# Accelerating professional workflows with NVIDIA® GPUs.

PNY®
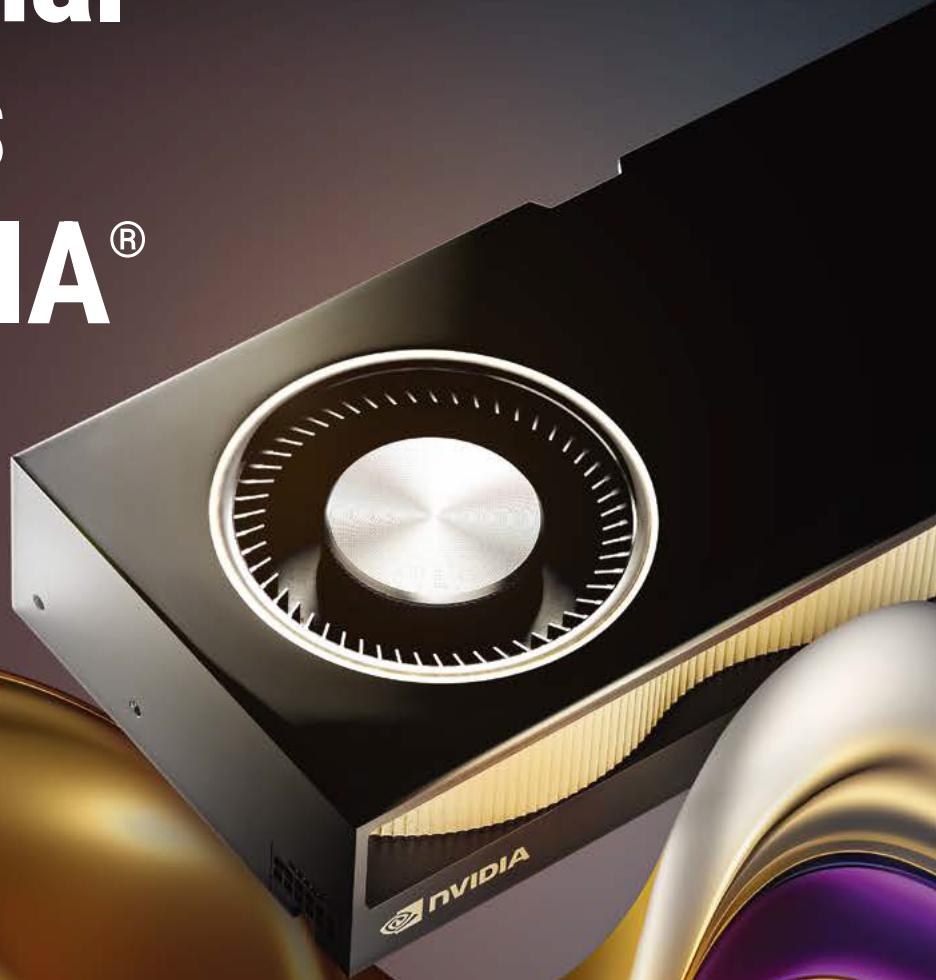
PNY® | NVIDIA

WHICH PNY PROFESSIONAL BOARD IS RIGHT FOR YOU?

	Part Number	CUDA Cores[1]	GPU Memory	Memory Bandwidth	Tensor Cores[1]	Ray Tracing Cores[1]	Floating Point Performance (TFlops)	DisplayPort[2]	Maximum Active Displays	Maximum Resolution Support @ 60 Hz	FSAA (Maximum)	Dimensions (mm)	Mosaic Technology	Maximum Power Consumption	AV1 Encode and Decode Engines	Vulkan Support	GPUDirect™ for Video	Graphics Syncronization[3]	NVLink Bridge support
NVIDIA FOR DESKTOP WORKSTATIONS																			
NVIDIA RTX PRO 6000 Blackwell Workstation Edition	VCNRTXPRO6000-PB	24064	96GB	1792GB/s	752	188	126,0	4	4	15360x8460	64x	137 x 305	√	600W	√	√	√	√	-
NVIDIA RTX PRO 6000 Blackwell Max-Q Workstation Edition	VCNRTXPRO6000MQ-PB	24064	96GB	1792GB/s	752	188	110,1	4	4	15360x8461	64x	112 x 267	√	300W	√	√	√	√	-
NVIDIA RTX PRO 5000 72GB Blackwell	VCNRTXPRO5000-72-PB	14080	72GB	1344GB/s	440	110	66,94	4	4	15360x8462	64x	112 x 267	√	300W	√	√	√	√	-
NVIDIA RTX PRO 5000 Blackwell	VCNRTXPRO5000-PB	14080	48GB	1344GB/s	440	110	66,94	4	4	15360x8462	64x	112 x 267	√	300W	√	√	√	√	-
NVIDIA RTX PRO 4500 Blackwell	VCNRTXPRO4500-PB	10496	32GB	896GB/s	328	82	54,94	4	4	15360x8463	64x	112 x 267	√	200W	√	√	√	√	-
NVIDIA RTX PRO 4000 Blackwell	VCNRTXPRO4000-PB	8960	24GB	672GB/s	280	70	46,90	4	4	15360x8464	64x	112 x 241	√	140W	√	√	√	√	-
NVIDIA RTX PRO 4000 SFF Blackwell	VCNRTXPRO4000LP-PB	8960	24GB	432GB/s	192	70	23.96	4	4	15360x8464	64x	69 x170	√	70W	√	√	√	√	-
NVIDIA RTX PRO 2000 Blackwell	VCNRTXPRO2000-PB	4352	16GB	288GB/s	128	34	16.97	4	4	15360x8464	64x	69 x170	√	70W	√	√	√	-	-
NVIDIA A800 40GB Active	VCNA800-SB	6912	40GB	1506GB/s	432	-	9,7 DP 19,5 SP	-	-	-	-	112 x 267	-	240W	-	√	√	-	√
NVIDIA RTX 6000 Ada Generation	VCNRTX6000ADA-PB	18176	48GB	960GB/s	568	142	91,1 SP	4	4	7680x4320	64x	112 x 267	√	300W	-	√	√	√	-
NVIDIA RTX 5000 Ada Generation	VCNRTX5000ADA-PB	12800	32GB	576GB/s	400	100	65,3 SP	4	4	7680x4320	64x	112 x 267	√	250W	-	√	√	√	-
NVIDIA RTX 4500 Ada Generation	VCNRTX4500ADA-PB	7680	24GB	432GB/s	240	60	39,9 SP	4	4	7680x4320	64x	112 x 267	√	210W	-	√	√	√	-
NVIDIA RTX 4000 Ada Generation	VCNRTX4000ADA-PB	6144	20GB	360GB/s	192	48	26,7 SP	4	4	7680x4320	64x	112 x 241	√	130W	-	√	√	√	-
NVIDIA RTX 4000 SFF Ada Generation	VCNRTXA4000ADALP-PB	6144	20GB	280GB/s	192	48	19,2 SP	4	4	7680x4320	64x	69 x 170	√	70W	-	√	√	√	-
NVIDIA RTX 2000 Ada Generation	VCNRTXA2000ADA-PB	3328	12GB	224GB/s	104	26	12 SP	4	4	7680x4320	64x	69 x 170	√	70W	-	√	√	-	-
NVIDIA RTX 2000E Ada Generation	VCNRTX2000EADA-PB	3328	12GB	224GB/s	104	26	9 SP	4	4	7680x4320	64x	69 x 170	√	50W	-	√	√	-	-
NVIDIA RTX A1000	VCNRTXA1000-PB	2304	8GB	192GB/s	72	18	6,7 SP	4	4	7680x4320	64x	69 x 164	√	50W	-	√	√	-	-
NVIDIA RTX A400	VCNRTXA400-PB	768	4GB	96GB/s	24	6	2,7 SP	4	4	7680x4320	64x	69 x 164	√	50W	-	√	√	-	-
NVIDIA FOR DATA CENTERS																			
NVIDIA RTX PRO 6000 Blackwell Server Edition	TCSRTXPRO6000SE-PB	24064	96GB	1597GB/s	752	188	126,0	4	4	15360x8460	64x	137x305	√	600W	√	√	√	√	-
NVIDIA H200 NVL	TCSH200NVLPCIE-PB	16896	141GB	4800GB/s	528	-	34 DP 67 SP	-	-	-	-	112 x 267	-	600W	-	-	-	-	√
NVIDIA H100 NVL	TCSH100NVLPCIE-PB	16896	94GB	3938GB/s	528	-	26 DP 51 SP	-	-	-	-	112 x 267	-	400W	-	-	-	-	√
NVIDIA L40S	TCSL40SPCIE-PB	18176	48GB	864GB/s	568	142	91,6 SP	4	4	7680x4320	64x	112 x 267	√	350W	√	√	√	√	-
NVIDIA L40	TCSL40PCIE-PB	18176	48GB	864GB/S	568	142	90,5 SP	4	4	7680x4320	64x	112 x 267	√	300W	√	√	√	√	-
NVIDIA A16	TCSA16M-PB	1280 x4	16GB x4	200GB/s x4	40 x4	10 x4	4,5 SP x4	-	-	-	-	112 x 267	-	250W	-	-	-	-	-
NVIDIA A10	TCSA10M-PB	9216	24GB	600GB/s	288	72	31,2 SP	-	-	-	-	112 x 267	-	150W	-	-	-	-	-
NVIDIA L4	TCSL4PCIE-PB	7680	24GB	300GB/s	240	60	30,3 SP	-	-	-	-	69 x 170	-	70W	-	-	-	-	-
NVIDIA A2	TCSA2MATX-PB	1280	16GB	200GB/s	40	10	4,5 SP x4	-	-	-	-	69 x 170	-	40-60W	-	-	-	-	-

1. Processing cores cannot be compared between GPU generations due to several important architectural differences that exist between designs.
2. Adapters available for HDMI.
3. NVIDIA RTX PRO SYNC required

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FIND THE RIGHT NVIDIA GRAPHICS SOLUTION ON THE PNY ONLINE CONFIGURATOR
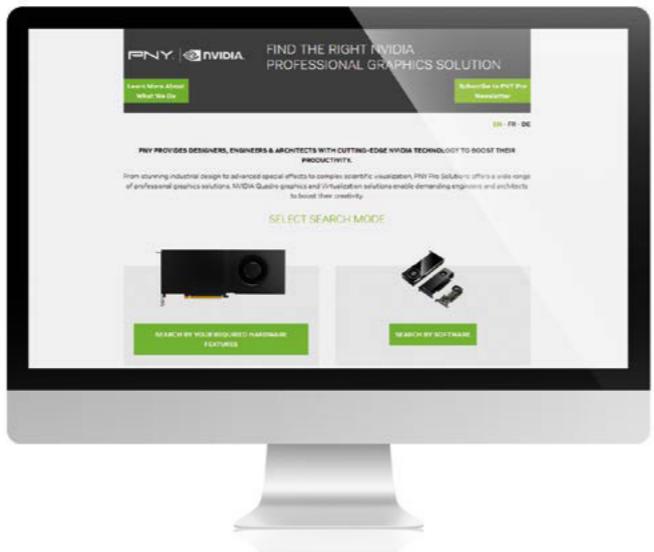
NVIDIA for the Data Center
BY PNY

HIGH-PERFORMANCE COMPUTING	HIGHLIGHTS	IDEAL FOR
NVIDIA H200 NVL TCSH200NVLPCIE-PB	FP64 34 TFLOPS FP64 Tensor Core 67 TFLOPS MIG Instance GPU NVLink 600 GB/s	HPC Deep Learning, Machine Learning, Training, Data Analytics
NVIDIA H100 NVL TCSH100NVLPCIE-PB	FP64 31 TFLOPS FP64 Tensor Core 62 TFLOPS MIG Instance GPU NVLink 600 GB/s	HPC, Deep Learning, Machine Learning, Training, Data Analytics

PROFESSIONAL VIRTUALIZATION	HIGHLIGHTS	IDEAL FOR
NVIDIA RTX PRO™ 6000 **Server Edition** TCSRTXPRO6000SE-PB	FP32 126 TFLOPS 4x DP 2.1b	HPC Rendering, Deep Learning, Machine Learning, Training, Inferencing Virtual Desktop Integration
NVIDIA A10 TCSA10M-PB	FP32 31.2 TFLOPS Single Slot Card	HPC Rendering, Deep Learning, Machine Learning, Training, Inferencing Virtual Desktop Integration

VIRTUAL DESKTOP INTEGRATION - INFERENCING	HIGHLIGHTS	IDEAL FOR
NVIDIA L4 TCSL4PCIE-PB	FP32 30.3 TFLOPS INT 8 485 TOPS Max. Power 72W Low Profile Form Factor	HPC, Inferencing Virtual Desktop Integration Designer / Engineer / Power User
NVIDIA A2 TCSA2MATX-PB	FP32 4.51 TFLOPS INT 4 144 TOPS Max. Power 60W Low Profile Form Factor	Inferencing Virtual Desktop Integration Designer / Engineer / Power User

VIRTUAL DESKTOP INTEGRATION	HIGHLIGHTS	IDEAL FOR
NVIDIA A16 TCSA16M-PB	4x GPU 64 GB Memory (16 GB x4) Density Optimized virtualization	Virtual Desktop Integration Office Workers

NVIDIA Professional Graphics Cards
BY PNY

ULTRA HIGH-END	PACKAGE CONTENT	IDEAL FOR
NVIDIA RTX™ PRO 6000 **Workstation Edition** VCNRTXPRO6000-PB	1 × Quick Start Guide 1 x Dual 8-pin to CEM5 16-pin	Artificial Intelligence Animation - Visualization Broadcast - Video Editing Oil & Gas Medical Imaging
NVIDIA RTX™ PRO 6000 **Max-Q Workstation Edition** VCNRTXPRO6000MQ-PB	1 × Quick Start Guide 1 x Dual 8-pin to CEM5 16-pin	Artificial Intelligence Animation - Visualization Broadcast - Video Editing Oil & Gas Medical Imaging
NVIDIA A800 VCNA800-PB	1 × Quick Start Guide 1 x 8-pin CPU to CEM5 16-pin 1 x Dual 8-pin to CEM5 16-pin	Deep Learning, Machine Learning, Training, Inferencing, Data Analytics

HIGH-END	PACKAGE CONTENT	IDEAL FOR
NVIDIA RTX™ PRO 5000 72GB VCNRTXPRO5000-72-PB **NVIDIA RTX™ PRO 5000** VCNRTXPRO5000-PB	1 × Quick Start Guide 1 x Dual 8-pin to CEM5 16-pin	Animation - Visualization Broadcast - Video Editing Design Manufacturing – large models Medical Imaging
NVIDIA RTX™ PRO 4500 VCNRTXPRO4500-PB	1 × Quick Start Guide 1 x Dual 8-pin to CEM5 16-pin	Animation - Visualization Broadcast - Video Editing Design Manufacturing – large models Medical Imaging
NVIDIA RTX™ PRO 4000 VCNRTXPRO4000-PB	1 × Quick Start Guide 1 x 8-pin to CEM5 16-pin	Animation - Visualization Broadcast - Video Editing Design Manufacturing – large models Medical Imaging

MID-RANGE	PACKAGE CONTENT	IDEAL FOR
NVIDIA RTX™ PRO 4000 SFF VCNRTX4000ADALP-PB	1 × Quick Start Guide 1 x unattached LP Bracket	Animation / Video Editing Manufacturing – large models Medical Imaging
NVIDIA RTX™ PRO 2000 VCNRTX2000ADA-PB	1 × Quick Start Guide 1 x unattached LP Bracket	Animation / Video Editing Manufacturing – med/large models Medical Imaging
NVIDIA RTX™ A1000 VCNRTXA1000-PB	4 × mDP to DP adapter 1 × Quick Start Guide 1 x unattached LP Bracket	Animation Video Editing Manufacturing – medium models

ENTRY-LEVEL	PACKAGE CONTENT	IDEAL FOR
NVIDIA RTX™ A400 VCNRTXA400-PB	4 × mDP to DP adapter 1 × Quick Start Guide 1 × unattached LP Bracket	Manufacturing – volume CAD

DEDICATED TO LOW POWER SYSTEMS	PACKAGE CONTENT	POWER LIMIT
NVIDIA RTX™ 4000 SFF **Ada Generation** VCNRTX4000ADALP-PL	1 x unattached LP Bracket	Power Limit 50W
NVIDIA RTX™ 2000 **Ada Generation** VCNRTX2000ADA-PL	1 x unattached LP Bracket	Power Limit 50W
NVIDIA RTX™ A1000 VCNRTXA1000-PL	1 x unattached LP Bracket	Power Limit 35W
NVIDIA RTX™ A400 VCNRTXA400-PL	1 x unattached LP Bracket	Power Limit 30W

BENEFITS OF PROFESSIONAL GRAPHICS

NVIDIA Blackwell Architecture

BREAKING BARRIERS IN ACCELERATED COMPUTING AND GENERATIVE AI

Delivered application performance is more than raw flops. Computational professionals depend on mission critical applications to accelerate discoveries and insights at scale. It starts with the world's fastest accelerators and includes a reliable infrastructure, the ability to monitor and manage that infrastructure, and the ability to quickly move data where it is needed. The NVIDIA Accelerated Computing Platform provides all of these to deliver unprecedented performance in scientific, analytics, engineering, consumer, and enterprise applications.

Differentiated Engineering:

Low Operating Voltage for Long Term. Reliability.
Large Guard-Band for Guaranteed Quality.
Error Correction Code (ECC) for Data Integrity.

Extensive Qualification & Testing:

Long Burn-in-Testing.
Zero Error Tolerance at Aggressive Clocks.
Result: 5% of GPUs screened out.
Guaranteed Quality.

Enterprise Tools:

Simplify Data Center Operations.
Manage and Monitor GPUs.
System Diagnostics, GPU recovery,
RMA diagnostics.
GPU Cluster Management.

NVIDIA RTX™ Platform

MOST POWERFUL VISUAL COMPUTING

The term "professional workstation" implies many things to many people. However, it usually translates to expectations of high quality, excellent reliability, responsive support, and high performance. The NVIDIA professional series is built to provide this high level of quality and reliability.

NVIDIA RTX™ Application Value-add:

Solidworks Realview.
3ds Max Shade.
Solidworks Visualize.
PTC Creo OIT.
Solidworks Ambient Occlusion.
Catia Live Rendering.

NVIDIA RTX™ Unique Features:

Large memory with ECC.
NVIDIA RTX Desktop Manager.
GPU direct for Video.
Higher Level of FSAA (64x).
Multi-GPU.
Enterprise IT Tools.
Iray Server Streaming.
Quad Buffered Stereo.
Mosaic.
Warp & Blend.
Bezel Correction & Overlap.
Genlock & Framelock.

Performance:

Application specific feature development & tuning.
Driver optimizations to maximize GPU features.
Unique features to support pro workflows.
IT tools for easy deployment & managment.

Reliability:

Application specific testing by NVIDIA.
100+ professional application certifications by ISVs.
Unique rock-solid driver with deterministic release schedule.
Designed and built by NVIDIA to a single specification for 24/7 reliability and stability.

Support:

Deep workflow experience across vertical industries.
Long-Life Cycle availability and support.
Bulk availability for large Enterprise.
Global technical pre-sales and post-sales support.

WHICH PNY PROFESSIONAL BOARD TO USE FOR YOUR APPLICATION?

Should I use a Professional Graphics Card?

PNY offers a suite of professional solutions that enable designers, manufacturers, scientists and researchers to do their work smarter, faster, with greater reliability and with energy efficiency. If you answer one or more of the below questions with yes we recommend to use professional NVIDIA cards.

Does your work involve creating, rendering, or visualizing data and images?
NVIDIA's professional cards are fully compatible, tested & certified on all your professional applications for more performance & reliability.

Is hardware reliability important?
Time spent troubleshooting is lost time for your creativity. NVIDIA professional graphics cards are designed for 24/7 operation with pro support.

Do you prefer long availability for your hardware?
Professional NVIDIA cards are usually available for 3 or more years while gaming cards often have a lifetime below 6 months.

Which NVIDIA for my application?

APPLICATION					
Microsoft Office		**Siemens** NX			
Trimble SketchUp		**PTC** Creo			
Adobe Illustrator CC Photoshop CC		After Effects CC Premiere Pro CC			
Autodesk AutoCAD, Inventor, Revit			Maya, 3ds MAX		
	Dassault Systems Solidworks		**3DEXCITE** CATIA Live Rendering	Solidworks Visualize	
		CATIA		ABAQUS, SIMULA	
		The Foundry Mari, Nuke			
				Ansys Mechanical	
			Schlumberger Petrel		
Small/simple CAD models, Video, entry PLM • ISV Certs • Higher performance vs. IGP, gfx GPU • NVIDIA Mosaic	Medium size/complexity CAD models, basic DCC, Medical Imaging, PLM • +2GB memory • Approx. 118% faster	Large/complex CAD models, Advanced DCC, Medical Imaging • +4GB memory • Approx. 37% faster • NVIDIA Mosaic with sync	Large/complex CAD models, Seismic exploration, complex DCC effects • +8GB memory • Approx. 65% faster • Error Correcting Code (ECC) Memory	Largest CAD models, CAE, Photo-realistic rendering, Seismic exploration, GPGPU compute • +8GB memory • Approx. 61% faster	Most demanding rendering and GPGPU compute applications • Multi-GPU solution • Highest performance
RTX A400	**RTX PRO 2000 RTX A1000**	**RTX PRO 4000 RTX PRO 4000 SFF**	**RTX PRO 5000 RTX PRO 4500**	**RTX PRO 6000 RTX PRO 6000 Max-Q A800**	**2x RTX PRO 6000 2x RTX PRO 6000 Max-Q 2x A800**
ENTRY	**MID-RANGE**	**HIGH-END**		**ULTRA HIGH-END**	

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PNY maximizes your NVIDIA Graphics Cards potential with an exceptional support.

COMPATIBILITY & SUPPORT
FOR ALL WORKSTATION BRANDS

PNY Warranty Extension Service

- ◉ To better protect your investment, PNY offers a comprehensive extended 5-Year warranty to your NVIDIA® card from PNY®.

Main Features

- ◉ Additional 2-Year Extended Warranty Service for your NVIDIA® card by PNY®.

- ◉ Advanced Product Replacement (for European Union countries, Norway and Switzerland).

PNY ADVANTAGE

- ◉ 3-Year standard warranty

- ◉ Pre-sales support and system configuration assistance

- ◉ Dedicated Field Application Engineers

- ◉ Direct access to technical support hotlines

- ◉ Support escalation for prompt issue resolution

- ◉ Certified software support and bug reporting

- ◉ Published product support and training materials

- ◉ Advanced replacement options for mission-critical deployments

- ◉ Long product life cycles and availability

- ◉ Loyalty partner channel programs