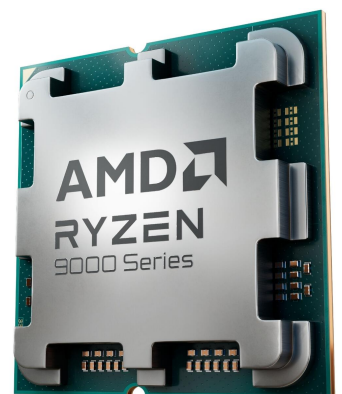
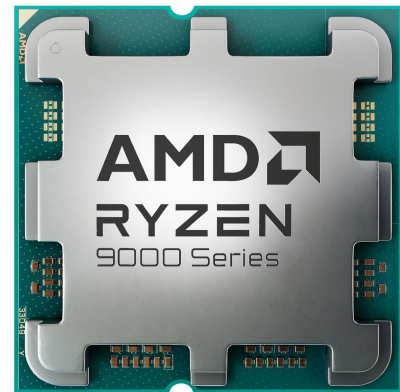
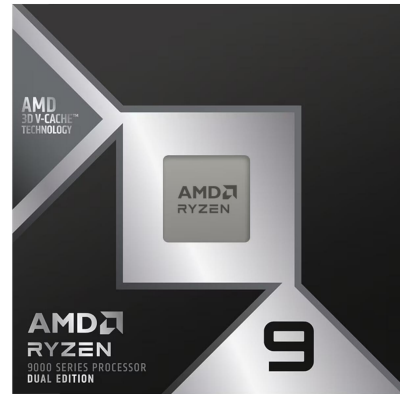


100-100001978WOF

AMD Ryzen 9 9950X3D2 Dual Edition 16-core 4.3GHz up to 5.6 GHz 192MB Cache AM5 Processor

Product Overview

AMD Ryzen 9 9950X3D2 Dual Edition 16-core 4.3GHz up to 5.6 GHz 192MB Cache AM5 Processor, Granite Ridge AM5 CPU Socket, Zen 5 Processor Architecture, 1280KB L1 Cache, 16MB L2 Cache, 192MB L3 Cache, 200W Default TDP, Thermal solution not included, AMD Radeon Graphics



Specifications

Overview Summary:

The AMD Ryzen 9 9950X3D2 Dual Edition processor is built for South African gamers, creators, and power users who demand elite desktop performance. With 16 cores, 32 threads, boost speeds up to 5.6GHz, and advanced AMD 3D V-Cache technology, this AM5 processor delivers exceptional gaming responsiveness and powerful multitasking for demanding workloads. Support for DDR5 memory and PCIe 5.0 ensures your next build is ready for modern high-speed hardware.

Designed for enthusiast desktop systems, the Ryzen 9 9950X3D2 handles gaming, streaming, rendering, and professional applications with ease. Its unlocked overclocking support and compatibility with the latest AM5 motherboards make it an excellent choice for custom performance PCs. Buy now and upgrade your gaming or workstation setup with cutting-edge AMD processing power.

Performance tier:Enthusiast / Flagship High-End

Uses:Gaming PCs, content creation, video editing, 3D rendering, streaming, multitasking, workstation builds, software development, virtual machines

Overview:

The AMD Ryzen 9 9950X3D2 positions itself at the top end of desktop processing, engineered for users who push systems to their limits. Built on the Zen 5 architecture and designed for the AM5 platform, it combines high core counts with aggressive clock speeds and an expanded cache design to deliver consistent performance across gaming and professional workloads. With 16 cores and 32 threads operating at a base of 4.3GHz and boosting up to 5.6GHz, it is tailored for scenarios where latency, throughput, and responsiveness all matter simultaneously. From high-refresh gaming to intensive rendering pipelines, this processor is structured to maintain performance without compromise.

Description:

The Ryzen 9 9950X3D2 is a high-performance desktop processor built for enthusiasts, gamers, and professional creators who require fast processing, strong multitasking, and stable output under heavy loads. Its large 192MB L3 cache enhances gaming responsiveness, while the 16-core design accelerates demanding applications like video editing, 3D rendering, and software development. Support for DDR5 memory and PCIe 5.0 ensures compatibility with modern hardware, while overclocking support and advanced tuning tools allow users to extract additional performance when needed. Part number 100-100001978WOF identifies this specific boxed processor configuration.

Features:

Gaming performance driven by advanced cache design

The integration of 3D V-Cache significantly expands available L3 cache, reducing latency and improving data access for the CPU cores. In practical terms, this results in higher frame rates and smoother gameplay, particularly in titles that rely heavily on fast memory access. Combined with high boost frequencies, the processor maintains responsiveness even in fast-paced competitive environments.

Multi-core efficiency for demanding workloads

With 16 cores and 32 threads, the processor is well suited to parallel workloads. Tasks such as compiling large codebases, running multiple virtual machines, or rendering complex scenes benefit from the available thread count. The architecture balances raw output with efficiency, using a 4nm process for CPU cores and a 6nm design for the I/O die.

Key capabilities include:

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Product Specification Sheet

- 16 cores and 32 threads supporting intensive multitasking
- Boost clock reaching up to 5.6GHz for high-speed execution
- Large combined cache structure including 192MB L3 cache
- Efficient power handling within a 200W TDP envelope

Platform advantages and forward compatibility

The AM5 socket introduces support for newer technologies that improve system bandwidth and longevity. DDR5 memory increases throughput, while PCIe 5.0 enables faster storage and expansion options. This ensures the processor remains viable in modern builds targeting long-term upgrades.

Platform highlights:

- Dual-channel DDR5 memory support for increased bandwidth
- PCIe 5.0 compatibility for next-generation GPUs and storage
- Broad chipset support including X670, B650, and newer series
- Compatibility with Windows and Linux environments

Precision tuning and control options

The processor is unlocked, allowing frequency and voltage adjustments for users who want to optimize performance beyond stock settings. Automated boosting technologies dynamically adjust clock speeds based on workload and thermal conditions.

Control and optimization tools:

- Precision Boost 2 for adaptive performance scaling
- Curve Optimizer for voltage tuning
- AMD EXPO support for memory overclocking
- Ryzen Master software for monitoring and configuration

Technical summary and core details

Essential specifications are outlined below for quick reference:

- Architecture: Zen 5
- Socket: AM5
- Cores / Threads: 16 / 32
- Base Clock: 4.3GHz
- Max Boost Clock: up to 5.6GHz
- Cache: 1280KB L1, 16MB L2, 192MB L3
- Default TDP: 200W
- Memory Support: DDR5 up to 256GB
- PCIe Version: PCIe 5.0
- Integrated Graphics: AMD Radeon Graphics
- Process Node: 4nm CPU cores, 6nm I/O die
- SKU: 100-100001978WOF

Thermal and system considerations

This processor does not include a thermal solution, and due to its power profile, a high-performance cooling system is recommended. Liquid cooling is typically preferred to maintain optimal boost behavior under sustained workloads.

In the box

- AMD Ryzen 9 9950X3D2 processor x1

Positioning within high-end desktop builds

This CPU is designed for users assembling premium systems where both gaming and productivity are priorities. It aligns with builds that include high-speed DDR5 memory, PCIe 5.0 storage, and powerful graphics hardware, ensuring balanced

performance across all components.

Specifications:

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Specifications	
Product Code	100-100001978WOF
Name	AMD Ryzen 9 9950X3D2 Dual Edition
Family	Ryzen
Series	Ryzen 9000 Series
Form Factor	Desktops , Boxed Processor
Market Segment	Enthusiast Desktop
Regional Availability	Global
Former Codename	Granite Ridge AM5
Processor Architecture	Zen 5
# of CPU Cores	16
Multithreading (SMT)	Yes
# of Threads	32
Max. Boost Clock	Up to 5.6 GHz
Base Clock	4.3 GHz
L1 Cache	1280 KB
L2 Cache	16 MB
L3 Cache	192 MB
Default TDP	200W
Processor Technology for CPU Cores	TSMC 4nm FinFET
Processor Technology for I/O Die	TSMC 6nm FinFET
Package Die Count	3
Unlocked for Overclocking	Yes
AMD EXPO Memory Overclocking Technology	Yes
Precision Boost Overdrive	Yes
Curve Optimizer Voltage Offsets	Yes
AMD Ryzen Master Support	Yes
CPU Socket	AM5
Supporting Chipsets	A620 , X670E , X670 , B650E , B650 , X870E , X870 , B840 , B850
CPU Boost Technology	Precision Boost 2

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Product Specification Sheet

Instruction Set	x86-64
Supported Extensions	AES , AVX512 , AVX2 , AVX , FMA3 , MMX-plus , SSE2 , SSE4.2 , SSE4A , SSE4.1 , SSE3 , SSSE3 , SSE , x86-64
Thermal Solution (PIB)	Not Included
Recommended Cooler	Liquid cooler recommended for optimal performance
Max. Operating Temperature (Tjmax)	95degreesC
Launch Date	4/22/26
*OS Support	Windows 11 - 64-Bit Edition , Windows 10 - 64-Bit Edition , RHEL x86 64-Bit , Ubuntu x86 64-Bit
Connectivity	
Native USB 3.2 Gen 2 (10Gbps)	4
Native USB 2.0 (480Mbps)	1
PCI Express Version	PCIe 5.0
Native PCIe Lanes (Total/Usable)	28 , 24
NVMe Support	Boot , RAID0 , RAID1 , RAID5 , RAID10
System Memory Type	DDR5
Memory Channels	2
Max. Memory	256 GB
System Memory Subtype	UDIMM
Max Memory Speed	
2x1R	DDR5-5600
2x2R	DDR5-5600
4x1R	DDR5-3600
4x2R	DDR5-3600
ECC Support	Yes (Requires mobo support)
Graphics Capabilities	
Graphics Model	AMD Radeon Graphics
Graphics Core Count	2
Graphics Frequency	2200 MHz
USB Type-C DisplayPort Alternate Mode	Yes
Product IDs	
Product ID Boxed	100-100001978WOF
Product ID Tray	100-000001978
Security	
AMD Secure Processor	Yes
AMD Platform Secure Boot	Yes

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Product Specification Sheet

Windows Secure Boot	Yes
UEFI Secure Boot	Yes
Windows Device Guard	Yes
Supervisor Mode Execution Prevention (SMEP)	Yes
Guest Mode Execution (GMET) Trap	Yes
Virtualization-Based Security (VBS)	Yes
Windows Secured-Core PC	Yes
Firmware TPM	Yes
AMD-V (SVM)	Yes
AMD AVIC (Interrupt Virtualization)	Yes
AMD-Vi (I/O MMU Virtualization)	Yes
Second Level Address Translation (SLAT)	Yes
Advanced Encryption Standard New Instructions (AES-NI)	Yes
AMD Enhanced Virus Protection (NX bit)	Yes
AMD Shadow Stack	Yes

Product Information Online

For the latest product information, availability and purchasing details, please visit the product page:

Product page: <https://www.comx.co.za/100-100001978WOF-AMD-Ryzen-9-9950X3D2-Dual-Edition-Buy-p-337425.php>

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