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› AMD Ryzen 9 5900X Processor Instruction Manual

AMD 100-100000061WOF

AMD Ryzen 9 5900X Processor Instruction Manual

Model: 100-100000061WOF

1. PRODUCT OVERVIEW

The AMD Ryzen 9 5900X is a high-performance desktop processor designed for demanding tasks such as gaming, content creation, and data processing. Featuring 12 cores and 24 threads with a base clock of 3.7 GHz and a maximum boost clock of up to 4.8 GHz, it delivers exceptional power and efficiency for next-generation computing experiences. This processor requires a discrete graphics card for display output.



Image 1: AMD Ryzen 9 5900X Processor in its retail packaging.

2. IMPORTANT USAGE NOTES AND SETUP

Before installing your AMD Ryzen 9 5900X processor, please read the following critical information:

- **BIOS Update Required:** To use this product, it is necessary to update the BIOS of your Socket AM4 motherboard to the latest version. Before installation, confirm that your motherboard's BIOS supports this specific CPU. If the BIOS is not compatible, the CPU will not function. Please refer to your motherboard manufacturer's website for BIOS update instructions.
- **Cooling System Requirement:** This CPU operates at high temperatures. A powerful cooling system is essential. We strongly recommend using a robust liquid cooling solution rather than air cooling. Ensure your PC case has sufficient airflow to dissipate heat effectively. High operating temperatures can lead to overheating, malfunction, or permanent damage to the CPU.

- **Pre-built PC Compatibility:** There is no guarantee of compatibility when installing this CPU into a manufacturer-built (OEM) personal computer. The CPU may not operate correctly if installed in such systems. For detailed compatibility information, please consult the support resources of your specific PC manufacturer.

使用上の注意事項

※該当商品をご使用には SocketAM4 のマザーボードの BIOS を最新に更新する必要があります。装着する前に、必ずお手元のマザーボードの BIOS が該当 CPU に対応するかをご確認ください。BIOS が対応しない場合、ご使用できませんのでご注意ください。BIOS のアップデート方法について各マザーボードメーカーサイトにてご確認ください。ご使用上に問題がある場合販売元にもご連絡いただけます。

※該当 CPU はメーカー製のパソコンに互換性の保証がございません。メーカー製のパソコンに換装しても動かない場合がございます。詳しくは各パソコンメーカーのサポートにてご確認ください。

※該当商品の動作温度が高く、それに対応する強力な冷却システム（空冷ではなく強力な水冷クーラーを強く推薦）をご使用してください。そしてケースの排気量も十分足りるようにご注意ください。動作温度が高い場合オーバーヒートが発生し、正常に動作しないもしくは焼損する恐れがございます。

Image 2: Close-up of the AMD Ryzen 9 5900X processor chip.

3. OPERATING INSTRUCTIONS

Once properly installed and configured, the AMD Ryzen 9 5900X processor will automatically manage its clock speeds and power consumption based on workload demands. For optimal performance, ensure your operating system (e.g., Windows 10) and drivers are up to date. AMD provides software utilities like AMD Ryzen Master for advanced users to monitor and customize processor settings, including eco-mode for reduced heat and power consumption without significant performance loss.

This processor is designed to handle intensive multi-threaded applications and high-refresh-rate gaming. Its architecture allows for efficient processing across its 12 cores and 24 threads.

4. MAINTENANCE

Regular maintenance of your cooling system is crucial for the longevity and stable operation of your AMD Ryzen 9 5900X processor. Due to its high operating temperatures, a well-maintained cooling solution prevents thermal throttling and potential damage.

- **Cooling System Inspection:** Periodically check your liquid cooler (radiator, pump, fans) or air cooler for dust accumulation. Clean dust from radiators and fans using compressed air.
- **Thermal Paste:** If you remove the cooler, reapply high-quality thermal paste before reinstallation to ensure efficient heat transfer.
- **Case Airflow:** Ensure all case fans are functioning correctly and that there are no obstructions to airflow within the PC case.

5. TROUBLESHOOTING

If you encounter issues with your AMD Ryzen 9 5900X processor, consider the following troubleshooting steps:

- **System Not Booting / No Display:**
 - Verify that your motherboard BIOS is updated to a version that supports the Ryzen 9 5900X. An outdated BIOS is a common cause of boot failures with new CPUs.
 - Ensure the CPU is correctly seated in the Socket AM4 and the cooler is properly installed and making good contact.
 - Confirm that a discrete graphics card is installed and connected to your display, as this CPU does not have integrated graphics.
- **Overheating / Performance Throttling:**
 - Check your cooling system. Ensure the liquid cooler pump is running, fans are spinning, and the radiator is clean.
 - Monitor CPU temperatures using software (e.g., AMD Ryzen Master, HWMonitor). If temperatures consistently exceed 85-90°C under load, your cooling solution may be inadequate or improperly installed.
 - Verify adequate case airflow. Ensure intake and exhaust fans are correctly oriented and not obstructed.
- **Instability / Blue Screens:**
 - Ensure all drivers (chipset, GPU) are up to date.
 - Check RAM compatibility and stability. Run memory diagnostic tools.
 - If issues persist, contact the seller for further assistance.

6. SPECIFICATIONS

Feature	Detail
Brand	AMD
Model Number	100-100000061WOF
CPU Cores	12
Threads	24
Base Clock Speed	3.7 GHz
Max Boost Clock	Up to 4.8 GHz
Total L2 Cache	6 MB
Total L3 Cache	64 MB
Total Game Cache (L2+L3)	70 MB
Default TDP	105 W
CPU Socket	AM4
Cooling Method	Requires powerful liquid cooling (not included)
Supported OS	Windows 10 (64-bit)

7. WARRANTY INFORMATION

This product comes with a **three-year domestic warranty in Japan**. Please note the following conditions:

- Physical damage such as bent or broken pins after use is **not covered** under warranty.
- Purchases from overseas sellers may not be eligible for the domestic three-year warranty and may incur import taxes.

Retain your proof of purchase for warranty claims.

8. SUPPORT

For any issues or questions regarding the use of this product, please contact the original seller. For specific compatibility questions related to your motherboard or pre-built PC, refer to the respective manufacturer's support channels.

Additional resources and software utilities can be found on the official AMD website.

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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