



NVIDIA RTX A2000 | A2000 12GB

Compact Design. Unmatched Performance.

Accelerate Your Workflow

The NVIDIA RTX™ A2000 brings the power of NVIDIA RTX technology, real-time ray tracing, AI-accelerated compute, and high-performance graphics to more professionals. Built on the NVIDIA Ampere architecture, the VR ready RTX A2000 combines 26 second-generation RT Cores, 104 third-generation Tensor Cores, and 3,328 next-generation CUDA® cores and 6 or 12GB of GDDR6 graphics memory with error correction code (ECC) support for error free computing. RTX A2000 GPUs feature a power-efficient low profile, dual-slot PCIe form factor that fits into a wide range of small form factor workstations, and the RTX A2000 12GB doubles memory for even larger models and datasets. Design bigger, render faster, and work smarter than ever before with RTX A2000 GPUs.

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 Mini DisplayPort 1.4a connectors with latching mechanism
- > AV1 decode support
- > DisplayPort with audio
- > NVIDIA RTX Experience™
- > NVIDIA RTX Desktop Manager software
- > HDCP 2.2 support
- > NVIDIA Mosaic¹ technology

PNY Part Numbers

Part Number	EAN Code	SPQ	Box Content (per card)
VCNRTXA2000-12GB-PB	3536403388867	4	Quick Start Guide, 1x mDP to DP
VCNRTXA2000-12GB-SB	3536403387884	5	-
VCNRTXA2000-12GB-BLK	3536403387914	25	-

SPECIFICATIONS

Part Number	VCNRTXA2000-12GB-PB
EAN code	3536403388867
GPU memory	12 GB GDDR6
Memory interface	192-bit
Memory bandwidth	288 GB/s
Error-correcting code (ECC)	Yes
NVIDIA Ampere architecture-based CUDA Cores	3,328
NVIDIA third-generation Tensor Cores	104
NVIDIA second-generation RT Cores	26
Single-precision performance	8.0 TFLOPS²
RT Core performance	15.6 TFLOPS²
Tensor performance	63.9 TFLOPS³
System interface	PCI Express 4.0 x16
Power consumption	Total board power: 70 W
Thermal solution	Active
Form factor	2.7" H x 6.6" L, dual slot
Display connectors	4x mDP 1.4a with latching mechanism
Max simultaneous displays	4x 4096 x 2160 @ 120 Hz, 4x 5120 x 2880 @ 60 Hz 2x 7680 x 4320 @ 60 Hz
Encode/decode engines	1x encode, 1x decode (+AV1 decode)
VR ready	Yes
Graphics APIs	DirectX 12.0⁷, Shader Model 5.1⁷, OpenGL 4.6⁸, Vulkan 1.2⁵
Compute APIs	CUDA, DirectCompute, OpenCL™

¹ Windows 10 and Linux. | ² Peak rates based on GPU Boost Clock. | ³ Effective teraFLOPS (TFLOPS) using the new sparsity feature. | ⁴ GPU supports DX 12.0 API, hardware feature level 12 + 1. | ⁵ 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 and Affiliates. All rights reserved. NVIDIA, the NVIDIA logo, CUDA, RTX Experience, and RTX are trademarks and/or registered trademarks of NVIDIA Corporation and Affiliates 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. NOV21

