ASUS B75M-PLUS

ASUS B75M-PLUS Motherboard User Manual

Model: B75M-PLUS

Overview   Setup   Operation   Maintenance   Troubleshooting   Specifications

1. PRODUCT OVERVIEW

The ASUS B75M-PLUS is a micro-ATX motherboard designed for Intel LGA 1155 processors. It features the Intel B75 Express chipset, supporting DDR3-1600 memory, SATA 6Gb/s, and USB 3.0. This motherboard provides a stable and reliable platform for building a personal computer, offering essential connectivity and performance features for everyday computing tasks.

Figure 1.1: Top view of the ASUS B75M-PLUS motherboard, showcasing its layout and major components.

2. Setup and Installation

This section provides instructions for installing the ASUS B75M-PLUS motherboard and its components into your computer case.

2.1 Safety Precautions

- Always disconnect the power cord from the wall outlet before touching any components.
- Wear an anti-static wrist strap or frequently touch a grounded metal object to prevent electrostatic discharge (ESD).
- Handle components by their edges to avoid touching sensitive parts.

2.2 Motherboard Layout

環境に配慮したGreen ASUS対応

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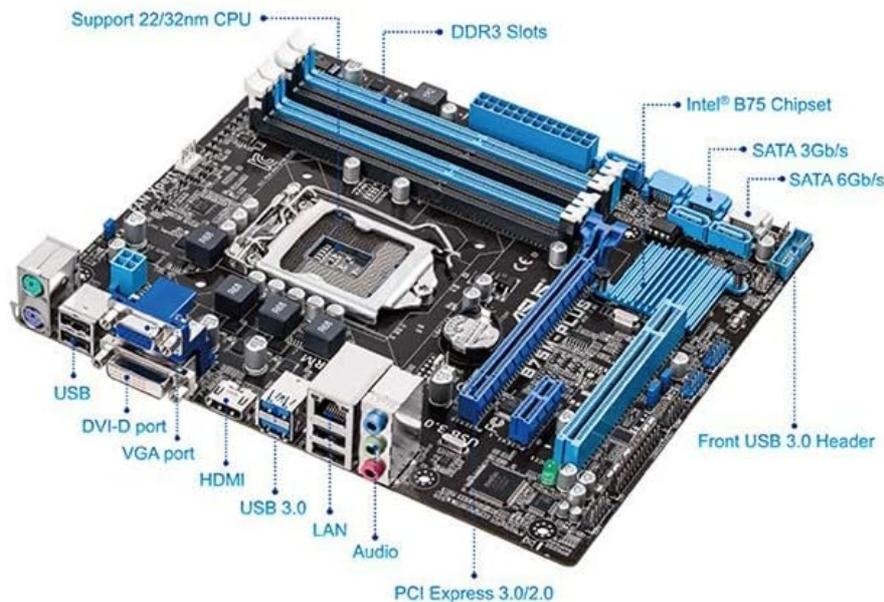
B75M-PLUS オーバービュー

Figure 2.1: Diagram of the ASUS B75M-PLUS motherboard highlighting key connectors and components for installation.

Familiarize yourself with the motherboard's layout, including the CPU socket (LGA 1155), DDR3 memory slots, SATA ports (SATA 3Gb/s and SATA 6Gb/s), PCI Express slots, and various headers for front panel connections, USB, and audio.

2.3 CPU Installation

1. Gently lift the load lever and open the CPU socket cover.
2. Align the CPU with the socket, ensuring the golden triangle on the CPU matches the triangle on the socket.
3. Carefully place the CPU into the socket without forcing it.
4. Close the socket cover and press down the load lever until it locks into place.
5. Apply thermal paste and install the CPU cooler according to its manufacturer's instructions.

2.4 Memory (RAM) Installation

The motherboard supports DDR3 memory modules. For optimal performance, install memory in matched pairs into the designated dual-channel slots (typically A2 and B2, or slots 2 and 4 from the CPU cooler).

1. Open the clips at both ends of the memory slot.
2. Align the notch on the memory module with the key in the slot.
3. Insert the module firmly into the slot until the clips snap into place. Ensure both clips are fully closed.

2.5 Storage Device Installation

Connect your SATA hard drives or SSDs to the SATA ports on the motherboard. The B75M-PLUS includes both SATA 3Gb/s and SATA 6Gb/s ports.

- Connect the SATA data cable from the storage device to an available SATA port on the motherboard.
- Connect the SATA power cable from your power supply to the storage device.

2.6 Power Connections

Connect the main 24-pin ATX power connector and the 4-pin ATX 12V power connector from your power supply to the corresponding ports on the motherboard.

2.7 Rear I/O Panel Connections

Figure 2.2: The rear input/output panel of the ASUS B75M-PLUS, showing various ports for external devices.

Connect your monitor, keyboard, mouse, and other peripherals to the appropriate ports on the rear I/O panel. This includes USB ports (USB 2.0 and USB 3.0), LAN port, audio jacks, and video output ports (VGA, DVI, HDMI).

3. OPERATION

Once the hardware is installed, you can power on your system and configure the BIOS/UEFI settings.

3.1 BIOS/UEFI Setup

The ASUS B75M-PLUS features an EFI BIOS (UEFI) which provides a user-friendly graphical interface. To enter the BIOS setup utility, press the **Delete** key during the Power-On Self-Test (POST) when the ASUS logo appears.

- **Main Menu:** View system information.
- **Ai Tweaker:** Adjust CPU and memory frequencies/voltages (for advanced users).
- **Advanced:** Configure CPU, PCH, SATA, USB, and other onboard device settings.
- **Monitor:** Monitor system temperatures, fan speeds, and voltages.
- **Boot:** Configure boot device priority and boot options.
- **Tool:** Access ASUS utilities like EZ Flash 2 for BIOS updates.
- **Exit:** Save or discard changes and exit the BIOS.

The EFI BIOS also includes an EZ Mode for quick system configuration and an Advanced Mode for detailed settings.

3.2 Driver Installation

After installing your operating system, install the necessary drivers for the motherboard's components. These typically include chipset drivers, audio drivers, LAN drivers, and USB 3.0 drivers. Drivers can be found on the ASUS support website for your specific model.

3.3 ASUS Exclusive Features

- **Fast Boot:** Optimizes system startup time. Enable this feature in the BIOS/UEFI settings for quicker boot-ups.
- **USB 3.0 Boost:** Enhances USB 3.0 transfer speeds using UASP (USB Attached SCSI Protocol).
- **DIGI+ VRM:** Digital power design for precise power delivery to the CPU and DRAM, improving stability and efficiency.
- **Network iControl:** Real-time network bandwidth management for prioritizing applications.
- **GPU Boost:** Overclocks the integrated GPU for improved graphics performance.

- **EPU (Energy Processing Unit):** Optimizes power consumption across the system, reducing energy usage.
- **Anti-Surge Protection:** Guards against damage from power surges.

4. MAINTENANCE

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

- **Dust Removal:** Regularly clean dust from inside your computer case, especially around the motherboard, CPU cooler, and fan vents. Use compressed air for best results.
- **Cable Management:** Ensure all cables are neatly routed and not obstructing airflow.
- **BIOS Updates:** Periodically check the ASUS support website for BIOS updates. Updates can improve compatibility, stability, and performance. Follow the instructions provided by ASUS carefully when updating the BIOS.
- **Driver Updates:** Keep your drivers updated to ensure optimal performance and compatibility with new software and hardware.

5. TROUBLESHOOTING

This section addresses common issues you might encounter with your motherboard.

- **No Power/No POST:**

  - Check all power connections (24-pin ATX, 4-pin ATX 12V) to the motherboard.
  - Ensure the CPU and RAM are correctly seated. Try reseating RAM modules.
  - Disconnect all non-essential peripherals and components (e.g., extra drives, expansion cards) and try booting with only the CPU, one RAM stick, and the graphics card (if applicable).
  - Clear the CMOS by removing the CMOS battery for a few minutes or using the CLRTC jumper (refer to the motherboard diagram for location).

- **No Display:**

  - Ensure your monitor is connected to the correct video output port (onboard or discrete graphics card).
  - Verify the graphics card is properly seated in its PCI Express slot and has adequate power connected.
  - Test with a different monitor or cable if possible.

- **System Instability/Crashes:**

  - Check for overheating. Ensure CPU cooler is properly installed and case fans are working.
  - Run memory diagnostic tools to check for faulty RAM.
  - Ensure all drivers are installed and up to date.
  - Check for loose connections or improperly seated components.

- **USB Ports Not Working:**

  - Ensure USB drivers are installed.
  - Check BIOS settings to ensure USB controllers are enabled.
  - Test with different USB devices and ports.

If issues persist, consult the ASUS support website or contact their technical support for further assistance.

6. SPECIFICATIONS

Feature	Detail
Brand	ASUS
Model Name	B75M-PLUS
CPU Socket	LGA 1155
Chipset Type	Intel B75 Express
RAM Memory Technology	DDR3
Memory Clock Speed	1600 MHz
Max Memory Capacity	32 GB
Compatible Devices	Personal Computer
Item Weight	1.95 pounds
Package Dimensions	10.75 x 10.47 x 2.32 inches
Date First Available	September 17, 2013

7. WARRANTY AND SUPPORT

For detailed warranty information, please refer to the warranty card included with your product or visit the official ASUS website. ASUS provides technical support and resources for their products.
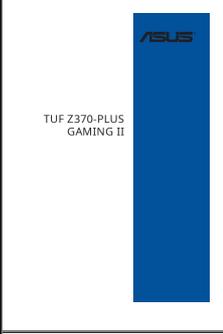
ASUS Support Website: https://www.asus.com/support/

Here you can find drivers, FAQs, troubleshooting guides, and contact information for technical assistance.

Related Documents - B75M-PLUS

[ASUS B75M-PLUS Motherboard User Manual and Specifications](#)
Detailed user manual for the ASUS B75M-PLUS motherboard, covering installation, safety, BIOS, and full technical specifications. An essential guide for PC builders and enthusiasts.

PRIME H610M-K D4 **Motherboard**	[ASUS PRIME H610M-K D4 Motherboard User Manual](#) Comprehensive user manual for the ASUS PRIME H610M-K D4 motherboard, detailing installation, specifications, BIOS setup, safety precautions, and support information.
PRIME B650M-A AX **Motherboard**	[ASUS PRIME B650M-A AX Motherboard: Features, Specifications, and User Guide](#) A comprehensive guide to the ASUS PRIME B650M-A AX motherboard, detailing its features, specifications, installation precautions, BIOS/RAID support, and connectivity options. Includes information on CPU socket, memory, expansion slots, and rear panel I/O.
TUF Z370-PLUS GAMING II	[راهنمای مادربرد ASUS TUF Z370-PLUS GAMING II: مشخصات، نصب و تنظیمات](#) شامل مشخصات فنی، چیدمان قطعات، ASUS TUF Z370-PLUS GAMING II راهنمای جامع مادربرد و ویژگی‌های خاص ایسوس ،RAID و BIOS و حافظه، تنظیمات CPU دستورالعمل‌های نصب.
Remplacement du disque dur et de la mémoire RAM de l'Asus X54C Rédigé par: ZFix	[Guide de remplacement du disque dur et de la mémoire RAM pour Asus X54C](#) Découvrez comment remplacer le disque dur et la mémoire RAM de votre ordinateur portable Asus X54C, X54H, X54L, X54HR avec ce guide détaillé étape par étape. Inclut les outils nécessaires et des instructions claires.
RT-AX55 RT-AX1800 Plus RT-AX56U V2 Wireless-AX1800 Dual Band WiFi 6 Router Quick Start Guide / 快速使用指南	[ASUS RT-AX55 AX1800 WiFi 6 Router Quick Start Guide](#) Get started quickly with the ASUS RT-AX55 AX1800 Dual Band WiFi 6 Router. This guide covers setup, positioning, and basic features for your new ASUS wireless router.