Datasheet

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NVIDIA RTX A4500

Powerful performance for professionals.

The NVIDIA RTX™ A4500 combines high performance, enterprise reliability, and the latest NVIDIA **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 20GB of graphics memory to supercharge rendering, AI, graphics, and compute tasks. Connect two RTX A4500s with NVIDIA NVLink™[1] to scale memory and performance with multi-GPU configurations[2], 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[3] compatibility

> NVIDIA RTX Experience™

> NVIDIA RTX Desktop Manager software

> NVIDIA RTX IO support

> HDCP 2.2 support

> NVIDIA Mosaic[4] technology

> NVIDIA NVLink Technology

Specifications	
GPU memory	20GB 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[5]
RT Core performance	46.2 TFLOPS[5]
Tensor performance	189.2 TFLOPS[6]
NVIDIA NVLink	Low profile bridges connect two NVIDIA RTX A4500 GPUs[1]
NVIDIA NVLink bandwidth	112.5 GB/s (bidirectional)
System interface	PCIe 4.0x16
Power consumption	Total board power: 200W
Thermal solution	Active
Form factor	4.4" H x 10.5" L, dual slot, full height
Display connectors	4x DisplayPort 1.4a
Max simultaneous displays	4x 4096 x 2160 @ 120Hz, 4x 5120 x 2880 @ 60Hz, 2x 7680 x 4320 @ 60Hz
Power connector	1x 8-pin PCIe
Encode/decode engines	1x encode, 1x decode (+AV1 decode)
VR ready	Yes
Graphics APIs	DirectX 12 Ultimate, Shader Model 6.6, OpenGL 4.6[7], Vulkan 1.3[7]
Compute APIs	CUDA 11.6, OpenCL 3.0, DirectCompute

Ready to Get Started?

To learn more about the NVIDIA RTX A4500,
visit **nvidia.com/rtx-a4500**