ASUS P8P67 LE

ASUS P8P67 LE Motherboard Instruction Manual

Model: P8P67 LE

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your ASUS P8P67 LE motherboard. The P8P67 LE motherboard is designed to support 2nd Generation Intel Core i7/Core i5/Core i3 Processors and features the Intel P67 chipset, offering advanced connectivity including SATA 6Gbps and USB 3.0.
Please read this manual thoroughly before beginning installation to ensure proper setup and to maximize the performance and longevity of your system.

2. SETUP AND INSTALLATION

Proper installation is crucial for the stable operation of your system. Always handle the motherboard by its edges to avoid static discharge. It is recommended to wear an anti-static wrist strap during installation.

2.1 Motherboard Overview

Figure 2.1: Top-down view of the ASUS P8P67 LE motherboard, highlighting major components such as the CPU socket, RAM slots, PCIe slots, and various headers.

2.2 CPU and Cooler Installation

- Carefully open the CPU socket lever and align the CPU with the socket, ensuring the gold triangle on the CPU matches the triangle on the socket.

- Gently place the CPU into the socket without forcing it. Close the lever to secure the CPU.

- Apply thermal paste (if not pre-applied to your cooler) and install the CPU cooler according to its manufacturer's instructions. Ensure it is securely fastened and the fan is connected to the CPU_FAN header.

2.3 Memory (RAM) Installation

- Locate the DDR3 DIMM slots. For dual-channel operation, refer to the motherboard manual for specific slot pairing (typically slots A2 and B2, or the same colored slots).

- Open the clips at both ends of the DIMM slot. Align the memory module with the slot, ensuring the notch on the module matches the key in the slot.

- Press down firmly on both ends of the memory module until the clips snap into place.

2.4 Power Connections

- Connect the 24-pin ATX power connector from your power supply to the main power socket on the motherboard.

- Connect the 8-pin (or 4-pin) ATX 12V power connector to the corresponding socket near the CPU.

2.5 Storage and Peripheral Connections

- Connect your SATA 6Gbps and SATA 3Gbps storage devices (HDDs, SSDs) to the appropriate SATA ports on the motherboard.

- Install any expansion cards (graphics cards, sound cards, etc.) into the PCI Express x16, x1, or PCI slots.

- Connect front panel headers (Power LED, HDD LED, Power Switch, Reset Switch, USB 2.0/3.0, Audio) to their respective pins on the motherboard. Refer to the motherboard diagram for correct pin assignments.

2.6 Rear I/O Panel Connections

Figure 2.3: Rear I/O panel of the ASUS P8P67 LE motherboard, showing ports for USB 2.0, USB 3.0, LAN, audio, and PS/2 for keyboard/mouse.

- Connect your keyboard and mouse to the PS/2 ports or USB ports.

- Connect your monitor to your graphics card (if installed).

- Connect Ethernet cable to the LAN port for network access.

- Connect audio devices (speakers, headphones, microphone) to the appropriate audio jacks.

3. OPERATING YOUR MOTHERBOARD

Once all components are installed and connected, you can power on your system. The ASUS P8P67 LE features several technologies to enhance user experience and system performance.

3.1 EFI BIOS (UEFI)

The motherboard utilizes an EFI BIOS, providing a graphical interface with mouse control for easy navigation and configuration. This allows for unparalleled control options, native support for 2.2TB or higher hard drives, and Quick Boot features to speed up system startup.

- To enter the EFI BIOS, press the **DEL** or **F2** key during system startup.
- Navigate using your mouse or keyboard to adjust settings such as boot order, system time, and hardware configurations.

3.2 EPU (Energy Processing Unit)

The EPU feature provides system-level energy saving and real-time power management. This optimizes power delivery to components, resulting in superb platform power efficiency. EPU can be configured via the ASUS AI Suite utility in your operating system.

3.3 TPU (TurboV Processing Unit)

The TPU allows you to increase platform performance instantly with self-optimized settings while retaining full system stability. This feature can be activated through the ASUS AI Suite utility or directly within the EFI BIOS for quick and safe overclocking.

3.4 MemOK!

The MemOK! button quickly ensures memory boot compatibility with a mere push of a button. If your system fails to boot due to memory compatibility issues, press the MemOK! button on the motherboard to initiate a memory compatibility check and adjustment.

4. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your motherboard and system.

- **Dust Removal:** Periodically clean dust from inside your computer case, especially from fans and heatsinks, using compressed air. Ensure the system is powered off and unplugged before cleaning.
- **BIOS Updates:** Check the ASUS support website for the latest BIOS updates. Updating the BIOS can improve system stability, compatibility, and performance. Follow the instructions provided by ASUS carefully when performing a BIOS update.
- **Anti-Surge Protection:** The motherboard is equipped with Anti-Surge Protection to safeguard your device by providing voltage protection to all major onboard components. While this feature offers protection, it is still recommended to use a reliable power supply and surge protector for your system.

5. TROUBLESHOOTING

If you encounter issues with your system, refer to the following troubleshooting steps.

- **System Fails to Boot:**
  - Ensure all power cables (24-pin ATX, 8-pin ATX 12V) are securely connected to the motherboard and power supply.
  - Verify that memory modules are correctly seated in their slots. If issues persist, try pressing the **MemOK!** button.
  - Check that the CPU is properly installed and the CPU cooler fan is spinning.
  - Remove all non-essential peripherals and expansion cards to isolate the issue.
- **UEFI BIOS Freezing or Instability:**
  - Ensure your BIOS is updated to the latest stable version available from the ASUS support website.
  - Reset BIOS settings to default. This can often resolve configuration-related instabilities.

- **Memory Compatibility Issues:**
    - If using multiple memory modules, ensure they are compatible and installed in the correct dual-channel slots.
    - If experiencing instability with XMP profiles, try setting memory timings and voltage manually or revert to default settings.

- **No Display Output:**
    - Ensure your monitor is connected to the correct output port on your graphics card.
    - Reseat your graphics card in its PCIe slot.
    - Test with a different monitor or cable if possible.

6. SPECIFICATIONS

Feature	Detail
Brand	ASUS
Model	P8P67 LE
CPU Socket	Intel LGA 1155
Compatible Processors	2nd Generation Intel Core i7/Core i5/Core i3, Intel Celeron D
Chipset Type	Intel P67
RAM Memory Technology	DDR3
Memory Clock Speed	Up to 2400 MHz (O.C.)
Memory Storage Capacity (Max)	32 GB
Graphics Card Interface	Integrated, PCI-Express x16
Product Dimensions	2.89 x 11.81 x 13.9 inches (ATX Form Factor)
Item Weight	3.06 pounds
Date First Available	February 27, 2011

7. WARRANTY AND SUPPORT

For warranty information and technical support, please refer to the official ASUS website or contact ASUS customer service. Keep your proof of purchase for warranty claims.
ASUS Support Website: https://www.asus.com/support/