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› A-Tech 32GB DDR4 2666MHz RAM Installation Guide for ASUS TUF Sabertooth Motherboards

A-Tech ASA171

A-Tech 32GB DDR4 2666MHz RAM Installation Guide

For ASUS TUF Sabertooth X99, Z170 Mark 1, Z170 S Motherboards

1. INTRODUCTION

This manual provides detailed instructions for installing and maintaining your A-Tech 32GB (2x16GB) DDR4 2666MHz PC4-21300 DIMM Non-ECC UDIMM Memory Upgrade Kit. This memory kit is designed to enhance the performance of compatible ASUS TUF Sabertooth motherboards, specifically the X99, Z170 Mark 1, and Z170 S models. Proper installation ensures optimal system stability and performance.

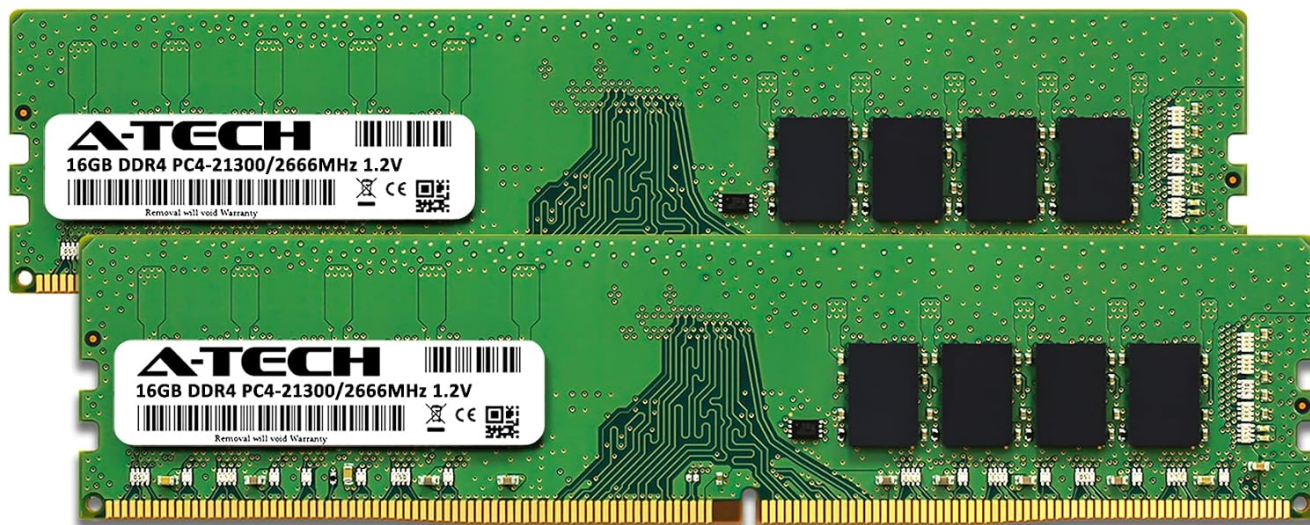


Image 1.1: Two A-Tech 16GB DDR4 RAM modules included in the kit.

2. SETUP AND INSTALLATION

Before beginning the installation process, ensure you have read and understood all instructions. Improper handling or installation can damage the memory modules or your computer system.

2.1 Pre-Installation Checklist

- **Safety First:** Always disconnect your computer from the power outlet before opening the case.
- **Static Electricity:** Ground yourself by touching an unpainted metal surface on your computer chassis before handling any components. Consider using an anti-static wrist strap.
- **Tools:** A Phillips head screwdriver may be required to open your computer case.
- **System Manual:** Refer to your motherboard's manual for specific RAM seating and channel guidelines, as

configurations can vary.

2.2 Installation Steps

1. **Open Computer Case:** Carefully open your computer's side panel to access the motherboard.
2. **Locate DIMM Slots:** Identify the DDR4 DIMM slots on your motherboard. These are typically long slots near the CPU. Your motherboard manual will indicate the correct slots for dual-channel configuration (e.g., A2/B2 or 1/3).
3. **Prepare Slots:** If existing RAM is present, gently push down the retention clips on both ends of the slot to release the module. If installing into empty slots, open the retention clips.
4. **Align RAM Module:** Hold the A-Tech DDR4 RAM module by its edges, avoiding touching the gold contacts. Align the notch on the module with the key in the DIMM slot. DDR4 modules have a single notch slightly off-center.
5. **Insert RAM Module:** Place the module into the slot and apply firm, even pressure to both ends until the retention clips snap into place. You should hear a click. Ensure the module is seated securely and evenly.
6. **Repeat for Second Module:** Install the second 16GB module into the corresponding slot as indicated by your motherboard manual for dual-channel operation.
7. **Close Case:** Once both modules are securely installed, close your computer case.
8. **Reconnect Power:** Reconnect all power cables and peripherals to your computer.

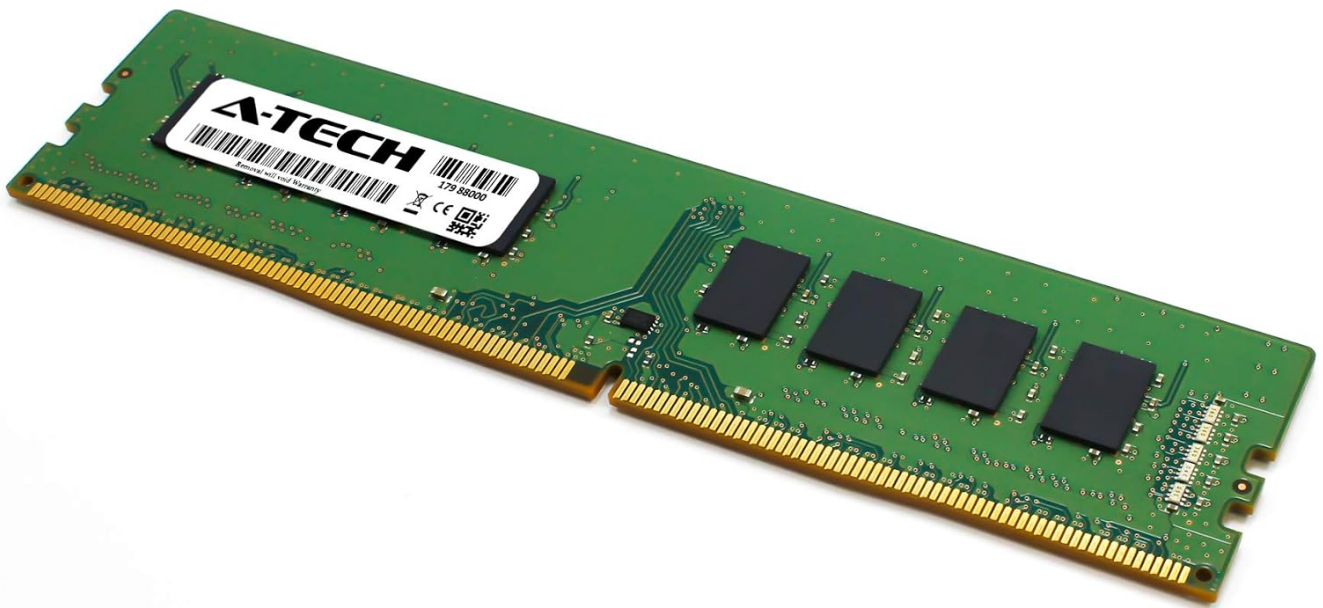


Image 2.1: A single A-Tech DDR4 RAM module, showing the notch for proper alignment.

3. OPERATING INSTRUCTIONS

After successful installation, your A-Tech RAM modules will be automatically detected and utilized by your system. Upon booting your computer, the system BIOS/UEFI will recognize the new memory capacity. The operating system will then make use of the expanded memory.

3.1 Verifying Installation

To confirm that the RAM has been correctly installed and recognized:

- **Windows:** Right-click on 'This PC' or 'My Computer', select 'Properties'. The installed RAM amount will be displayed. Alternatively, open Task Manager (Ctrl+Shift+Esc), go to the 'Performance' tab, and select 'Memory'.
- **BIOS/UEFI:** During startup, enter your system's BIOS/UEFI settings (usually by pressing Del, F2, or F10).

Navigate to the system information or memory section to view the detected RAM.

UPGRADE PERFORMANCE

Reduce bottlenecks, speed up data processing, and improve the stability of your Desktop PC with A-Tech Memory



Image 3.1: A desktop PC environment, ready for enhanced multitasking with upgraded memory.

4. MAINTENANCE

A-Tech RAM modules are designed for long-term reliability and generally require minimal maintenance. However, following these guidelines can help ensure their longevity and optimal performance:

- **Keep System Clean:** Regularly clean the interior of your computer case to prevent dust buildup, which can lead to overheating and affect component performance. Use compressed air to gently remove dust from RAM modules and slots.
- **Proper Handling:** When handling RAM modules, always hold them by the edges and avoid touching the gold contacts or the integrated circuits.
- **Environmental Conditions:** Ensure your computer operates in a well-ventilated area with stable temperature and humidity to prevent stress on components.

5. TROUBLESHOOTING

If you encounter issues after installing your A-Tech RAM, refer to the following troubleshooting steps:

5.1 Common Issues and Solutions

- **System Does Not Boot / No Display:**
 - **Re-seat RAM:** Ensure both RAM modules are fully seated in their slots. Remove and re-insert them, applying firm, even pressure until the clips snap.
 - **Check Compatibility:** Double-check that the RAM is compatible with your motherboard model and CPU.
 - **Test Individually:** If you installed two modules, try booting with only one module at a time in the primary slot (refer to your motherboard manual). This helps identify a potentially faulty module.
 - **Clear CMOS:** Reset your motherboard's BIOS/UEFI settings to default by clearing the CMOS (refer to your motherboard manual for instructions).
- **Incorrect RAM Amount Detected:**
 - **Check Seating:** Ensure all modules are fully seated.
 - **BIOS/UEFI Update:** Ensure your motherboard's BIOS/UEFI is updated to the latest version, as this can improve memory compatibility and detection.
 - **Motherboard Manual:** Verify that you have installed the modules in the correct slots for dual-channel operation, as specified by your motherboard manual.

- **System Instability / Blue Screens:**
 - **Run Memory Diagnostic:** Use Windows Memory Diagnostic Tool or a third-party tool like MemTest86 to check for memory errors.
 - **Check BIOS Settings:** Ensure memory frequency and timings are set correctly in the BIOS/UEFI. If XMP/DOCP is enabled, try disabling it or setting it to a lower profile.

6. SPECIFICATIONS

The following table details the technical specifications of your A-Tech 32GB DDR4 2666MHz RAM kit:

Feature	Specification
Brand	A-Tech
Model Name	ASA171
Computer Memory Size	32 GB (2 x 16 GB Modules)
RAM Memory Technology	DDR4
Memory Speed	2666 MHz (PC4-21300 / PC4-2666)
Voltage	1.2 Volts
Form Factor	DIMM (288-Pin)
Error Correction	Non-ECC Unbuffered
Column Address Strobe Latency	19
Compatible Devices	ASUS TUF Sabertooth X99, Z170 MARK 1, Z170 S

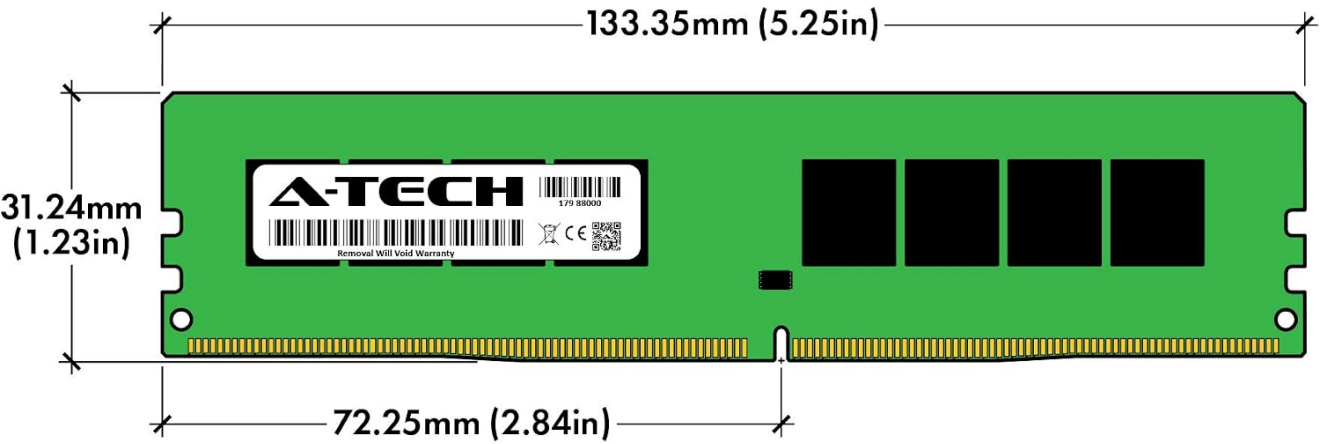


Image 6.1: Dimensions of an A-Tech DDR4 DIMM module.

7. WARRANTY AND SUPPORT

A-Tech memory modules are backed by a **Limited Lifetime Warranty** covering defects in materials and workmanship. This warranty ensures dependable and reliable performance throughout the product's lifespan.

For technical assistance, troubleshooting, or warranty claims, please contact A-Tech's knowledgeable Tech Team. Support is available to help before and after your purchase.

For more information or to contact support, please visit the official A-Tech website or refer to the contact information

provided with your purchase documentation.

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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.

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