NVIDIA RTX A5500

The Power to Create.

Amplified Performance for Professionals

The NVIDIA RTX™ A5500 is a high-performance workstation graphics card that gives you the performance and capabilities required for demanding multi-application workflows. Built on the NVIDIA Ampere architecture, the RTX A5500 combines 80 second-generation RT Cores, 320 third-generation Tensor Cores, and 10,240 CUDA® cores with 24GB of graphics memory with error correction code (ECC) to supercharge rendering, AI, graphics, and compute tasks. Configure multiple GPUs[1] with NVIDIA® NVLink™[2] to scale memory and performance for memory-intensive tasks, such as large models, ultra-high resolution rendering, and complex compute workloads. With support for NVIDIA RTX Virtual Workstation (vWS) software, the RTX A5500 is ready to handle the most complex design, visualization, and compute work—from anywhere. 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 you need 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 virtual GPU (vGPU) software 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

Learn More

To learn more about the NVIDIA RTX A5500, visit
www.nvidia.com/rtx-a5500/

SPECIFICATIONS

GPU memory	**24GB GDDR6**
Memory interface	**384-bit**
Memory bandwidth	**768 GB/s**
Error correcting code (ECC)	**Yes**
NVIDIA Ampere architecture-based CUDA Cores	**10,240**
NVIDIA third-generation Tensor Cores	**320**
NVIDIA second-generation RT Cores	**80**
Single-precision performance	**34.1 TFLOPS[5]**
RT Core performance	**66.6 TFLOPS[5]**
Tensor performance	**272.8 TFLOPS[6]**
NVIDIA NVLink	**Low profile bridges connect two NVIDIA RTX A5500 GPUs[2]**
NVIDIA NVLink bandwidth	**112.5 GB/s (bidirectional)**
System interface	**PCIe 4.0 x16**
Power consumption	**Total board power: 230 W**
Thermal solution	**Active**
Form factor	**4.4" H x 10.5" L, dual slot, full height**
Display connectors	**4x DisplayPort 1.4a[7]**
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, 2x decode (+AV1 decode)**
VR ready	**Yes**
vGPU software support[7]	**NVIDIA vPC/vApps NVIDIA RTX Virtual Workstation**
vGPU profiles supported	**See the Virtual GPU Licensing Guide**
Graphics APIs	**DirectX 12 Ultimate , Shader Model 6.6, OpenGL 4.6[8], Vulkan 1.3[8]**
Compute APIs	**CUDA 11.6, DirectCompute, OpenCL 3.0**

1 Connecting two RTX A5500 cards with NVLink to scale performance and memory capacity to 48GB is only possible if your application supports NVLink technology. Please contact your application provider to confirm their support for NVLink. I 2 NVIDIA NVLink sold separately. I 3 Quadro Sync II card sold separately. I 4 Windows 10, Windows 11, and Linux. I 5 Peak rates based on GPU Boost Clock. I 6 Effective teraFLOPS (TFLOPS) using the new sparsity feature. I 7 Display ports are on by default for RTX A5500. Display ports are not active when using vGPU software. I 8 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**