AMD AMD Ryzen 5 5500

AMD Ryzen 5 5500 Processor Instruction Manual

Model: AMD Ryzen 5 5500

INTRODUCTION

This manual provides essential information for the setup, operation, maintenance, and troubleshooting of your AMD Ryzen™ 5 5500 6-Core, 12-Thread Unlocked Desktop Processor with Wraith Stealth Cooler. Please read this manual thoroughly before installation and use.

Figure 1: AMD Ryzen 5 5500 Processor Retail Box

SETUP

The AMD Ryzen 5 5500 processor is designed for the advanced Socket AM4 platform. A discrete graphics card is required for display output as this CPU does not feature integrated graphics.

Compatibility

- **Socket:** AM4 Motherboards only. Not compatible with AM5 or other sockets.
- **Graphics:** Requires a discrete graphics card.
- **PCIe:** Supports up to PCIe 3.0 speeds. For optimal SSD performance, consider PCIe 3.0 NVMe SSDs.

Installation Steps

1. **Prepare Motherboard:** Ensure your AM4 motherboard BIOS is updated to support the Ryzen 5 5500 processor. Refer to your

motherboard's manual for specific BIOS update procedures.

2. **Install CPU:** Carefully align the triangular marker on the processor with the marker on the AM4 socket. Gently lower the CPU into the socket without applying force. Close the retention arm to secure the CPU.
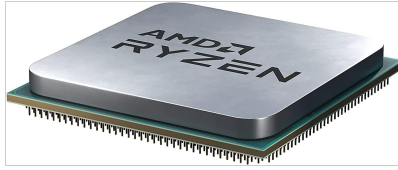

Figure 2: AMD Ryzen 5 5500 Processor (Top View)

Figure 3: AMD Ryzen 5 5500 Processor (Bottom View with Pins)

3. **Install Wraith Stealth Cooler:** The processor comes bundled with the AMD Wraith Stealth cooler. This cooler has pre-applied thermal paste. Place the cooler directly onto the CPU, aligning the mounting screws with the motherboard's backplate. Tighten the screws in a diagonal pattern until snug. Connect the cooler's fan cable to the CPU_FAN header on your motherboard.

Figure 4: AMD Wraith Stealth Cooler

4. **Install RAM:** Insert DDR4 RAM modules into the appropriate DIMM slots as indicated by your motherboard manual.

5. **Install Discrete Graphics Card:** Insert your discrete graphics card into the primary PCIe x16 slot on your motherboard and secure it. Connect necessary power cables from your power supply to the graphics card.

OPERATING THE PROCESSOR

The AMD Ryzen 5 5500 is a powerful 6-core, 12-thread processor designed for excellent performance in gaming and everyday computing tasks.

- **Performance:** Capable of delivering fast 100+ FPS performance in popular games at 1080p resolution when paired with a suitable discrete graphics card.
- **Clock Speeds:** Features a 4.2 GHz Max Boost clock and is unlocked for overclocking, allowing advanced users to push performance further.
- **Cache:** Equipped with 19 MB of cache for efficient data access.

- **Memory Support:** Supports DDR4-3200 memory for high-speed data transfer.
- **Thermal Management:** The bundled Wraith Stealth cooler is designed to keep the processor within proper operating temperatures under typical workloads.

MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your processor and cooling solution.

- **Dust Cleaning:** Periodically clean dust from the Wraith Stealth cooler's fins and fan blades using compressed air. Ensure the system is powered off before cleaning.
- **Thermal Paste:** If you ever remove the Wraith Stealth cooler, you will need to clean off the old thermal paste from both the CPU and the cooler's base and apply new thermal paste before reinstallation.
- **System Updates:** Keep your operating system and motherboard BIOS updated to ensure compatibility and performance optimizations.

TROUBLESHOOTING

If you encounter issues with your system after installing the AMD Ryzen 5 5500, consider the following troubleshooting steps:

- **No Display Output:**
  - Ensure a discrete graphics card is properly installed and connected to your monitor. The Ryzen 5 5500 does not have integrated graphics.
  - Verify all power cables to the graphics card and motherboard are securely connected.

- **Motherboard Debug LEDs:**
  - Many motherboards have debug LEDs (e.g., CPU, DRAM, VGA, BOOT). Consult your motherboard's manual to interpret the meaning of these lights.
  - A red CPU LED often indicates an issue with the processor installation or compatibility.
  - A yellow DRAM LED suggests a memory issue. Try reseating your RAM modules or testing them one by one in different DIMM slots.

- **System Instability/Crashes:**
  - Ensure your motherboard BIOS is updated to the latest version that supports the Ryzen 5 5500.
  - Check that your RAM is installed in the correct slots for dual-channel operation as per your motherboard manual.
  - Verify that the Wraith Stealth cooler is securely mounted and making proper contact with the CPU.

SPECIFICATIONS

Feature	Detail
Processor Model	AMD Ryzen 5 5500
Cores/Threads	6 Cores, 12 Threads
Max Boost Clock	4.2 GHz
Base Clock	3.6 GHz
Total L3 Cache	16 MB

Feature	Detail
Total L2 Cache	3 MB
Default TDP	65W
CPU Socket	AM4
Memory Type	DDR4
Max Memory Speed	Up to 3200MHz
Integrated Graphics	No
Bundled Cooler	Wraith Stealth
Product Dimensions	1.57 x 1.57 x 0.1 inches
Item Weight	15.2 ounces

W**ARRANTY** & S**UPPORT**

AMD provides a limited warranty for its processors. For detailed warranty information, please visit the official AMD website.

Protection Plans

Extended protection plans may be available for your product:

- 3-Year Protection Plan
- 4-Year Protection Plan
- Complete Protect: One plan covers all eligible past and future purchases

For technical support, driver downloads, and further product information, please visit the official AMD support website or contact their customer service.
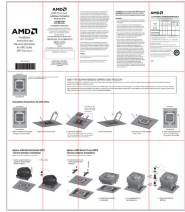
Related Documents - AMD Ryzen 5 5500

[AMD Ryzen 5 5600X Processor: User Manual and Installation Guide](#)
Comprehensive user manual and installation guide for the AMD Ryzen 5 5600X processor, covering product specifications, compatible motherboards, installation steps, optimization tips, and troubleshooting.

[AMD Ryzen 5 5600 Processor: User Manual and Installation Guide](#)
Official user manual and installation guide for the AMD Ryzen 5 5600 processor. Provides detailed specifications, recommended compatible components, step-by-step installation instructions, and troubleshooting tips for optimal performance.

[AMD Socket AM5 Processor Installation Guide and Warranty](#)
Official installation instructions and warranty information for AMD Socket AM5 processors, including AMD Wraith Stealth and Prism cooler installation. Learn how to safely install your AMD CPU.

[AMD Ryzen Master 1.5 Quick Reference Guide: Optimize Processor Performance](#)
Discover AMD Ryzen Master 1.5, a software utility for enthusiasts to monitor, tune, and optimize AMD Ryzen and Ryzen Threadripper desktop processors for enhanced performance and stability.

[AMD Ryzen 5 7500F Processor: Technical Specifications and Installation Guide](#)
Detailed technical specifications, compatibility information, and installation guide for the AMD Ryzen 5 7500F processor, including performance expectations and warranty details.

[AMD Software: PRO Edition 25.Q4 Release Notes and Compatibility Guide](#)
Official release notes for AMD Software: PRO Edition 25.Q4, detailing software compatibility, supported operating systems, APIs, hardware requirements, and security updates for AMD professional graphics products.