



NVIDIA RTX A4000

SLEEK DESIGN. POWERFUL PERFORMANCE.



Amplified Performance for Professionals

The NVIDIA RTX™ A4000 is the most powerful single-slot GPU for professionals, delivering real-time ray tracing, AI-accelerated compute, and high-performance graphics to your desktop. Built on the NVIDIA Ampere architecture, the RTX A4000 combines 48 second-generation RT Cores, 192 third-generation Tensor Cores, and 6,144 CUDA® cores with 16 GB of graphics memory with error-correction code (ECC) so you can innovate with uncompromised computing accuracy and reliability. The RTX A4000 also features a power-efficient, single-slot PCIe form factor that fits into a wide range of workstation chassis, so you can do exceptional work without limits.

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 II¹ compatibility
- > NVIDIA RTX Experience™
- > NVIDIA RTX Desktop Manager software
- > NVIDIA RTX IO support
- > HDCP 2.2 support
- > NVIDIA Mosaic² technology

To learn more about the NVIDIA RTX A4000, visit www.pny.com/nvidia-rtx-a4000

1 Quadro Sync II card sold separately. | 2 Windows 10 and Linux. | 3 Peak rates based on GPU Boost Clock. | 4 Effective teraFLOPS (TFLOPS) using the new sparsity feature. | 5 GPU supports DX 12.0 API, hardware feature level 12 + 1. | 6 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

© 2021 NVIDIA Corporation. All rights reserved. NVIDIA, the NVIDIA logo, CUDA, GPUDirect, NVLink, Quadro, RTX Experience, and RTX are trademarks and/or registered trademarks of NVIDIA Corporation in the U.S. and other countries. Other company and product names may be trademarks of the respective companies with which they are associated. All other trademarks are property of their respective owners.

SPECIFICATIONS

PNY Part Number	VCNRTXA4000-PB
GPU memory	16 GB GDDR6
Memory interface	256-bit
Memory bandwidth	448 GB/s
Error-correcting code (ECC)	Yes
NVIDIA Ampere architecture-based CUDA Cores	6,144
NVIDIA third-generation Tensor Cores	192
NVIDIA second-generation RT Cores	48
Single-precision performance	19.2 TFLOPS³
RT Core performance	37.4 TFLOPS³
Tensor performance	153.4 TFLOPS⁴
System interface	PCI Express 4.0 x16
Power consumption	Total board power: 140 W
Thermal solution	Active
Form factor	4.4" H x 9.5" L, single slot
Display connectors	4x DisplayPort 1.4a
Max simultaneous displays	4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz, 2x 7680 x 4320 @ 60 Hz
Power connector	1x 6-pin PCIe
Encode/decode engines	1x encode, 1x decode (+AV1 decode)
VR ready	Yes
Graphics APIs	DirectX 12.0⁵, Shader Model 5.17⁵, OpenGL 4.68⁵, Vulkan 1.2⁶
Compute APIs	CUDA, DirectCompute, OpenCL™

PNY



NVIDIA RTX A4000 | DATASHEET | APR21

