

SKY-QUAD-5000B-48
SKY-QUAD-4500B-32
SKY-QUAD-4000B-24
SKY-QUAD-4000SB-24
SKY-QUAD-2000B-16

NVIDIA RTX PRO 5000 Blackwell
NVIDIA RTX PRO 4500 Blackwell
NVIDIA RTX PRO 4000 Blackwell
NVIDIA RTX PRO 4000 SFF Blackwell
NVIDIA RTX PRO 2000 Blackwell



Features

- NVIDIA Blackwell Architecture
- FP4 Tensor Core Acceleration
- DLSS 4 with Multi-Frame Generation
- GDDR7 ECC Memory for Heavy Workloads
- Dual 9th-Gen NVENC / 6th-Gen NVDEC Engines
- PCIe Gen 5
- DisplayPort 2.1 Ready
- NVIDIA Mosaic Technology
- Enterprise Reliability

Introduction

The NVIDIA RTX PRO Blackwell series—featuring the RTX PRO 2000, 4000, 4000 SFF, 4500, and 5000—is engineered for next-gen AI, design, and visualization. Built on the new Blackwell architecture, these GPUs feature up to 12,800 CUDA cores and up to 48 GB of ultra-fast GDDR7 ECC memory. Key innovations include 5th-generation Tensor Cores with FP4 precision and DLSS 4 with Multi-Frame Generation for ultra-smooth visuals.

The RTX PRO 2000 provides entry-level professional performance, while the RTX PRO 4000 SFF excels in compact systems with space-constrained workstations. The 4500 balances memory and performance, and the 5000 handles massive models and 8K workflows. With PCIe Gen 5.0, DisplayPort 2.1, and dual encoding engines, RTX PRO Blackwell GPUs empower creators and developers in AI, graphics, and content production.

Specifications

Product name	NVIDIA RTX PRO 5000 Blackwell	NVIDIA RTX PRO 4500 Blackwell	NVIDIA RTX PRO 4000 Blackwell	NVIDIA RTX PRO 4000 SFF Blackwell	NVIDIA RTX PRO 2000 Blackwell
Part Number	SKY-QUAD-5000B-48	SKY-QUAD-4500B-32	SKY-QUAD-4000B-24	SKY-QUAD-4000SB-24	SKY-QUAD-2000B-16
GPU Architecture	NVIDIA Blackwell	NVIDIA Blackwell	NVIDIA Blackwell	NVIDIA Blackwell	NVIDIA Blackwell
Memory Capacity	48 GB GDDR7 w/ECC	32 GB GDDR7 w/ECC	24 GB GDDR7 w/ECC	24 GB GDDR7 w/ECC	16 GB GDDR7 w/ECC
Memory Interface	384-bit	256-bit	192-bit	192-bit	128-bit
Memory Bandwidth	1344 GB / s	896 GB / s	672 GB / s	432 GB / s	288 GB / s
CUDA Cores	12,800	10,496	8,960	8,960	4352
Tensor Cores	400	328	280	280	136
RT Cores	100	82	70	70	34
Single-Precision Performance	73 TFLOPS	55 TFLOPS	47 TFLOPS	24 TFLOPS	17 TFLOPS
System interface	PCI Express 5.0 x 16	PCI Express 5.0 x 16	PCI Express 5.0 x 16	PCI Express 5.0 x 8 (Uses full-length PCIe interface)	PCI Express 5.0 x 8 (Uses full-length PCIe interface)
Max Power Consumption	300 W	200 W	140 W	70W	70W
Thermal solution	Active blower	Active blower	Active blower	Active blower	Active blower
Multi-Instance GPU	2	No	No	No	No
Form Factor	4.4" H x 10.5" L, Dual-slot, Full Height	4.4" H x 10.5" L, Dual-slot, Full Height	4.4" H x 9.5" L, Dual-slot, Full Height	2.7" H x 6.6" L Dual slot, Low profile	2.7" H x 6.6" L Dual slot, Low profile
Display Connectors	4 x DP 2.1b	4 x DP 2.1b	4 x DP 2.1b	4 x mDP 2.1b	4 x mDP 2.1b
Max simultaneous displays	4x 3840 x 2160 @ 165 Hz 2x 7680 x 4320 @ 100 Hz	4x 3840 x 2160 @ 165 Hz 2x 7680 x 4320 @ 100 Hz	4x 3840 x 2160 @ 165 Hz 2x 7680 x 4320 @ 100 Hz	4x 3840 x 2160 @ 165 Hz 2x 7680 x 4320 @ 100 Hz	4x 3840 x 2160 @ 165 Hz 2x 7680 x 4320 @ 100 Hz
Graphics APIs	DirectX 12 Shader Model 6.6 OpenGL 4.6 Vulkan 1.3	DirectX 12 Shader Model 6.6 OpenGL 4.6 Vulkan 1.3	DirectX 12 Shader Model 6.6 OpenGL 4.6 Vulkan 1.3	DirectX 12 Shader Model 6.6 OpenGL 4.6 Vulkan 1.3	DirectX 12 Shader Model 6.6 OpenGL 4.6 Vulkan 1.3
Compute APIs	CUDA 12.8, OpenCL 3.0, DirectCompute	CUDA 12.8, OpenCL 3.0, DirectCompute	CUDA 12.8, OpenCL 3.0, DirectCompute	CUDA 12.8, OpenCL 3.0, DirectCompute	CUDA 12.8, OpenCL 3.0, DirectCompute
Power Connector	16-Pin PCIe	16-Pin PCIe	16-Pin PCIe	No	No
Power Adapter Cable Included	Yes	Yes	Yes	No	No
Power Adapter Interface	2x PCIe 8-Pin	2x PCIe 8-Pin	1x PCIe 8-Pin	No	No
Low profile Bracket	-	-	-	Yes	Yes