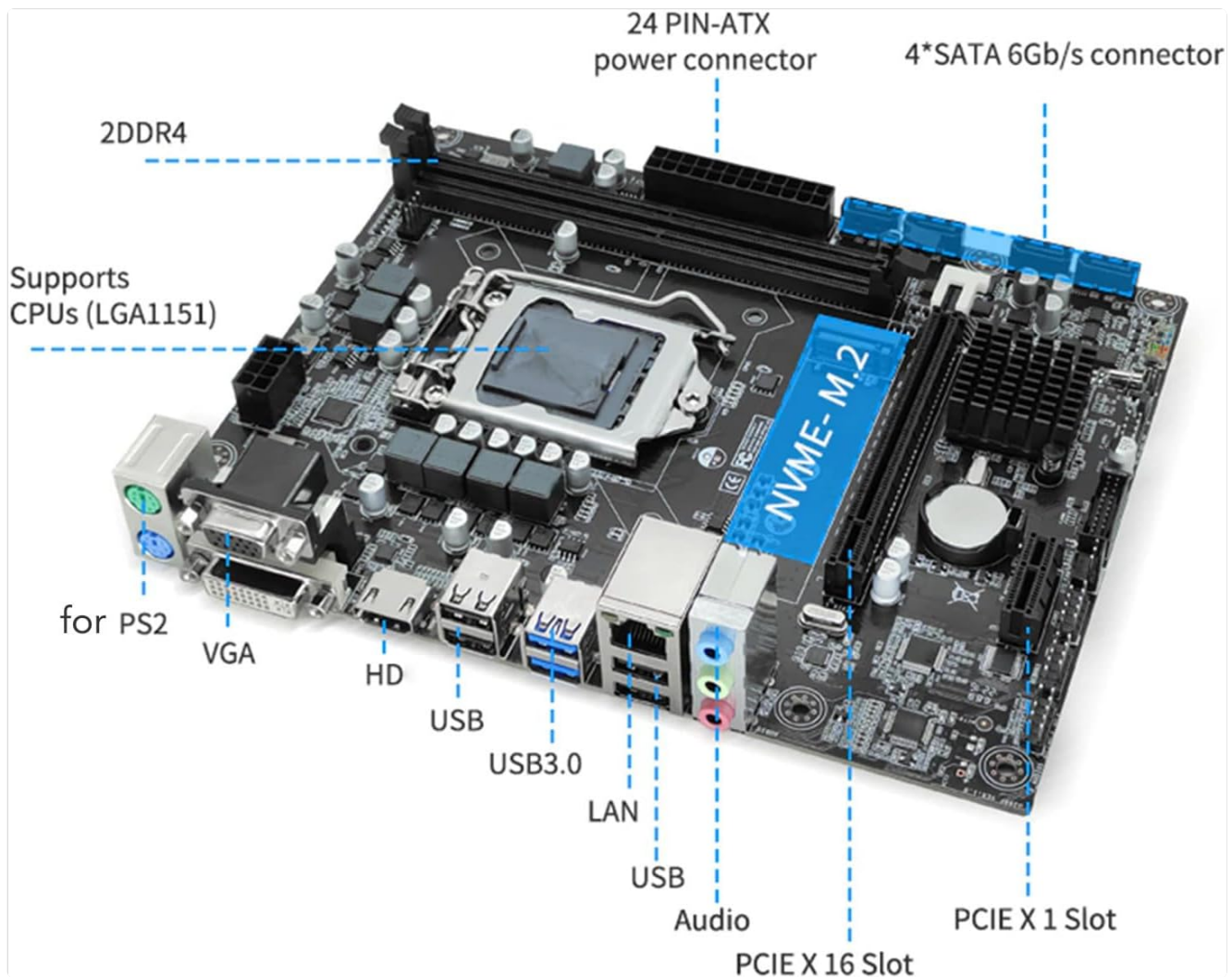


Figure 1: Dpofirs H310 Motherboard with labeled ports and connectors. This image shows the layout of the motherboard, including the CPU socket, DDR4 memory slots, PCIe slots, SATA ports, NVME M.2 slot, and various I/O connectors on the rear panel.



Figure 2: Rear I/O Panel of the Dpofirs H310 Motherboard. From left to right, it displays PS/2 ports, VGA port, DVI port, HDMI port, USB 2.0 ports, USB 3.0 ports, RJ45 LAN port, and audio jacks.

3. SPECIFICATIONS

Detailed technical specifications for the Dpofirs H310 Motherboard are provided below:

Feature	Specification
Item Type	H310 LGA 1151 Motherboard
Material	PCB
Size	Approx. 21.5 x 17 cm / 8.5 x 6.7 inches (Micro ATX Architecture)

Feature	Specification
CPU Socket	LGA 1151, supports 8th/9th Generation Intel Core CPU (for Lvy Bridge)
Chipset	Intel H310
Memory	Dual Channel DDR4, 2 x DIMM slots, supports up to 32GB (2666/2400/2133MHz)
Graphics	Integrated Graphics Processor (requires CPU with integrated graphics)
Audio	For Realtek ALC662 6 Channel Sound Codec
LAN	For Realtek 100M/1000M LAN Controller
Expansion Slots	1 x PCI Express X16 Slot, 1 x PCI Express X1 Slot
Storage Connectors	4 x SATA 6Gb/s Connectors, 1 x NVME M.2 Connector
Internal I/O Connectors	1 x Front Panel Connector, 1 x COM Connector, 1 x Front Sound Connector, 1 x USB 2.0/1.1 Connector (supports 2 x USB 2.0), 1 x USB 3.0 Connector (supports 2 x USB 3.0)
Rear I/O Ports	4 x USB 2.0/1.1 Ports, 2 x USB 3.0 Ports, 1 x PS/2 Port, 1 x VGA Port, 1 x DVI Port, 1 x HD Multimedia Interface Compatible Port, 1 x RJ45 Port, 1 x Sound Jack
Battery	CR2032 (Built-In) Capacity: 240 mAh

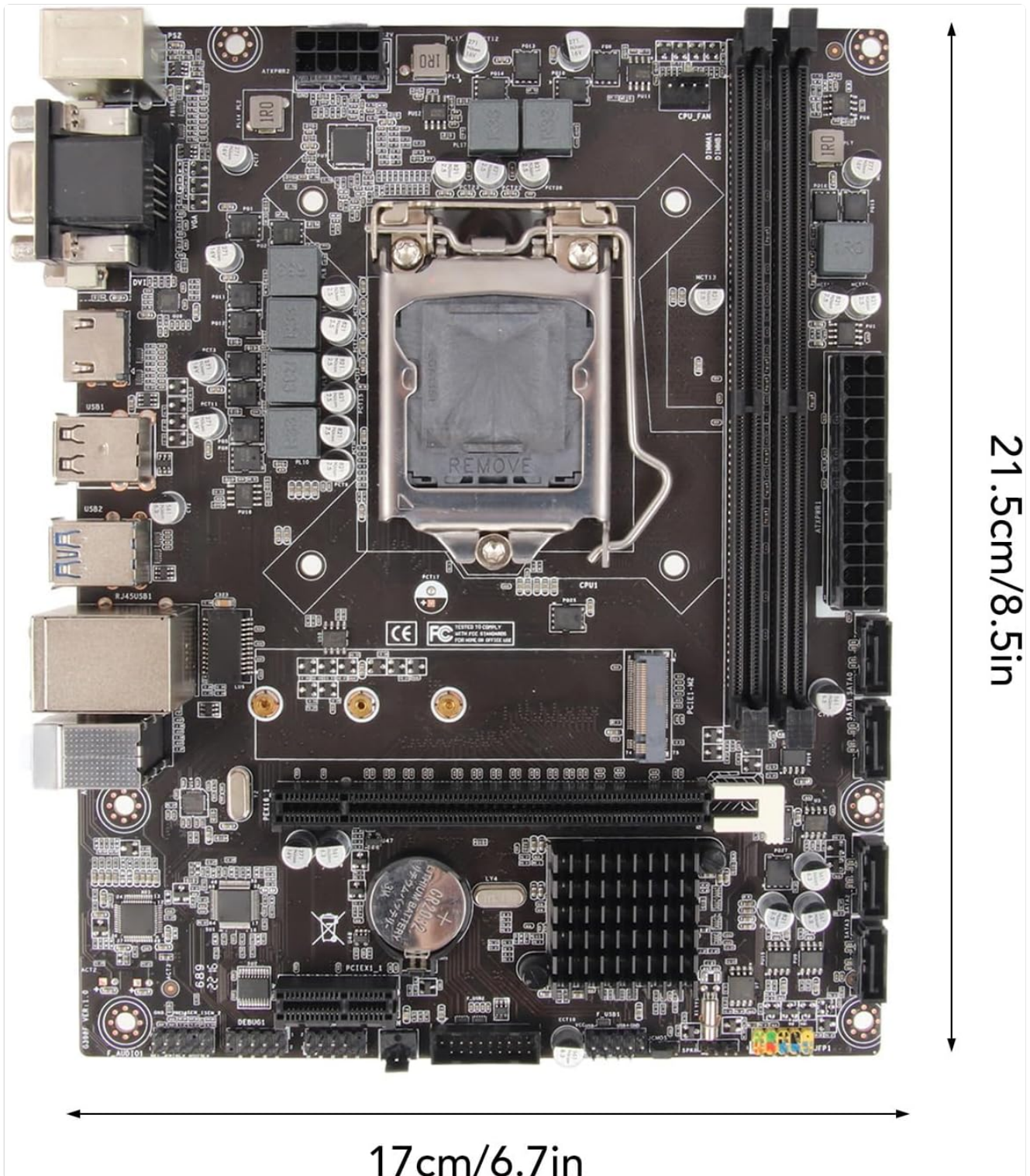


Figure 3: Dimensions of the Dpofirs H310 Motherboard, measuring approximately 21.5 cm (8.5 inches) by 17 cm (6.7 inches).

4. SETUP INSTRUCTIONS

Follow these steps carefully to install your Dpofirs H310 motherboard and its components.

4.1 Preparing Your System

1. **Safety First:** Always disconnect the power supply from the wall outlet before installing or removing any components. Wear an anti-static wrist strap to prevent electrostatic discharge (ESD) damage.
2. **Clear Workspace:** Ensure you have a clean, well-lit, and spacious area to work.

4.2 CPU Installation

1. Locate the LGA 1151 CPU socket on the motherboard.
2. Gently push down the load lever and pull it to the side to open the CPU socket cover.
3. Carefully align the CPU with the socket, matching the golden triangle on the CPU with the triangle mark on the socket. Do not force the CPU into the socket; it should drop in easily.
4. Close the socket cover and push the load lever back into its locked position.
5. Apply thermal paste to the CPU and install the CPU cooler according to its manufacturer's instructions.

4.3 Memory (RAM) Installation

1. Locate the two DDR4 DIMM slots.
2. Open the clips at both ends of the memory slot.
3. Align the notch on the DDR4 memory module with the key in the DIMM slot.
4. Insert the memory module firmly into the slot until the clips snap into place. Ensure both clips are closed.
5. For dual-channel operation, install memory modules in both slots.

4.4 Storage Device Installation

4.4.1 NVME M.2 SSD Installation

1. Locate the NVME M.2 slot on the motherboard.
2. Remove the M.2 standoff screw.
3. Insert the M.2 SSD into the slot at a 30-degree angle.
4. Gently push down the M.2 SSD and secure it with the standoff screw.

4.4.2 SATA Drive Installation

1. Connect one end of a SATA data cable to a SATA 6Gb/s connector on the motherboard.
2. Connect the other end of the SATA data cable to your SATA hard drive or SSD.
3. Connect a SATA power cable from your power supply unit (PSU) to the SATA drive.

4.5 Graphics Card (PCIe X16) Installation (Optional)

1. Locate the PCI Express X16 slot.
2. Remove the corresponding expansion slot cover from your PC case.
3. Align your graphics card with the slot and press down firmly until it is fully seated and the retention clip locks.
4. Secure the graphics card to the case with a screw.
5. Connect any necessary PCIe power cables from your PSU to the graphics card.

4.6 Power Supply Connection

1. Connect the 24-pin ATX main power connector from your PSU to the 24-pin power socket on the motherboard.
2. Connect the 4-pin ATX 12V power connector from your PSU to the 4-pin power socket near the CPU.

4.7 Front Panel and Peripheral Connections

1. Connect the front panel connectors (Power SW, Reset SW, HDD LED, Power LED) to the corresponding pins on the motherboard's front panel header. Refer to the motherboard layout diagram for pin assignments.

2. Connect USB 2.0 and USB 3.0 headers from your case to the respective USB headers on the motherboard.
3. Connect the front panel audio cable to the F_AUDIO header.
4. Connect your monitor to the appropriate video output port (VGA, DVI, or HDMI) on the motherboard's rear I/O panel or your dedicated graphics card.
5. Connect your keyboard and mouse to the PS/2 or USB ports.
6. Connect your Ethernet cable to the RJ45 LAN port.

5. OPERATING INSTRUCTIONS

Once all components are installed and connected, you can proceed with initial system boot-up and software installation.

5.1 Initial Boot-Up

1. Ensure all power cables are securely connected and the power supply switch is in the 'ON' position.
2. Press the power button on your PC case.
3. The system should power on, and you should see a display on your monitor.
4. If no display appears, refer to the Troubleshooting section.

5.2 BIOS/UEFI Setup

1. During the initial boot sequence, repeatedly press the **DEL** or **F2** key (or as indicated on screen) to enter the BIOS/UEFI setup utility.
2. In the BIOS/UEFI, you can configure boot order, system time, CPU settings, memory settings, and other hardware parameters.
3. Save changes and exit the BIOS/UEFI to continue booting.

5.3 Operating System and Driver Installation

1. Insert your operating system installation media (USB drive or DVD).
2. Follow the on-screen prompts to install your preferred operating system (e.g., Windows).
3. After the operating system is installed, install the necessary drivers for the motherboard chipset, graphics, audio, and LAN. These drivers are typically available on the manufacturer's website or an included driver disc.

6. MAINTENANCE

Proper maintenance ensures the longevity and stable operation of your motherboard.

- **Dust Removal:** Regularly clean dust from inside your PC case, especially from the CPU cooler, chipset heatsink, and fan vents. Use compressed air for best results. Ensure the system is powered off and unplugged before cleaning.
- **BIOS Updates:** Periodically check the Dpofirs 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 internal cables are neatly routed to improve airflow and prevent interference.

7. TROUBLESHOOTING

This section addresses common issues you might encounter.

7.1 No Power / No Boot

- **Check Power Connections:** Ensure the 24-pin ATX and 4-pin ATX 12V power connectors are securely plugged into the motherboard. Verify the PSU is switched on and connected to a working power outlet.
- **Front Panel Connections:** Double-check that the Power SW cable from your case is correctly connected to the motherboard's front panel header.
- **Test PSU:** If possible, test your power supply unit with another system or a PSU tester.

7.2 No Display

- **Monitor Connection:** Ensure your monitor is correctly connected to the video output (VGA, DVI, or HDMI) on the motherboard or graphics card and is powered on.
- **RAM Reseat:** Power off the system, remove the RAM modules, and reinsert them firmly into their slots.
- **Graphics Card:** If using a dedicated graphics card, ensure it is properly seated in the PCIe slot and any necessary power cables are connected. Try removing the graphics card and using the integrated graphics (if your CPU supports it) to isolate the issue.
- **CPU Compatibility:** Verify that your CPU is compatible with the LGA 1151 socket and H310 chipset.

7.3 Device Not Recognized

- **SATA/M.2 Drives:** Check data and power cable connections for SATA drives. For M.2 SSDs, ensure it is fully seated and secured. Verify settings in BIOS/UEFI.
- **USB Devices:** Try connecting the device to a different USB port. Ensure USB drivers are installed.
- **Drivers:** Ensure all necessary chipset and device drivers are installed for your operating system.

8. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the documentation provided with your purchase or visit the official Dpofirs website. Keep your proof of purchase for warranty claims.

Online Support: For the latest drivers, FAQs, and support resources, please visit the Dpofirs official website.

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.

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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

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