AMD FD8370FRHKBOX

AMD FX-8370 Black Edition 8-Core CPU Processor AM3+ Instruction Manual

Model: FD8370FRHKBOX

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your AMD FX-8370 Black Edition 8-Core CPU Processor. The AMD FX-8370 is an unlocked 8-core processor designed for the AM3+ platform, offering high performance for computing tasks. Please read this manual thoroughly before proceeding with installation.

2. PACKAGE CONTENTS

Verify that all items listed below are present in your product package:

- AMD FX-8370 8-Core CPU Processor
- Heat Sink and Fan (Stock Cooler) with pre-applied thermal paste
- FX Bezel Sticker
- Certificate of Authenticity
- Installation Instruction Guide
- 3 Year Warranty Information

Image 1: AMD FX-8370 Black Edition Processor Retail Box. This image displays the packaging of the AMD FX-8370 processor, indicating its 'Black Edition' and 'Unlocked' status.

3. Product Overview

The AMD FX-8370 processor is engineered for demanding applications and gaming. Key features include:

- **8-Core Architecture:** Designed for multi-threaded performance.
- **4.3 GHz Max Turbo Frequency:** Delivers high clock speeds for responsive computing.
- **AM3+ Socket Compatibility:** Ensures broad compatibility with existing motherboards.
- **125W Thermal Design Power (TDP):** Indicates power consumption and heat output.
- **16MB Cache:** Provides fast access to frequently used data.
- **Unlocked Multiplier:** Allows for overclocking (advanced users only).

4. Specifications

Feature	Specification
Processor Cores	8
Base Clock Speed	4.0 GHz
Max Turbo Frequency	4.3 GHz

Feature	Specification
Socket Type	AM3+
Thermal Design Power (TDP)	125W
Total Cache (L2+L3)	16MB
Memory Type Support	DDR3 SDRAM
Model Number	FD8370FRHKBOX
Product Dimensions (CPU only)	1.57 x 1.57 inches (40 x 40 mm)

5. Setup and Installation

Proper installation is critical for the performance and longevity of your CPU. Always handle the processor by its edges to avoid touching the pins or the integrated heat spreader (IHS).

5.1 Safety Precautions

- Ensure your system is powered off and unplugged from the wall outlet.
- Discharge static electricity by touching a grounded metal object before handling components.
- Refer to your motherboard manual for specific CPU socket and cooler mounting instructions.

5.2 CPU Installation Steps

1. **Prepare the Motherboard:** Locate the AM3+ CPU socket on your motherboard. Lift the small metal lever on the side of the socket to open it.
2. **Install the CPU:** Carefully align the triangular arrow on the corner of the AMD FX-8370 processor with the corresponding arrow on the CPU socket. Gently lower the processor straight down into the socket. Do not force it; if it doesn't seat easily, recheck the alignment.
3. **Secure the CPU:** Once the CPU is fully seated, push the metal lever back down to lock the processor into place.

Image 2: AMD FX-8370 Black Edition Processor. This image shows a close-up of the AMD FX-8370 CPU, highlighting its design and the 'AMD FX Unlocked' branding.

5.3 Cooler Installation Steps

The included stock cooler has thermal paste pre-applied. If you are using an aftermarket cooler, follow its specific instructions for thermal paste application.

1. **Position the Cooler:** Place the heat sink and fan assembly onto the CPU, ensuring the mounting clips align with the retention brackets on the motherboard.
2. **Secure the Cooler:** Attach the cooler's clips to the motherboard retention brackets. Apply even pressure and secure both clips. Some coolers may require screwing down.
3. **Connect Fan Power:** Connect the cooler's 4-pin fan cable to the CPU_FAN header on your motherboard. Refer to your motherboard manual for the exact location.

6. OPERATING INSTRUCTIONS

Once the CPU and cooler are installed, reassemble your computer and connect all peripherals. Upon first

boot, access your motherboard's BIOS/UEFI settings to ensure the CPU is recognized correctly and that fan speeds are set appropriately. Install the latest chipset drivers from your motherboard manufacturer's website for optimal performance.

6.1 BIOS/UEFI Configuration

- Verify CPU temperature readings are within acceptable limits.
- Ensure RAM frequency and timings are correctly configured.
- For advanced users, the unlocked multiplier allows for overclocking. Proceed with caution and adequate cooling.

7. MAINTENANCE

Regular maintenance helps ensure stable performance and extends the lifespan of your CPU and cooling system.

- **Dust Removal:** Periodically clean the CPU cooler's fan and heatsink fins to prevent dust buildup, which can impede airflow and lead to overheating. Use compressed air for this task.
- **Thermal Paste:** Over time, thermal paste can dry out. If you notice consistently high temperatures, consider reapplying fresh thermal paste. This requires removing the cooler, cleaning old paste from both the CPU and cooler base, and applying a new thin, even layer.
- **System Airflow:** Ensure good airflow within your computer case by managing cables and keeping intake/exhaust vents clear.

8. TROUBLESHOOTING

If you encounter issues after installation, refer to the following common troubleshooting steps:

- **System Not Booting:**
  - Check all power connections, especially the 4/8-pin CPU power connector on the motherboard.
  - Ensure the CPU is correctly seated in its socket and the lever is locked.
  - Verify the CPU cooler is properly installed and its fan is spinning.
  - Reset CMOS (refer to your motherboard manual).

- **Overheating/High Temperatures:**
  - Confirm the CPU cooler is securely mounted and making good contact with the CPU.
  - Check if the CPU fan is connected to the correct header (CPU_FAN) and is spinning.
  - Ensure thermal paste was applied correctly (or is still effective if pre-applied).
  - Clean dust from the heatsink fins.

- **System Instability/Crashes:**
  - Ensure your motherboard BIOS/UEFI is updated to the latest version.
  - Check RAM stability and compatibility.
  - If overclocking, revert to default CPU settings to test stability.

9. WARRANTY AND SUPPORT

9.1 Warranty Information

The AMD FX-8370 Black Edition CPU Processor comes with a **3-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For full terms and

conditions, please refer to the warranty documentation included in your package or visit the official AMD website.
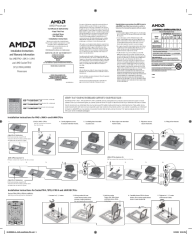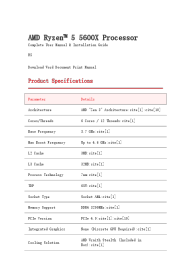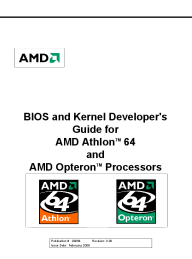
9.2 Technical Support

For technical assistance, driver downloads, or further product information, please visit the official AMD support website:

www.amd.com/support

You may also contact AMD customer service through the channels provided on their website.

Related Documents - FD8370FRHKBOX

	AMD Processor Installation Guide and Limited Warranty Information This document provides installation instructions and detailed warranty information for AMD processors, including models for FM2+, AM3+, AM4, SocketTR4, SP3, sTRX4, and sWRX8 sockets. It covers essential pre-installation checks, step-by-step installation procedures, warranty terms, limitations, exclusions, and how to obtain service.
	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 Athlon 64 & Opteron Processors: BIOS and Kernel Developer's Guide Comprehensive guide for BIOS and kernel developers on AMD Athlon 64 and AMD Opteron processors, detailing system configuration, initialization, HyperTransport technology, and advanced features for optimal performance.
	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 AOCL User Guide: Optimize Performance on Zen Processors The AMD Optimizing CPU Libraries (AOCL) User Guide provides comprehensive instructions for installing, using, and tuning a suite of high-performance numerical libraries optimized for AMD 'Zen'-based processors. It covers AOCL-BLIS, AOCL-libFLAME, AOCL-FFTW, AOCL-LibM, AOCL-ScaLAPACK, AOCL-RNG, AOCL-SecureRNG, AOCL-Sparse, AOCL-LibMem, AOCL-Cryptography, and AOCL-Compression, along with integration with HPL and MUMPS, and performance tuning guidelines.
	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.