parts-quick 32GB DDR5 4800MHz ECC UDIMM RAM

32GB Compatible Memory for MSI D3051 Motherboard DDR5 4800MHz ECC UDIMM RAM User Manual

Brand: parts-quick

INTRODUCTION

Welcome to the user manual for your new parts-quick 32GB DDR5 4800MHz ECC UDIMM RAM module. This manual provides essential information for the proper installation, operation, and maintenance of your memory module, specifically designed for compatibility with the MSI D3051 Motherboard. Please read this manual carefully before proceeding with installation.

PRODUCT OVERVIEW

The parts-quick 32GB DDR5 4800MHz ECC UDIMM RAM is a high-performance memory module engineered to enhance the speed and efficiency of compatible systems. It features Error-Correcting Code (ECC) for improved data integrity and system stability, making it suitable for professional and server-grade applications where data accuracy is critical.
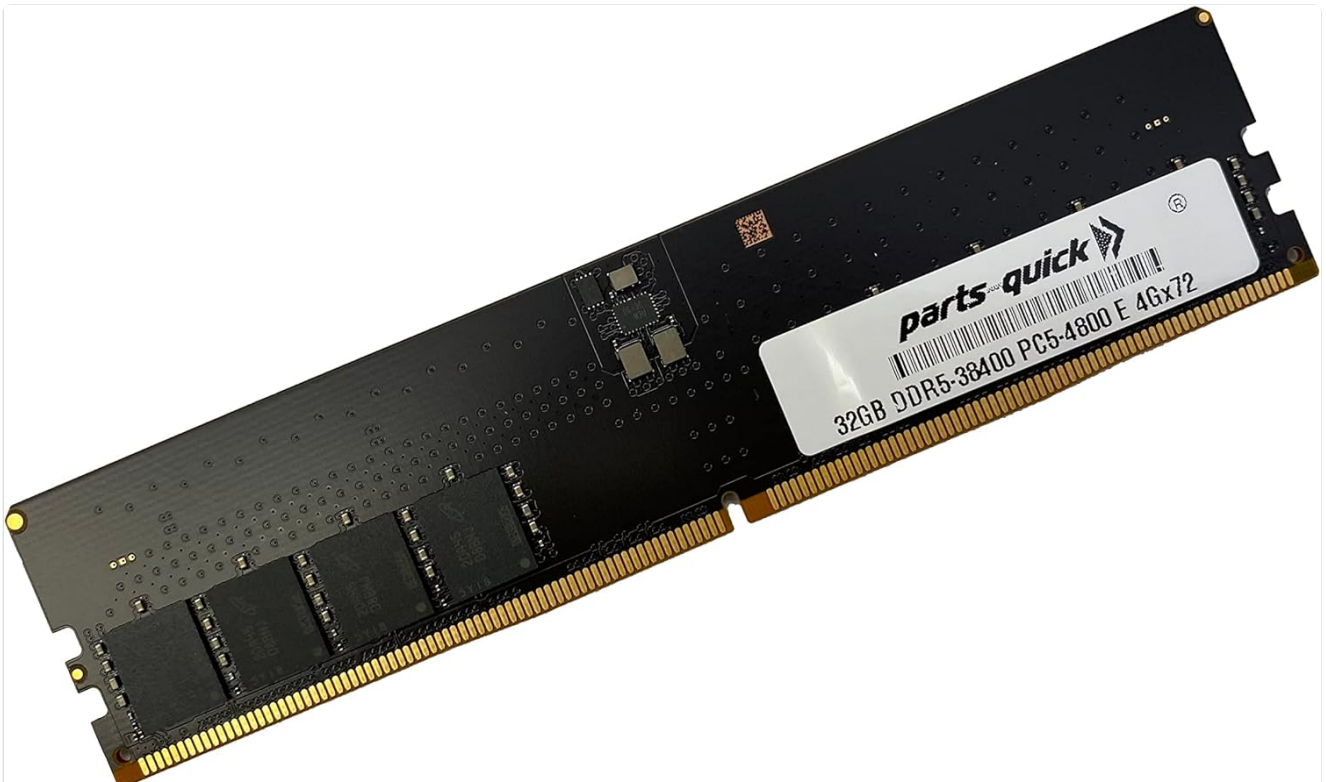

Image: A single black DDR5 RAM module with a white label showing "parts-quick" logo and "32GB DDR5-38400 PC5-4800 E 4Gx72". The module has gold contacts along the bottom edge.

Key Features:

- **Capacity:** 32GB
- **Speed:** DDR5 PC5-38400 4800MHz
- **Form Factor:** 288-pin ECC Unbuffered DIMM
- **Voltage:** 1.1v
- **Compatibility:** Specifically compatible with MSI D3051 Motherboard.
- **Error Correction:** ECC (Error-Correcting Code) for enhanced data integrity.

SETUP AND INSTALLATION

Before installing the memory module, ensure your computer is powered off and unplugged from the wall outlet. It is highly recommended to wear an anti-static wrist strap or frequently touch a grounded metal object (like the computer case) to discharge static electricity, which can damage electronic components.

1. **Preparation:** Power down your computer completely and disconnect the power cable. Open the computer case to access the motherboard.
2. **Locate DIMM Slots:** Identify the DDR5 DIMM slots on your MSI D3051 Motherboard. Refer to your motherboard's user manual for the correct slot configuration and population order, especially if installing multiple modules.
3. **Open Retention Clips:** Gently push open the white retention clips at both ends of the DIMM slot.
4. **Align Module:** Hold the memory module by its edges, avoiding touching the gold contacts. Align the notch on the memory module with the key in the DIMM slot. The module will only fit one way.
5. **Insert Module:** Apply even pressure to both ends of the memory module until it clicks into place and the retention clips automatically close. If the clips do not close, gently push them inward until they secure the module.
6. **Verify Installation:** Ensure the module is seated firmly and evenly in the slot, and the clips are fully engaged.
7. **Close Case and Power On:** Close your computer case, reconnect the power cable, and power on your system.

Important Compatibility Note:
This system supports ECC or non-ECC memory depending on which CPU is installed. ECC memory is not supported on Intel Core i3-12100, i3-13100, i3-13400, and i5-12400 processors. Mixing ECC and non-ECC memory is not recommended and may lead to system instability or failure. Please check your motherboard's user manual and CPU specifications for additional information regarding memory compatibility.

OPERATING

Once the memory module is successfully installed, your system should automatically detect the new memory. Upon booting, you can verify the installed memory in your system's BIOS/UEFI settings or within the operating system's system information utility.

- **BIOS/UEFI Verification:** During startup, press the designated key (often Del, F2, F10, or F12) to enter the BIOS/UEFI setup. Navigate to the system information or memory section to confirm the detected RAM capacity and speed.
- **Operating System Verification:**
  - **Windows:** Right-click on "This PC" or "My Computer," select "Properties," or open Task Manager (Ctrl+Shift+Esc) and go to the "Performance" tab, then "Memory."
  - **macOS:** Click the Apple menu, select "About This Mac," then "Memory."

- **Linux:** Use commands like free -h or sudo lshw -c memory in the terminal.

The added memory will allow your system to handle more demanding applications, improve multitasking capabilities, and potentially increase overall system responsiveness, especially for memory-intensive tasks.

MAINTENANCE

Memory modules generally require minimal maintenance. However, following these guidelines can help ensure their longevity and optimal performance:

- **Keep it Clean:** Periodically clean the inside of your computer case to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air to gently remove dust from around the memory modules and slots.
- **Proper Handling:** Always handle memory modules by their edges. Avoid touching the gold contacts or the integrated circuits (chips) on the module.
- **Environmental Conditions:** Ensure your computer operates in a well-ventilated area with stable temperature and humidity to prevent component stress.
- **Firmware Updates:** Keep your motherboard's BIOS/UEFI firmware updated. Manufacturers often release updates that improve memory compatibility and stability.

TROUBLESHOOTING

If you encounter issues after installing your memory module, consider the following troubleshooting steps:

- **System Does Not Boot or No Display:**

  - **Re-seat the Module:** Power off and unplug the computer. Carefully remove and re-insert the memory module, ensuring it is fully seated and the retention clips are engaged.
  - **Check Motherboard Manual:** Verify that the module is installed in the correct DIMM slot(s) according to your motherboard's manual, especially if using multiple modules or specific configurations.
  - **Test One Module:** If you have multiple modules, try booting with only one module installed at a time to identify if a specific module is faulty.
  - **Clear CMOS:** Refer to your motherboard manual for instructions on how to clear the CMOS (BIOS settings). This can resolve compatibility issues.

- **Incorrect Memory Capacity Detected:**

  - **BIOS/UEFI Update:** Ensure your motherboard's BIOS/UEFI is updated to the latest version, as this often includes improved memory support.
  - **Re-seat Module:** A partially seated module might not be fully recognized.

- **System Instability or Crashes (Blue Screens/Kernel Panics):**

  - **Memory Diagnostic Tool:** Run a memory diagnostic tool (e.g., Windows Memory Diagnostic, MemTest86) to check for errors in the memory module.
  - **ECC/Non-ECC Mismatch:** Reconfirm that your CPU and motherboard configuration supports ECC memory, and that you are not mixing ECC and non-ECC modules.
  - **Overheating:** Ensure proper airflow within the case and that other components are not overheating.

If these steps do not resolve the issue, please contact parts-quick technical support for further assistance.

SPECIFICATIONS

Attribute	Detail
Capacity	32GB
Memory Type	DDR5
Speed	4800MHz (PC5-38400)
Form Factor	288-pin ECC Unbuffered DIMM
Voltage	1.1v
Error Correction	ECC (Error-Correcting Code)
Compatibility	MSI D3051 Motherboard
Manufacturer	parts-quick
Date First Available	January 23, 2024

WARRANTY AND SUPPORT

Your parts-quick memory module is backed by a **Lifetime Warranty**, ensuring peace of mind regarding the quality and durability of your purchase. In the unlikely event of a defect or issue, parts-quick will provide support and replacement as per the warranty terms.

For technical assistance, troubleshooting, or warranty claims, please contact parts-quick Toll Free Technical Support. Refer to the parts-quick official website or product packaging for the most current contact information.
Manufacturer: parts-quick