

ASUS X99-E

ASUS X99-E LGA2011-v3 Motherboard User Manual

Model: X99-E

1. INTRODUCTION

This manual provides comprehensive instructions for the installation, operation, and maintenance of your ASUS X99-E LGA2011-v3 ATX Motherboard. Designed for Intel Core i7 X-Series Processors, the X99-E features 5-Way Optimization, onboard USB 3.1 Type-C, M.2 support, ASUS Aura RGB lighting, and SafeSlot technology for enhanced durability. Please read this manual thoroughly before proceeding with installation and usage.

2. KEY FEATURES

- **Next-gen Connectivity:** Equipped with onboard M.2 slots utilizing 32Gbps PCIe bandwidth and onboard USB 3.1 Type-C for high-speed data transfer.
- **ASUS Aura RGB:** Features controllable RGB onboard lighting and a 4-pin strip header, allowing synchronization with other Aura-capable ASUS hardware for personalized aesthetics.
- **Patent-pending SafeSlot:** A reinforced PCIe slot design that uses an insert-molding process to bind the slot to fortifying metal, providing superior retention and shearing resistance for heavy graphics cards.
- **5-Way Optimization with Fan Xpert 4:** Offers one-click system tuning for optimized performance, power efficiency, digital power delivery, and cooling. Fan Xpert 4 provides advanced fan control with auto PWM/DC fan detection and support for high-amperage fans and water-cooling pumps.
- **Crystal Sound 3:** Gaming-grade audio solution with unmatched clarity, featuring a power pre-regulator for clean power delivery, noise isolation design, and premium audio components.

3. PACKAGE CONTENTS

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

- ASUS X99-E Motherboard
- ASUS 2-Way SLI bridge
- Serial ATA 6.0Gb/s cables

- ASUS Q-Shield (I/O Shield)
- Q-connector
- M.2 Screw Package
- User's manual (this document)
- Supporting DVD (drivers and utilities)

4. MOTHERBOARD LAYOUT

Below is an image illustrating the key components and connectors on the ASUS X99-E motherboard.



Figure 1: ASUS X99-E LGA2011-v3 ATX Motherboard. An overhead view showcasing its LGA2011-3 CPU socket, eight DDR4 DIMM slots, PCIe slots, M.2 support, and various connectors. Key features like Fan Xpert 3, Crystal Sound 3, and the ASUS Aura RGB header are visible.

Familiarize yourself with the location of the CPU socket, DIMM slots, PCIe slots, SATA ports, M.2 slot, and various headers before beginning installation.

5. SETUP AND INSTALLATION

Before installing the motherboard, ensure your system case is compatible with the ATX form factor. Always handle the motherboard by its edges to avoid static discharge. It is recommended to wear an anti-static wrist strap.

5.1. CPU Installation

1. Locate the LGA2011-3 CPU socket on the motherboard.
2. Open the CPU socket retention mechanism by pushing down and out on the two levers.
3. Carefully align the triangular mark on the CPU with the corresponding mark on the socket.
4. Gently place the CPU into the socket. Do not force it.
5. Close the retention mechanism by pushing the levers back into place until they click.

5.2. CPU Cooler Installation

Install your compatible LGA2011-3 CPU cooler according to its manufacturer's instructions. Ensure proper thermal paste application for efficient heat dissipation.

5.3. Memory (RAM) Installation

The ASUS X99-E supports DDR4 DIMM memory. Refer to the motherboard's manual for recommended memory configurations and dual/quad-channel setup.

1. Open the clips at both ends of the DIMM slot.
2. Align the notch on the DDR4 memory module with the key in the DIMM slot.
3. Insert the module firmly into the slot until the clips snap into place.

5.4. Motherboard Mounting

1. Install the I/O Shield (ASUS Q-Shield) into your PC case.
2. Align the motherboard with the standoffs in your PC case.
3. Secure the motherboard with screws, ensuring it is firmly seated but not overtightened.

5.5. Connecting Peripherals and Power

- Connect the 24-pin ATX power connector and the 8-pin CPU power connector from your power supply to the motherboard.
- Install graphics cards into the PCIe x16 slots.
- Connect SATA drives to the SATA 6.0Gb/s ports.
- Install M.2 SSDs into the M.2 slot, securing with the provided M.2 screw package.
- Connect front panel headers (power button, reset button, USB, audio) using the Q-connector for easier installation.
- Connect case fans to the Fan Xpert 4 headers.

6. OPERATING YOUR MOTHERBOARD

6.1. UEFI BIOS

The UEFI BIOS (Unified Extensible Firmware Interface Basic Input/Output System) is a firmware that initializes

hardware components and launches the operating system. To enter the UEFI BIOS utility, press the **Delete** key during the Power-On Self-Test (POST) or the **F2** key.

- **EZ Mode:** Provides a user-friendly interface for basic system information, fan control, and boot priority settings.
- **Advanced Mode:** Offers detailed configuration options for CPU, memory, storage, and other advanced settings.

6.2. ASUS 5-Way Optimization

This feature allows for one-click system tuning to optimize performance, power efficiency, digital power delivery, and cooling. Install the ASUS AI Suite 3 software from the supporting DVD or ASUS website to utilize this feature. It automatically detects your system's configuration and applies optimal settings.

6.3. ASUS Aura RGB Lighting

Control the onboard RGB lighting and connected Aura-compatible devices using the ASUS Aura software. This software allows you to customize lighting effects, colors, and synchronization across your system components.

7. MAINTENANCE

7.1. Cleaning

Regularly clean your PC case and motherboard to prevent dust buildup, which can lead to overheating and component failure. Use compressed air to remove dust from heatsinks, fans, and other components. Ensure the system is powered off and unplugged before cleaning.

7.2. BIOS Updates

Periodically check the ASUS support website for BIOS updates. BIOS updates can improve system stability, add support for new hardware, or fix bugs. Follow the instructions provided by ASUS carefully when updating the BIOS to avoid system damage.

8. TROUBLESHOOTING

If you encounter issues with your ASUS X99-E motherboard, consider the following common troubleshooting steps:

- **No Power:**
 - Ensure all power cables (24-pin ATX, 8-pin CPU) are securely connected.
 - Verify the power supply unit (PSU) is switched on and functioning correctly.
 - Check front panel power switch connections.
- **No Display:**
 - Confirm the monitor is connected to the graphics card (not the motherboard, as X99 platforms do not have integrated graphics).
 - Reseat the graphics card in its PCIe slot.
 - Try a different display cable or monitor.
 - Ensure RAM modules are properly seated.
- **System Instability/Crashes:**

- Check CPU and GPU temperatures.
- Verify RAM compatibility and stability (run memory diagnostic tools).
- Ensure all drivers are up to date.
- Reset BIOS settings to default.

- **Peripheral Not Detected:**

- Ensure the peripheral is correctly connected.
- Check device manager for driver issues.
- Try a different port or device.

For more detailed troubleshooting, refer to the ASUS support website or contact technical support.

9. SPECIFICATIONS

Feature	Specification
Brand	ASUS
Model	X99-E
CPU Socket	LGA 2011-3
Compatible Processors	Intel Core i7 X-Series
Chipset	Intel X99
RAM Type	DDR4 DIMM
Memory Speed	2133 MHz (and higher via overclocking)
USB 2.0 Ports	4 (onboard headers)
USB 3.1 Type-C	Onboard
M.2 Support	Yes, 32Gbps PCIe bandwidth
Audio	Crystal Sound 3
Form Factor	ATX

10. WARRANTY INFORMATION

This ASUS motherboard is covered by a manufacturer's limited warranty. The specific terms and duration of the warranty may vary by region and retailer. Please retain your proof of purchase for warranty claims. For detailed warranty information, visit the official ASUS website or contact your local ASUS representative.

11. TECHNICAL SUPPORT


For further assistance, driver downloads, BIOS updates, or troubleshooting not covered in this manual, please visit the official ASUS support website:

www.asus.com/support/

You may also contact ASUS customer service directly for personalized support.

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Related Documents - X99-E

<div><div>X99-E WS/ USB 3.1</div><div>ASUS</div><div>Motherboard</div></div>	<div><div>ASUS X99-E WS/USB 3.1 Motherboard User Manual</div><div>Comprehensive user manual for the ASUS X99-E WS/USB 3.1 motherboard, covering installation, BIOS setup, software support, RAID configurations, and multi-GPU support.</div></div>
<div><div>X99-E Series</div><div>ASUS</div><div>Motherboard</div></div>	<div><div>ASUS X99-E Series Motherboard User Manual</div><div>This comprehensive user manual provides essential information for the installation, configuration, and optimal use of the ASUS X99-E Series Motherboard. Designed for users building or upgrading their PC systems, this guide covers everything from initial hardware setup to advanced BIOS settings and RAID configurations.</div></div>
<div><div>X99-PRO/ USB 3.1</div><div>ASUS</div><div>Motherboard</div></div>	<div><div>ASUS X99-PRO/USB 3.1 Motherboard User Manual and Installation Guide</div><div>Explore the ASUS X99-PRO/USB 3.1 Motherboard User Manual for detailed installation, BIOS configuration, system specifications, and safety guidelines. Essential for PC builders and enthusiasts.</div></div>
<div><div>X99-DELUXE II Series</div><div>ASUS</div><div>Motherboard</div></div>	<div><div>ASUS X99-DELUXE II Series Motherboard User Manual: Installation, BIOS Setup, and Specifications</div><div>Comprehensive user manual for the ASUS X99-DELUXE II Series Motherboard, covering detailed installation procedures, BIOS setup configurations, RAID support, and full product specifications. Essential guide for PC builders and enthusiasts.</div></div>
<div><div></div></div>	<div><div>ASUS X99-E WS Motherboard CPU Support and Specifications</div><div>Comprehensive CPU support list for the ASUS X99-E WS motherboard, including Intel Core i7 and Xeon processors. Details validated PCB and BIOS versions, along with important notes for server installations. Information on ASUS products, services, and community resources.</div></div>

X99-A II

ASUS
Motherboard

[ASUS X99-A II Motherboard User Manual and Specifications](#)

This comprehensive user manual provides detailed information for the ASUS X99-A II Motherboard, including installation guides, BIOS setup procedures, RAID support configurations, and extensive technical specifications for optimal system building.