CHOOSING A WORKSTATION THAT'S UP TO THE TASK

How workstations powered by the right CPU make a difference

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AMD RYZEN[™] THREADRIPPER[™] PRO PROCESSORS

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PICKING THE RIGHT WORKSTATION PROCESSOR FOR THE JOB

- Architecture and engineering
- Design and manufacturing
- Media and entertainment
- Software and sciences



PRODUCT BENEFITS

AMD RYZEN[™] THREADRIPPER[™] PRO 5000 WX-SERIES PROCESSORS

Take on the most demanding professional workloads with unrivaled workstation performance.¹ AMD Ryzen[™] Threadripper[™] PRO 5000 WX-Series processors deliver with up to 4.5GHz max boost clock speed and up to 64 high-performance cores built on 7nm "Zen 3" architecture.² They also provide the enterprise-grade security features, manageability, and reliability that today's businesses require.

ARCHI	TECTURE A	ND ENGIN	EERING	
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Design and visualize faster than the competition with accelerated 3D rendering and design and outstanding reality capture.³

MEDIA AND ENTERTAINMENT

Increase creative iterations, achieve seamless 3D modeling and animation, and accelerate rendering.⁴

DESIGN AND MANUFACTURING

Boost productivity for 3D design tasks, multithreaded simulation, and generative design.^{5,6}

SOFTWARE AND SCIENCES

Iterate code faster, reduce compile times and increase AI/machine learning development.⁷

PRODUCT FEATURES

AMD PRO TECHNOLOGIES

AMD Ryzen[™] Threadripper[™] 5000 WX-Series processors with AMD PRO technologies offer cutting-edge security features, advanced manageability tools, and consistent user experiences across generations.



AMD PRO SECURITY

Help	address security risks	with	multilayered
data	protection features		

Protection from sophisticated attacks with AMD Shadow Stack

Full memory encryption with AMD Memory Guard⁸ – Full support for the Microsoft Secured-core PC initiative



AMD PRO MANAGEABILITY

Streamline IT operations using robust management tools

Simplified multivendor management

Compatibility with traditional and modern enterprise mobility management (EMM) solutions

Seamless Microsoft deployment



AMD PRO BUSINESS READY

Count on platform longevity

18 months of planned software stability

-

24 months of planned availability

Enterprise-grade quality assurance and reliability

PRODUCT MODELS

INNOVATION DESIGNED FOR PROFESSIONALS

There are five models of AMD Ryzen[™] Threadripper[™] PRO 5000 WX-Series processors designed to meet unique business needs.

AMD Ryzen™ Threadripper™ PRO 5995WX	Unrivaled 64-core professional workstation processor	Cores: 64 Threads: 128 PCle® 4.0 lanes: 128 Max boost clock speed: Up to 4.5 GHz ²
AMD Ryzen™ Threadripper™ PRO 5975WX	The world's most powerful 32-core professional workstation processor ¹	Cores: 32 Threads: 64 PCIe [®] 4.0 lanes: 128 Max boost clock speed: Up to 4.5 GHz ²
AMD Ryzen™ Threadripper™ PRO 5965WX	Full-spectrum performance for demanding professional workloads	Cores: 24 Threads: 48 PCle [®] 4.0 lanes: 128 Max boost clock speed: Up to 4.5 GHz ²
AMD Ryzen™ Threadripper™ PRO 5955WX	The best of both worlds for 3D modeling, design, and visualization	Cores: 16 Threads: 32 PCIe® 4.0 lanes: 128 Max boost clock speed: Up to 4.5 GHz ²
AMD Ryzen™ Threadripper™ PRO 5945WX*	Cutting-edge performance for demanding architects and engineers	Cores: 12 Threads: 24 PCIe [®] 4.0 lanes: 128 Max boost clock speed: Up to 4.5 GHz ²

*Only available through select OEMs

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PROCESSOR SELECTION

PICKING THE RIGHT WORKSTATION PROCESSOR FOR THE JOB

When selecting or building workstations for your business, define your task and then start at the core. Once you find a processor with the performance to take on your specific tasks, you can pinpoint or create the ideal system.



WORKSTATIONS FOR ARCHITECTURE AND ENGINEERING

Architects need systems with the CPU performance to handle large datasets and complex visualizations.



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ARCHITECTURE AND ENGINEERING PERFORMANCE



*Lower is better



*Lower is better

WORKSTATIONS FOR DESIGN AND MANUFACTURING

When it comes to workstations for product designers, the CPU needs to have the power to process massive datasets and develop complex simulations.





DESIGN AND MANUFACTURING PERFORMANCE

DASSAULT SOLIDWORKS CPU COMPOSITE⁵

Up to 19% higher performance



*Higher is better



*Higher is better

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WORKSTATIONS FOR MEDIA AND ENTERTAINMENT

Video and graphics pros need workstations with the processing power to help reduce render times and execute seamless 3D modeling and animation.





MEDIA AND ENTERTAINMENT PERFORMANCE



CHAOS V-RAY³ AMD Ryzen[™] Threadripper[™] PRO 5995WX (64 core) Up to 60,111 Up to 60,111 Intel® Xeon® W-3375 (38 core) 30,792

*Higher is better

WORKSTATIONS FOR SOFTWARE AND SCIENCES

The right system with the right CPU performance can help reduce software compile time and drive AI/machine learning development.



SOFTWARE AND SCIENCES PERFORMANCE

CHROMIUM COMPILATION TIME (SECONDS)¹³

Up to 37% faster performance



*Lower is better



*Lower is better

AMD FOR BUSINESS

GET THE BEST WORKSTATION FOR THE JOB

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Take advantage of the superior performance of AMD Ryzen[™] Threadripper[™] PRO 5000 WX-Series processors with workstations from leading OEMs.

DELL PRECISION 7865 TOWER

The Dell Precision 7865 Tower powered by AMD Ryzen[™] Threadripper[™] PRO processors provides exceptional performance for lightly threaded and multithreaded tasks. The Precision is equipped with professional graphics, scalable memory, and advanced thermals for cool and quiet work.

LENOVO THINKSTATION P620

The acclaimed Lenovo ThinkStation P620 powered by AMD Ryzen[™] Threadripper[™] PRO processors excels in both lightly threaded and multithreaded workloads. Configure your ThinkStation with up to 64 cores, as well as graphics, memory, and storage to meet your needs.

LEARN MORE

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- ¹ Based on AMD performance lab testing on January 31, 2022, using the Revit RFO benchmark, the V-Ray benchmark and the Unreal Engine compile benchmark to compare performance of (5) AMD Ryzen[™] Threadripper[™] PRO 5000WX-Series reference systems, each configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. (5) similarly configured BOXX APEXX4 workstations with Intel[®] Xeon[®] W-3300 series processors. Results may vary. CGP-21
- ² Max boost for AMD Ryzen processors is the maximum frequency achievable by a single core on the processor running a bursty single-threaded workload. Max boost will vary based on several factors, including, but not limited to: thermal paste; system cooling; motherboard design and BIOS; the latest AMD chipset driver; and the latest OS updates. GD-150
- ³ Based on AMD Labs testing as of January 31, 2022, using the Chaos V-Ray v5 (Update 1.1) benchmark tool to measure CPU rendering performance of an AMD Ryzen Threadripper Pro 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel® Xeon® W-3375. Results may vary. CGP-05
- ⁴ Based on AMD Labs testing as of January 31, 2022 using the Revit RFO model creation benchmark, the chaos V-Ray benchmark and the SPECapc[®] for Maya 2017 CPU Composite metric to compare the Ryzen Threadripper PRO 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with Intel[®] Xeon[®] W-2995 processor. GCP-27
- ⁵ Based on AMD performance lab testing on January 31, 2022, using the SPECapc[®] for Solidworks 2021 CPU Composite metric to compare the performance of AMD Ryzen[™] Threadripper[™] PRO 5000WX-Series reference systems configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. similarly configured BOXX APEXX4 workstations with an Intel[®] Xeon[®] W-3300 series processors. Results may vary. SPEC[®], and SPECapc[®] are registered trademarks of the Standard Performance Evaluation Corporation. See www.spec.org for more information. CGP-12
- ⁶ Based on AMD performance lab testing on January 31, 2022, using the Luxion Keyshot viewer benchmark to compare performance of an AMD Ryzen Threadripper Pro 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel[®] Xeon[®] W-3375 Results may vary. CGP-20
- ⁷ Based on AMD performance lab testing as of January 31, 2022 using the Unreal Engine 4.23 compile performance test to compare the performance of AMD Ryzen Threadripper 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel[®] Xeon[®] W-3375 processor. Results may vary. CGP-01
- ⁸ Full system memory encryption with AMD Memory Guard is included in AMD Ryzen PRO, AMD Ryzen Threadripper PRO, and AMD Athlon PRO processors. Requires OEM enablement. Check with the system manufacturer prior to purchase. GD-206
- ⁹ Based on AMD performance lab testing as of January 31, 2022 using Chaos Corona Render to compare the performance of AMD Ryzen Threadripper 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel® Xeon® W-3375 processor. Results may vary. CGP-37
- ¹⁰ Based on AMD performance lab testing on January 31, 2022, using the Revit RFO model creation benchmark to compare performance of AMD Ryzen[™] Threadripper[™] PRO 5000WX-Series reference systems configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. five similarly configured BOXX APEXX4 workstations with Intel[®] Xeon[®] W-3300 series processors. Results may vary. CGP-18
- ¹¹ Based on internal AMD analysis comparing the core count of AMD Ryzen[™] Threadripper[™] PRO 5995WX to Intel[®] Xeon[®] W-3375. CGP-32
- ¹² Based on AMD Labs testing as of January 31, 2022 using the Puget Systems Adobe After Effects CC benchmark test to compare the Ryzen Threadripper PRO 5995X reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel[®] Xeon[®] W-3375. Results may vary. CGP-06
- ¹³ Based on AMD performance lab testing as of January 31, 2022 using the Chromium Compilation 86.0.4199.0 performance test to compare the performance of AMD Ryzen Threadripper 5995WX reference system configured with 8x32GB DDR4, NVIDIA Quadro RTX A5000, 1TB SSD, Win 11 vs. a similarly configured BOXX APEXX4 workstation with an Intel® Xeon® W-3375. Results may vary. CGP-02

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