Crucial CT2K8G4DFD8213

Crucial 16GB Kit DDR4 2133 MT/s UDIMM Memory Installation Guide

Model: CT2K8G4DFD8213

Introduction

This manual provides detailed instructions for the installation, operation, maintenance, and troubleshooting of your Crucial 16GB Kit (8GBx2) DDR4 2133 MT/s (PC4-17000) CL15 DR x8 Non-ECC UDIMM 288-Pin Memory. Please read these instructions carefully before proceeding with installation to ensure proper function and to avoid damage to your system or memory modules.

Safety Information

Always observe the following safety precautions when handling computer components:

- **Electrostatic Discharge (ESD) Protection:** ESD can damage electronic components. Before handling memory modules, discharge static electricity by touching a grounded metal object, such as the unpainted metal chassis of your computer. Consider using an anti-static wrist strap.
- **Power Off:** Ensure your computer is completely powered off and unplugged from the wall outlet before opening the case or installing any components.
- **Handle with Care:** Hold memory modules by their edges, avoiding contact with the gold connector pins or the integrated circuits.
- **Ventilation:** Ensure adequate ventilation around your computer to prevent overheating.

Setup: Memory Installation

Follow these steps to properly install your Crucial DDR4 UDIMM memory modules:

1. **Prepare Your System:**
    - Power down your computer completely and unplug the power cord.
    - Open your computer case to access the motherboard. Refer to your computer or motherboard manual for specific instructions on how to open the case.
    - Discharge any static electricity by touching a grounded metal object.
2. **Locate Memory Slots:**

Identify the DDR4 DIMM slots on your motherboard. These are typically long slots near the CPU. Consult your motherboard manual for the correct slot configuration for dual-channel memory installation (e.g., slots 1 and 3, or 2 and 4).

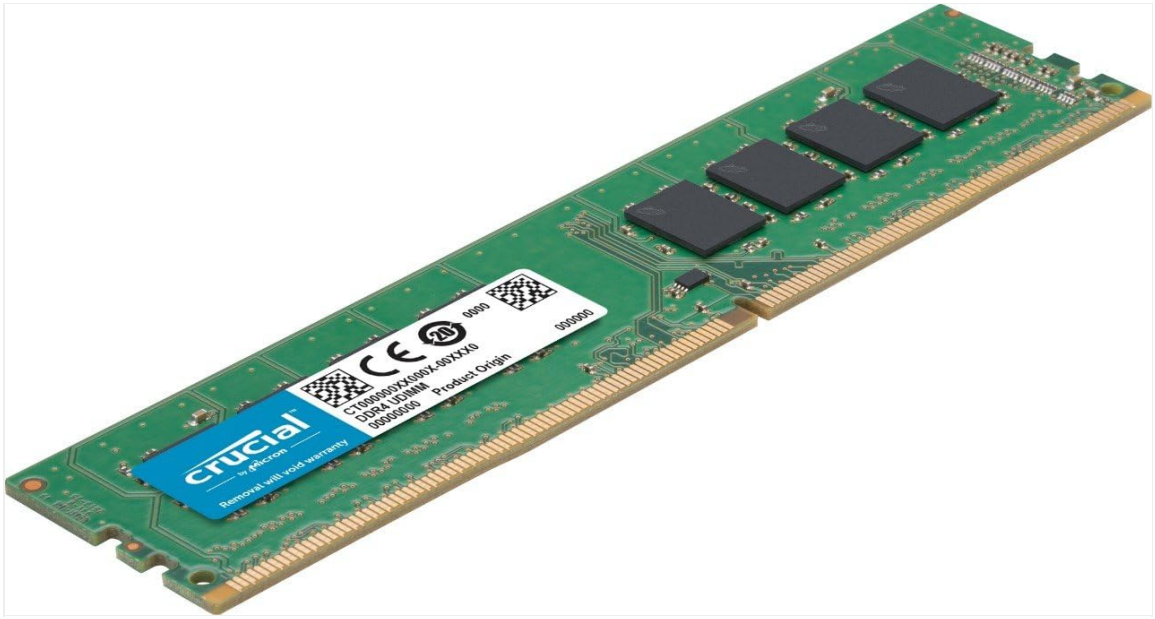

Image: A single Crucial DDR4 UDIMM memory module, showing its green PCB and black memory chips.

3. **Open Retention Clips:**

   Push the small white or black clips at each end of the memory slot outwards to open them.

4. **Insert Memory Module:**

   Align the notch on the bottom edge of the memory module with the key in the DIMM slot. The module is designed to fit only one way. Apply firm, even pressure to both ends of the module until it clicks into place and the retention clips snap shut automatically. If the clips do not snap shut, gently push them inward until they lock.

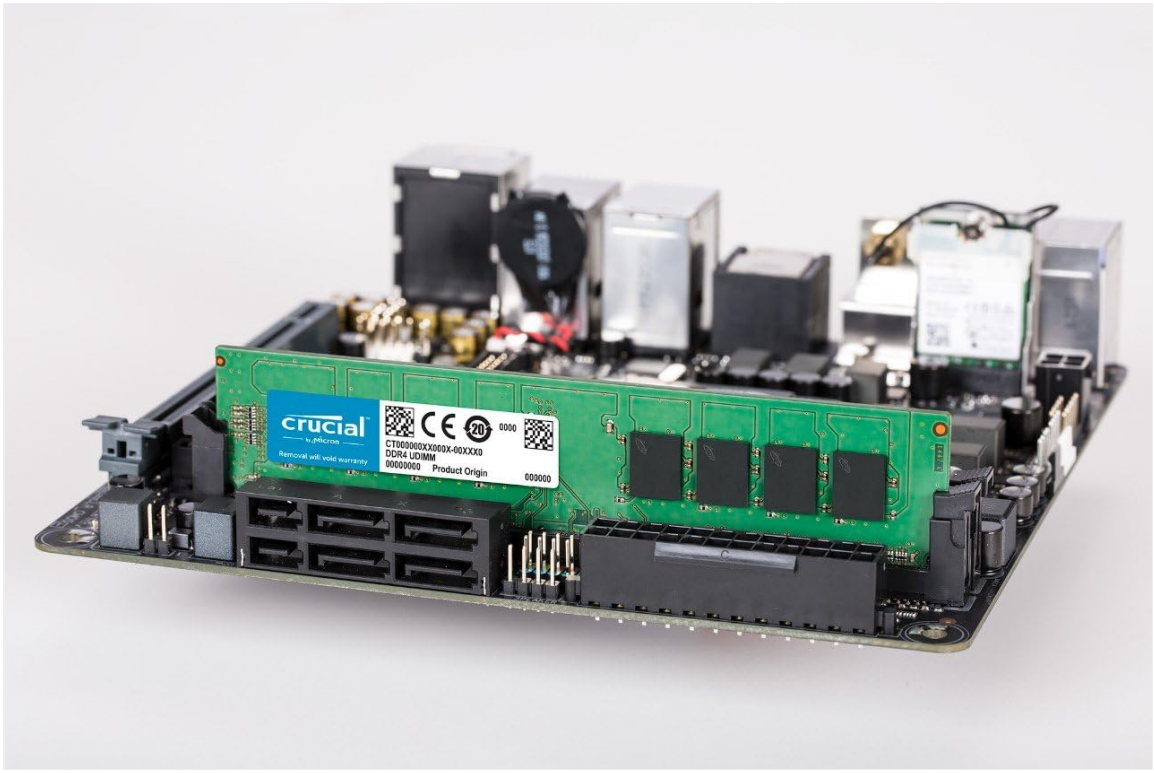

Image: A Crucial DDR4 UDIMM memory module being inserted into a motherboard slot, demonstrating proper alignment.

5. **Install Second Module:**

   Repeat the process for the second memory module, ensuring it is installed in the correct

corresponding slot for dual-channel operation as specified by your motherboard manual.

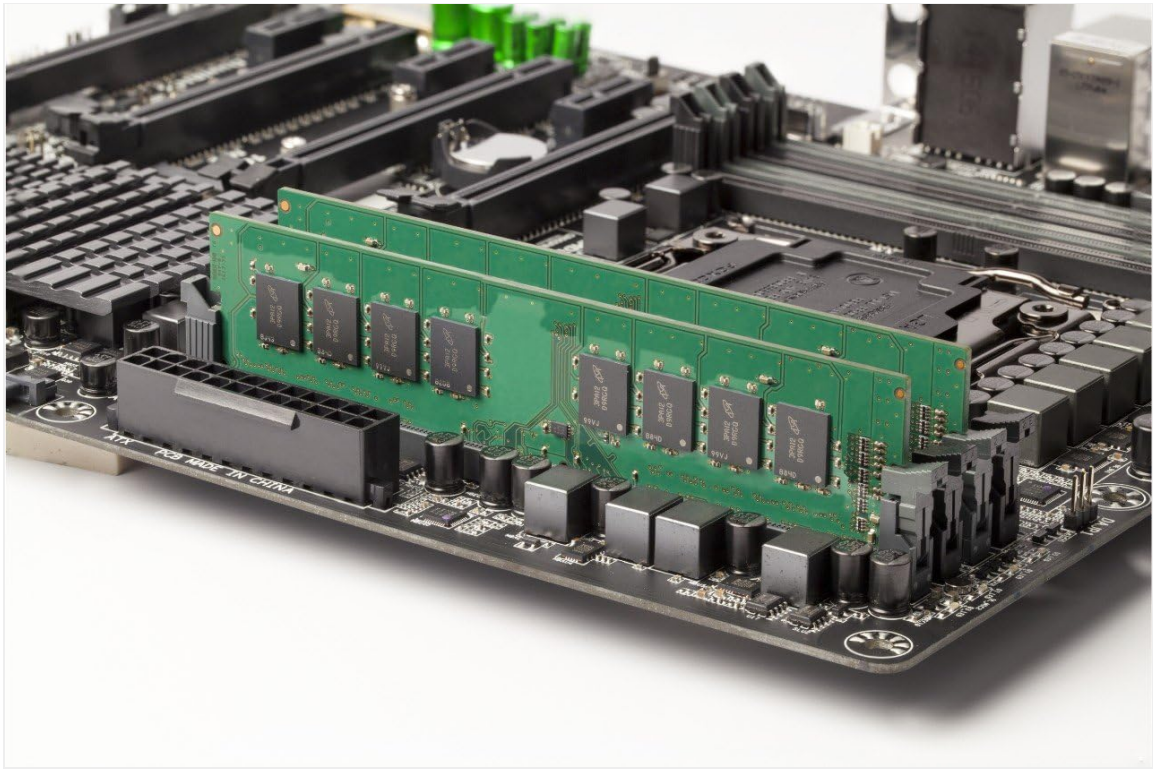

Image: Two Crucial DDR4 UDIMM memory modules correctly installed in adjacent slots on a motherboard.

6. **Close Case and Power On:**

   Once both modules are securely installed, close your computer case, reconnect the power cord, and power on your system.

Operating

After installation, your system should automatically detect the new memory. Upon booting, you can verify the installed RAM:

- **BIOS/UEFI:** Access your system's BIOS or UEFI settings during startup (usually by pressing DEL, F2, or F10). Look for a system information or memory section to confirm the total installed RAM.
- **Operating System:**
  - **Windows:** Right-click on 'This PC' or 'My Computer', select 'Properties'. The installed RAM will be displayed.
  - **macOS:** Click the Apple menu, then 'About This Mac'. The memory information will be listed.
  - **Linux:** Open a terminal and type `free -h` or `cat /proc/meminfo`.

Your system should now operate with the increased memory capacity, potentially leading to improved multitasking and overall performance.

Maintenance

Crucial memory modules are designed for reliability and generally require minimal maintenance. However, consider the following to ensure optimal performance and longevity:

- **Keep System Clean:** Regularly clean the interior of your computer case to prevent dust buildup, which can impede airflow and lead to overheating of components, including memory. Use compressed air to gently remove dust from memory modules and slots.
- **BIOS/UEFI Updates:** Keep your motherboard's BIOS or UEFI firmware updated. Manufacturers

often release updates that improve memory compatibility and stability.

- **Avoid Physical Stress:** Do not bend or apply excessive force to the memory modules once installed.

Troubleshooting

If you encounter issues after installing your Crucial memory, consider these troubleshooting steps:

- **System Does Not Boot:**
  - Ensure memory modules are fully seated in their slots. Re-seat them by pressing down firmly until the clips lock.
  - Verify that the modules are installed in the correct slots according to your motherboard manual for dual-channel operation.
  - If installing multiple modules, try booting with only one module at a time to identify a potentially faulty module or slot.
  - Clear the CMOS (Complementary Metal-Oxide-Semiconductor) settings on your motherboard. Refer to your motherboard manual for instructions.
- **Incorrect RAM Detected:**
  - Check BIOS/UEFI settings to ensure the memory is recognized correctly.
  - Ensure your motherboard supports the total capacity and speed of the installed memory.
  - Update your motherboard's BIOS/UEFI to the latest version, as this often includes improved memory compatibility.
- **System Instability/Crashes:**
  - Run a memory diagnostic tool (e.g., Windows Memory Diagnostic, MemTest86) to check for errors.
  - Ensure your system's power supply unit (PSU) is sufficient for all components, including the new memory.

If issues persist after these steps, contact Crucial support or your system manufacturer for further assistance.

Specifications

Feature	Detail
Model Number	CT2K8G4DFD8213
Capacity	16GB Kit (8GB x 2 modules)
Memory Type	DDR4 UDIMM
Speed	2133 MT/s (PC4-17000)
CAS Latency	CL15
Rank	Dual Rank (DR x8)
Error Correction	Non-ECC
Form Factor	288-Pin Unbuffered DIMM

Feature	Detail
Voltage	1.2V
Dimensions (LxWxH)	5.27 x 0.03 x 1.23 inches

Warranty Information

Crucial memory products are backed by a limited lifetime warranty. This warranty covers defects in materials and workmanship. For full details regarding warranty terms, conditions, and limitations, please refer to the official Crucial website or the warranty documentation included with your purchase.

Support

For additional assistance, technical support, or to access updated drivers and documentation, please visit the official Crucial support website:
Crucial Support Website: www.crucial.com/support
You may also find helpful resources and community forums on the Crucial website.