

Lenovo
ThinkStation

Lenovo ThinkStation P8

Smarter
creates
the
future

AEC Solution Brief



Lenovo

Meet the ThinkStation P8

Redefining power, reliability, and speed for BIM

The Lenovo ThinkStation P8 sets a new performance benchmark; helping you better adopt AI and emerging technologies for the built environment.

New design technologies continue to evolve for the built environment that extend what's possible with BIM. Emerging BIM workflows now adopt digital fabrication, real time visualization, artificial intelligence, robotics, generative design, VR, reality modelling, IoT and digital twins. These new workflows place even greater demand on workstation hardware.

As project size and complexity continue to evolve, power users need a solution that keeps pace with these scaling workloads. Designed specifically to provide fast, reliable processing power, the ThinkStation P8 not only meets but exceeds the requirements of these complex workflows. The P8 delivers game-changing performance, powered by AMD Ryzen™ Threadripper™ PRO 7000 WX-Series processors with up to 96 cores and 5.3GHz, a new industry standard - redefining what can be accomplished with a single-CPU workstation.

AMD
THREADRIPPER
PRO



Lenovo

Architecture, Engineering, and Construction P8 configurations for AEC workflows

Architects, Designers & Engineers

Workflow: High-performance BIM design and engineering

Description: Featuring the unique combination of high clock speeds with huge memory capacity and flexible graphics. NVIDIA RTX™ enables enhanced collaboration and product evaluation with immersive VR design reviews. The P8 is a powerful workstation for architects, designers, engineers, and visualization specialists who need maximum performance from every aspect of their BIM workflow.

Workflow: Reality Capture

Description: Lidar, point cloud scanning, photogrammetry processing, and visualization require a combination of multi-core solving and powerful graphics. Applications like Autodesk ReCap, Bentley ContextCapture, Faro SCENE and Leica Cyclone will benefit from the ThinkStation P8 next generation architecture and powerful configuration options.

Recommended configuration for BIM workflows:

- CPU:** AMD Ryzen™ Threadripper™ PRO 7000 WX-Series (12 cores @ 5.3GHZ)
- GPU:** NVIDIA RTX™ A4000 or A5000
- Memory:** 64GB, 3200MHz, ECC
- SSD:** 1TB M.2, NVMe

Visualization Specialists

Workflow: Rendering and visualization

Description: Create complex photorealistic renderings, animations, and VR experiences with applications like Twinmotion, Autodesk 3ds Max, Chaos V-Ray, Unreal Engine, and Unity. For CPU-driven workloads, choose between 24, 32, or 64 core AMD Ryzen™ Threadripper™ PRO processors based on the demands of your workflows, ensuring optimal performance. For workflows that require both GPU and CPU performance, the ThinkStation P8 offers 12, 16 and 24 core Threadripper PRO processors with up to two NVIDIA RTX™ A6000 professional GPUs for outstanding performance.

Recommended configuration for ProVis, VR, MR and AI workflows:

- CPU:** AMD Ryzen™ Threadripper™ PRO 7000 WX-Series (64 or 96 cores)
- GPU:** NVIDIA RTX™ 6000 Ada
- Memory:** 128GB, 3200MHz, ECC
- SSD:** 2TB M.2, NVMe SSD (cache/scratch)



Performance Gains for ISV applications include:



Transforming what is possible in a single-CPU workstation

From complex BIM, generative design, AI, and reality capture, to geospatial analysis, digital fabrication, and visualization, the ThinkStation P8 is designed to take on complex and demanding high performance workloads for the built environment with ease.



Breakthrough Compute Architecture

Featuring the latest AMD Ryzen™ Threadripper™ PRO 7000 WX-Series processors, with up to 96 cores in a single-socket platform for high-end compute demands and multithreaded workloads.



Aston Martin Inspired Chassis

An advanced thermal design combines Lenovo's patented tri-channel cooling with a redesigned air baffle and larger 3D hex ventilation openings, allowing for unobstructed airflow and maximum component performance.



Stunning Visuals

Pair the ThinkStation P8 with dual P32p-20 or P27q-20 displays for optimal productivity and user experience.



Superior Graphics Support

Powering the highest end graphics from NVIDIA, including support for 3 NVIDIA RTX™ 6000 Ada GPUs as well as support for up to four RTX A4000 GPUs.



Limitless Possibilities

The P8 offers high-performance real-time ray tracing, AI-accelerated computing, and professional graphics rendering; allowing you to get much more done, much faster.



Desktop-to-Data Center Flexibility

Rack-optimized, 4U chassis with easy to attach rail kits and non-disruptive workstation acoustics.



Lenovo

AMD
THREADRIPPER
PRO

For more information on the ThinkStation P8, please click [here](#).
©2023, Lenovo Group Limited. All rights reserved.