Micron CT102464BF160B

Crucial RAM 8GB DDR3 1600 MHz CL11 Laptop Memory User Manual

Model: CT102464BF160B

1. Product Overview

The Crucial 8GB DDR3L 1600 MHz CL11 Laptop Memory (Model: CT102464BF160B) is designed to enhance the performance of compatible laptop systems. This module operates at speeds up to 1600 MT/s and features a CL11 latency. It is a dual voltage module, capable of operating at either 1.35V or 1.5V, making it versatile for various laptop configurations. It is an Unbuffered, non-ECC SODIMM with 204 pins, conforming to industry standards for laptop memory. Key benefits include improved system responsiveness, faster application loading, and enhanced multitasking capabilities. Installation is designed to be straightforward for users.



Figure 1: Crucial 8GB DDR3L 1600 MHz SODIMM memory module. This image shows the top view of the memory stick, highlighting the Crucial branding, model number (CT102464BF160B), capacity (8GB), type (DDR3L-1600 SODIMM), voltage (1.35V), and CL11 latency. The module also displays regulatory marks and a QR code.

2. Setup and Installation

Before beginning the installation process, ensure your laptop is powered off and disconnected from all power sources. It is

recommended to discharge any static electricity from your body by touching a grounded metal object before handling the memory module.

2.1. Preparation

- **Power Off:** Completely shut down your laptop. Do not just put it to sleep.
- **Disconnect Power:** Unplug the AC adapter and remove the battery (if removable).
- **Static Discharge:** Touch an unpainted metal surface on your laptop's chassis to ground yourself and prevent electrostatic discharge (ESD) damage to components.
- **Locate Memory Slots:** Refer to your laptop's manufacturer manual to locate the memory access panel and the SODIMM slots.

2.2. Installation Steps

1. Carefully open the memory access panel on your laptop.
2. If replacing existing memory, gently push the small clips on either side of the SODIMM module outwards to release it. The module will pop up at an angle. Remove it by pulling it away from the slot.
3. Align the notch on the new Crucial SODIMM module with the notch in the memory slot.
4. Insert the module at a 45-degree angle into the slot, applying firm, even pressure until it is fully seated.
5. Gently push the module down until the clips on both sides snap into place, securing the module horizontally.
6. Close the memory access panel.
7. Reinstall the battery (if removed) and reconnect the AC adapter.
8. Power on your laptop. The system should automatically detect the new memory.

For a detailed visual guide, you may refer to theInstallation Manual (PDF) provided by the manufacturer.

3. Operating Principles

Once installed, the Crucial 8GB DDR3L 1600 MHz CL11 Laptop Memory operates as the primary working memory for your computer's Central Processing Unit (CPU). It temporarily stores data and program instructions that the CPU needs to access quickly. By increasing the amount of available RAM, your system can handle more applications simultaneously, switch between tasks more smoothly, and process large files more efficiently.
The 1600 MHz speed indicates the data transfer rate, and CL11 (CAS Latency 11) refers to the number of clock cycles it takes for the memory to respond to a request from the CPU. Lower latency generally means faster response times. The dual voltage capability (1.35V or 1.5V) ensures compatibility with a wider range of systems that support either standard DDR3 or low-voltage DDR3L memory.

4. Maintenance

Memory modules generally require minimal maintenance. However, ensuring the overall health of your laptop can contribute to the longevity and stable operation of your RAM.

- **Keep System Clean:** Regularly clean your laptop's cooling vents to prevent dust buildup, which can lead to overheating. Overheating can negatively impact all internal components, including RAM.
- **Software Updates:** Keep your operating system and drivers updated. Sometimes, system stability issues related to memory can be resolved with software patches.
- **Avoid Physical Damage:** Handle the memory module only by its edges to avoid touching the gold contacts or the chips, which can be sensitive to oils and static electricity.
- **Proper Storage:** If storing the module, keep it in an anti-static bag to protect it from static discharge and dust.

5. Troubleshooting

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

- **System Not Booting / Black Screen:**
  - Ensure the memory module is fully seated in its slot. Re-seat it by removing and re-inserting it firmly.
  - Verify that the module's notch aligns correctly with the slot's key.
  - If you have multiple modules, try installing only one at a time to identify a potentially faulty module.
  - Check your laptop's compatibility with DDR3L 1600 MHz SODIMM memory.
- **System Instability / Blue Screens (BSOD):**
  - Run a memory diagnostic tool (e.g., Windows Memory Diagnostic) to check for errors.
  - Ensure your laptop's BIOS/UEFI firmware is up to date.
  - Confirm the memory is running at the correct voltage (1.35V or 1.5V) as supported by your system.
- **Incorrect Memory Size Detected:**
  - Verify the module is correctly seated.
  - Check your operating system's system information to confirm the detected RAM.
  - Some older systems may have a maximum RAM limit; ensure your laptop supports 8GB per slot or total.

If problems persist, consult your laptop's manufacturer support or Crucial's support resources.

6. Specifications

Feature	Detail
Model Number	CT102464BF160B
Capacity	8GB
Memory Type	DDR3L SODIMM
Speed	1600 MHz (PC3-12800)
CAS Latency (CL)	CL11
Voltage	1.35V (Dual Voltage: 1.35V or 1.5V)
Form Factor	204-pin SODIMM
Error Correction	Non-ECC
Buffering	Unbuffered
Dimensions (LxWxH)	2.87 x 1.18 x 0.08 inches
Weight	0.32 ounces

7. Warranty and Support

Crucial memory products are backed by a comprehensive warranty. This Crucial 8GB DDR3L 1600 MHz CL11 Laptop Memory module comes with a **Free Lifetime Warranty**, ensuring peace of mind regarding its quality and durability. Additionally, a No Hassle Return Policy is typically offered for eligible purchases.

For technical support, compatibility questions, or warranty claims, please visit the official Crucial website or contact their customer service. You can also find helpful resources and guides on their support pages.

Important Note: As per legal disclaimers, users must be 18 years or older to purchase this product.

© 2024 Micron Technology, Inc. All rights reserved. Crucial is a trademark of Micron Technology, Inc.
This manual is for informational purposes only. Specifications are subject to change without notice.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question