

## Computer Memory Solutions 2GB DDR2 5300 667MHz Non ECC SODIMM

# Computer Memory Solutions 2GB DDR2 SODIMM RAM Installation Guide

Model: 2GB DDR2 5300 667MHz Non ECC SODIMM

## 1. INTRODUCTION

This manual provides detailed instructions for the proper installation, verification, and care of your Computer Memory Solutions (CMS) 2GB DDR2 5300 667MHz Non ECC SODIMM memory module. This module is specifically designed for compatibility with various Toshiba Satellite X200 series laptop models. Please read all instructions carefully before proceeding with installation.

The CMS memory module is a 2GB PC5300 240-pin SODIMM operating at 667MHz DDR2 SDRAM. It is a single-piece kit designed to enhance your system's performance.

## 2. SETUP AND INSTALLATION

Before beginning the installation process, ensure your laptop is powered off and disconnected from all power sources. It is crucial to discharge any static electricity from your body by touching a grounded metal object to prevent damage to the memory module or your laptop components.

### 2.1 Safety Precautions

- Always power off and unplug your laptop before opening it.
- Remove the battery from the laptop.
- Ground yourself to prevent electrostatic discharge (ESD) damage.
- Handle the memory module by its edges, avoiding contact with the gold connectors or chips.

### 2.2 Installation Steps

1. **Locate the Memory Compartment:** Carefully turn your laptop over and locate the memory compartment cover. This is typically secured by small screws. Refer to your laptop's specific user manual for exact location and removal instructions.
2. **Remove the Cover:** Unscrew and gently remove the memory compartment cover.

3. **Identify Existing Modules (if any):** If there are existing memory modules, note their orientation. If you are replacing a module, gently push the retaining clips on both sides outwards to release the module, then pull it out at an angle.
4. **Insert the New Module:** Align the notch on the CMS 2GB DDR2 SODIMM module with the notch in the memory slot. Insert the module at a 45-degree angle into the slot.



Figure 1: Top view of the CMS 2GB DDR2 SODIMM memory module.

5. **Secure the Module:** Once inserted, push the module down until the retaining clips on both sides snap into place, securing the module horizontally.



Figure 2: Angled view of the CMS 2GB DDR2 SODIMM memory module, showing the gold connectors.

6. **Replace the Cover:** Reattach the memory compartment cover and secure it with the screws.
7. **Reconnect Power:** Reinsert the battery and reconnect the AC adapter.

### 3. OPERATING AND VERIFICATION

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After installation, power on your laptop. The system should automatically detect the new memory. You can verify the installation through the following methods:

- **BIOS/UEFI Setup:** During startup, press the designated key (often F2, Del, or F10) to enter the BIOS/UEFI setup. Navigate to the 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`.

If the system boots successfully and the memory is recognized, the installation was successful.

### 4. MAINTENANCE

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Memory modules generally require minimal maintenance. However, proper handling and environmental conditions are important for longevity.

- **Handling:** Always handle the module by its edges. Avoid touching the gold contacts or the integrated circuits (chips) on the module.
- **Cleaning:** If necessary, gently clean the gold contacts with a lint-free cloth and isopropyl alcohol. Ensure

the module is completely dry before reinstallation. Do not use abrasive cleaners.

- **Storage:** Store unused modules in an anti-static bag in a cool, dry environment.

## 5. TROUBLESHOOTING

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

- **System Does Not Boot:**
  - Ensure the module is fully seated in the slot and the retaining clips are engaged.
  - Verify the module's notch aligns correctly with the slot's key.
  - If multiple modules are installed, try booting with only the new CMS module.
  - If the system still does not boot, try reinstalling your original memory modules to confirm the laptop is functional.
- **Incorrect Memory Size Reported:**
  - Re-check the module seating.
  - Ensure your operating system is 64-bit to fully utilize more than 4GB of RAM (though this module is 2GB, it's a general consideration for memory upgrades).
  - Verify compatibility with your specific laptop model.
- **System Instability or Crashes:**
  - Run a memory diagnostic tool (e.g., Windows Memory Diagnostic, MemTest86) to check for errors.
  - Ensure the module is correctly installed and not loose.

## 6. SPECIFICATIONS

Feature	Specification
RAM Capacity	2 GB
Memory Type	SODIMM, 200-Pin
RAM Technology	DDR2 SDRAM (PC2-5300)
Memory Speed	667 MHz (5300 MHz)
Error Correction	Non ECC
Voltage	1.8 Volts
Compatible Devices	Laptop (Toshiba Satellite X200 Series)
Product Dimensions	4 x 0.5 x 8 inches
Item Weight	2.08 ounces
Manufacturer	Computer Memory Solutions

Note: Product appearance (color of PCB, chips) may vary depending on stock.

## 7. WARRANTY INFORMATION

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This Computer Memory Solutions (CMS) product carries a **Limited Lifetime Warranty** when purchased directly from Computer Memory Solutions. This warranty covers defects in materials and workmanship under normal use. Please retain your proof of purchase for warranty claims.

The warranty is void if the "Warranty Void If Removed" sticker on the module is tampered with or removed.

## 8. SUPPORT

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For further assistance, technical support, or warranty inquiries, please contact Computer Memory Solutions directly. You can find more information and contact details on the official Computer Memory Solutions website or through their authorized retailers.

Visit the [Computer Memory Solutions Store on Amazon](#) for additional product information and support resources.