



# NVIDIA RTX A4500

Powerful Performance for Professionals.



The NVIDIA RTX™ A4500 combines high performance, enterprise reliability, and the latest **RTX technology** to help you achieve your best work in real-time. Built on the NVIDIA Ampere architecture, the RTX A4500 combines 56 second-generation RT Cores, 224 third-generation Tensor Cores, and 7,168 CUDA® cores with 20 GB of graphics memory to supercharge rendering, AI, graphics, and compute tasks. Connect two RTX A4500s with NVIDIA NVLink<sup>1</sup> to scale memory and performance with multi-GPU configurations<sup>2</sup>, allowing professionals to work with memory intensive tasks such as large models, ultra-high resolution rendering, and complex compute workloads.

NVIDIA RTX professional graphics cards are certified with a broad range of professional applications, tested by leading independent software vendors (ISVs) and workstation manufacturers, and backed by a global team of support specialists. Get the peace of mind needed to focus on what matters with the premier visual computing solution for mission-critical business.

## Features

- > PCI Express Gen 4
- > Four DisplayPort 1.4a connectors
- > AV1 decode support
- > DisplayPort with audio
- > 3D stereo support with stereo connector
- > NVIDIA GPUDirect® for Video support
- > NVIDIA Quadro® Sync II<sup>3</sup> compatibility
- > NVIDIA RTX Experience™
- > NVIDIA RTX Desktop Manager software
- > NVIDIA RTX IO support
- > HDCP 2.2 support
- > NVIDIA Mosaic<sup>4</sup> technology
- > NVIDIA NVLink Technology

<sup>1</sup> NVIDIA NVLink sold separately. | <sup>2</sup> Connecting two RTX A4500 cards with NVLink to scale performance and memory capacity to 40GB is only possible if your application supports NVLink technology. Please contact your application provider to confirm their support for NVLink. | <sup>3</sup> Quadro Sync II card sold separately. | <sup>4</sup> Windows 10 and Linux. | <sup>5</sup> Peak rates based on GPU Boost Clock. | <sup>6</sup> Effective teraFLOPS (TFLOPS) using the new sparsity feature. | <sup>7</sup> GPU supports DX 12.0 API, hardware feature level 12 + 1. | <sup>8</sup> Product is based on a published Khronos specification and is expected to pass the Khronos conformance testing process when available. Current conformance status can be found at [www.khronos.org/conformance](http://www.khronos.org/conformance)

## SPECIFICATIONS

GPU memory	20 GB GDDR6
Memory interface	320-bit
Memory bandwidth	640 GB/s
Error-correcting code (ECC)	Yes
NVIDIA Ampere architecture-based CUDA Cores	7,168
NVIDIA third-generation Tensor Cores	224
NVIDIA second-generation RT Cores	56
Single-precision performance	23.7 TFLOPS <sup>5</sup>
RT Core performance	46.2 TFLOPS <sup>5</sup>
Tensor performance	189.2 TFLOPS <sup>6</sup>
NVIDIA NVLink	Low profile bridges connect two NVIDIA RTX A4500 GPUs <sup>1</sup>
NVIDIA NVLink bandwidth	112.5 GB/s (bidirectional)
System interface	PCI Express 4.0 x16
Power consumption	Total board power: 200 W
Thermal solution	Active
Form factor	4.4" H x 10.5" L, dual slot, full height
Display connectors	4x DisplayPort 1.4
Max simultaneous displays	4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz, 2x 7680 x 4320 @ 60 Hz
Power connector	1x 8-pin PCIe
Encode/decode engines	1x encode, 1x decode (+AV1 decode)
VR ready	Yes
Graphics APIs	DirectX 12.0 <sup>7</sup> , Shader Model 5.1 <sup>7</sup> , OpenGL 4.6 <sup>8</sup> , Vulkan 1.2 <sup>8</sup>
Compute APIs	CUDA, DirectCompute, OpenCL™

[Learn more](#)

To learn more about the NVIDIA RTX A4500, visit [www.nvidia.com/rtx-a4500/](http://www.nvidia.com/rtx-a4500/)

