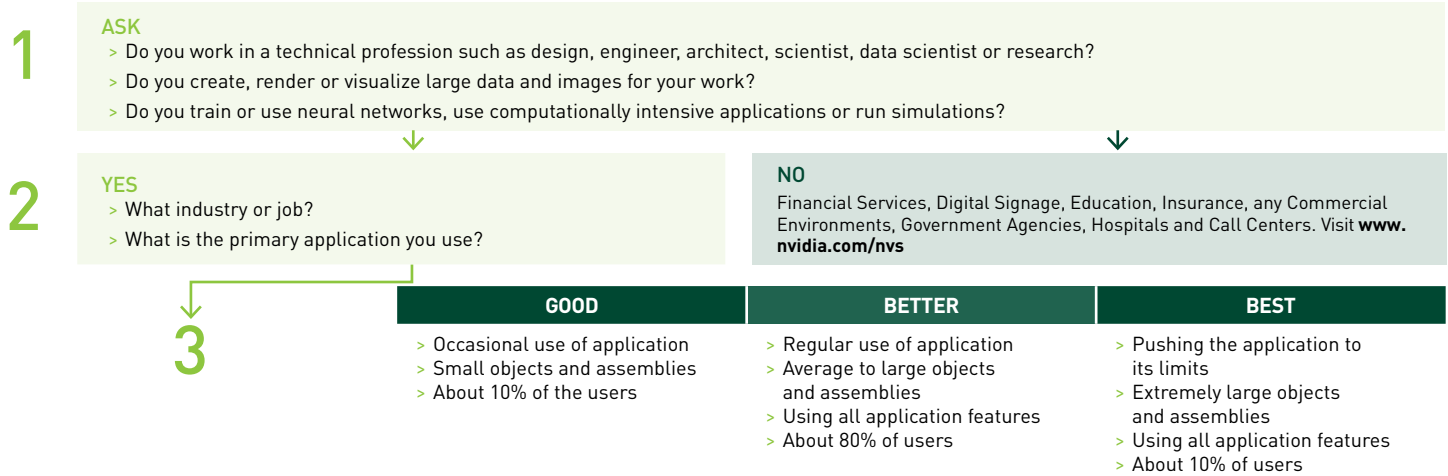PNY | nVIDIA.

QUADRO

RTX 8000

THE RIGHT TOOLS FOR PROFESSIONALS NVIDIA WORKSTATION GPUs

NVIDIA PROFESSIONAL SOLUTION GUIDE

The best solution for customers on their use case.

The current Quadro lineup includes Maxwell, Pascal and Volta architectures. **Please request that your customer contact their software provider for the latest information on application certifications and support.**

1 ASK
> Do you work in a technical profession such as design, engineer, architect, scientist, data scientist or research?
> Do you create, render or visualize large data and images for your work?
> Do you train or use neural networks, use computationally intensive applications or run simulations?

2 YES
> What industry or job?
> What is the primary application you use?

NO
Financial Services, Digital Signage, Education, Insurance, any Commercial Environments, Government Agencies, Hospitals and Call Centers. Visit **www.nvidia.com/nvs**

3

GOOD	BETTER	BEST
> Occasional use of application > Small objects and assemblies > About 10% of the users	> Regular use of application > Average to large objects and assemblies > Using all application features > About 80% of users	> Pushing the application to its limits > Extremely large objects and assemblies > Using all application features > About 10% of users

DESIGN/ENGINEERING/MANUFACTURING

Application		GOOD	BETTER	BEST
Altair® HyperWorks®	Desktop	NVIDIA Quadro® P2000	NVIDIA Quadro® P4000	NVIDIA Quadro® P5000
	Mobile	Quadro® P2000	Quadro® P4200	Quadro® P5200
ANSYS® Discovery Live	Desktop	Quadro P4000	Quadro P5000	Quadro P6000 / Quadro GP100 / Quadro GV100
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
ANSYS Workbench™, ANSYS AIM and ANSYS EnSight	Desktop	Quadro P1000	Quadro P4000	Quadro P5000
	Mobile	Quadro P1000	Quadro P4200	Quadro P5200
ANSYS Mechanical, ANSYS Fluent and ANSYS HFSS	Desktop	Quadro GP100	Quadro GP100 / Quadro GV100	2x Quadro GP100 / 2x Quadro GV100
	Mobile#1	Quadro P1000	Quadro P4200	Quadro P5200
Autodesk® 3ds Max®	Desktop	Quadro RTX 4000	2x Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P2000 /Quadro P3200	Quadro P4200	Quadro P5200
Autodesk AutoCAD®	Desktop	Quadro P620	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P600	Quadro P2000	Quadro P4200
Autodesk Fusion 360	Desktop	Quadro P2000	Quadro P4000	Quadro RTX 4000
	Mobile	Quadro P600	Quadro P2000	Quadro P4200
Autodesk Netfabb 2018	Desktop	Quadro P620	Quadro P2000	Quadro RTX 4000
	Mobile	Quadro P600	Quadro P2000	Quadro P4000
Autodesk Inventor®	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P1000	Quadro P2000	Quadro P4200
Autodesk MoldFlow®	Desktop	Quadro GV100	Quadro GP100 / Quadro GV100	2x Quadro GV100
	Mobile	Quadro P2000	Quadro P2000	Quadro P4000
Autodesk Showcase™	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Autodesk VRED	Desktop	Quadro RTX 4000	2x Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Beta CAE ANSA, META	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
COMSOL	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Dassault Systèmes 3DEXCITE DELTAGEN / DELTAVIEW	Desktop	Quadro RTX 5000	Quadro RTX 6000	Quadro RTX 8000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Dassault Systèmes CATIA V5-6 and 3DEXPERIENCE	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 6000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Dassault Systèmes CATIA Live Rendering	Desktop	Quadro RTX 5000	Quadro RTX 6000	Quadro RTX 8000
	Mobile	Quadro P5200	Quadro P5200	Quadro P5200
Dassault Systèmes SIMULIA Abaqus and SIMULIA CST STUDIO	Desktop	Quadro GP100	Quadro GV100	2x Quadro GV100
	Mobile#1	Quadro P1000	Quadro P4200	Quadro P5200
Dassault Systèmes SOLIDWORKS	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Dassault Systèmes SOLIDWORKS Visualize#2	Desktop	Quadro P4000	Quadro 2x P4000	Quadro GV100
	Mobile	Quadro P4200	Quadro P5200	Quadro P5200
ESI Group IC.IDO	Desktop	Quadro P5000	2x Quadro P5000	3x Quadro P6000
	Mobile	Quadro P5200	Quadro P5200	Quadro P5200
EXA PowerViz	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200

DESIGN/ENGINEERING/ MANUFACTURING cont.

		GOOD	BETTER	BEST
LS-PrePost	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Lumiscaphe P3D Design	Desktop	Quadro RTX 5000	Quadro RTX 6000	Quadro GV100
	Mobile	Quadro P5200	Quadro P5200	Quadro P5200
MathWorks MATLAB	Desktop	Quadro GV100	Quadro GV100	2x Quadro GV100
	Mobile	Quadro P5200	Quadro P5200	Quadro P5200
MSC Nastran	Desktop	Quadro GP100	Quadro GV100	2x Quadro GV100
	Mobile	Not Applicable	Not Applicable	Not Applicable
MSC Patran, Apex, ADAMS	Desktop	Quadro P620	Quadro P1000	Quadro P4000
	Mobile	Quadro P1000	Quadro P2000	Quadro P4200
PTC Creo	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens CD-adapco STAR-CCM+	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens NX, SimCenter, NX CAE and FEMAP	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens NX + Ray Traced Studio (Iray)	Desktop	Quadro P4000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens PLM Solid Edge	Desktop	Quadro P2000	Quadro P4000	Quadro P5000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens NX Nastran	Desktop	Quadro GP100	Quadro GV100	2x Quadro GV100
	Mobile	Not Applicable	Not Applicable	Not Applicable

VIRTUAL REALITY VIEWER (VR VIEWER)

Autodesk Live	Desktop	Quadro RTX 4000	Quadro RTX 5000	Quadro RTX 6000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Siemens NX VR, Plant Simulations VR, TeamCenter VR	Desktop	Quadro P5000	Quadro P6000	Quadro RTX 6000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200

ARCHITECTURE / ENGINEERING / CONSTRUCTION

Autodesk 3ds Max®	Desktop	Quadro RTX 4000	2x Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P2000 / Quadro P3200	Quadro P4200	Quadro P5200
Autodesk ReCap 360	Desktop	Quadro RTX 4000	Quadro RTX 5000	Quadro RTX 6000
	Mobile	Quadro P600	Quadro P2000	Quadro P5200
Autodesk Revit®	Desktop	Quadro RTX 4000	Quadro RTX 5000	Quadro RTX 6000
	Mobile	Quadro P600	Quadro P2000	Quadro P5200
Nemetschek Allplan	Desktop	Quadro P620	Quadro P2000	Quadro P4000
	Mobile	Quadro P600	Quadro P2000	Quadro P4200
Nemetschek Graphisoft ArchiCAD	Desktop	Quadro P620	Quadro P2000	Quadro P4000
	Mobile	Quadro P600	Quadro P2000	Quadro P4200
Nemetschek Vectorworks	Desktop	Quadro P620	Quadro P2000	Quadro P4000
	Mobile	Quadro P600	Quadro P2000	Quadro P4200

MODELING/ANIMATION /VISUALIZATION/EFFECTS

Adobe After Effects CC#3	Desktop	Quadro RTX 4000	2x Quadro RTX 5000	2x Quadro RTX 6000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Autodesk 3ds Max	Desktop	Quadro RTX 4000	2x Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Autodesk Arnold	Desktop	Quadro RTX 5000	2x Quadro RTX 6000	3x Quadro RTX 8000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Autodesk Maya®	Desktop	Quadro RTX 4000	Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Autodesk Maya for GPU Ray Tracing	Desktop	Quadro RTX 4000	Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200
Chaos V-Ray GPU	Desktop	Quadro RTX 4000	Quadro RTX 6000	Quadro RTX 8000
	Mobile	Quadro P2000 / Quadro P3200	Quadro P4200	Quadro P5200
Maxon CINEMA 4D	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 6000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Otoy Octane	Desktop	Quadro RTX 4000	Quadro RTX 6000	Quadro RTX 8000
	Mobile	Quadro P2000 / Quadro P3200	Quadro P4200	Quadro P5200
NewTek Lightwave™	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Redshift Renderer	Desktop	Quadro RTX 4000	Quadro RTX 6000	Quadro RTX 8000
	Mobile	Quadro P2000 / Quadro P3200	Quadro P4200	Quadro P5200
Side Effects Houdini	Desktop	Quadro RTX 6000	2x Quadro RTX 6000	2x Quadro RTX 8000
	Mobile	Quadro P3200	Quadro P4200	Quadro P5200

VIDEO EDITING

Adobe® Media Encoder	Desktop	Quadro P2000	Quadro RTX 5000	Quadro RTX 6000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Adobe® Premiere Pro® CC	Desktop	Quadro P2000	Quadro RTX 5000	2x Quadro RTX 6000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200

NVIDIA GPU [Genius]™

Please visit **www.gpugenius.com** to find
> Online sales and product training modules
> Easy to share customer-ready presentations, solution sheets and videos

VIDEO EDITING cont.		GOOD	BETTER	BEST
Avid® Media Composer®	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Grass Valley Edius®	Desktop	Quadro P620	Quadro P2000	Quadro RTX 4000
	Mobile	Quadro P1000	Quadro P2000	Quadro P4200
Magix Vegas Pro™	Desktop	Quadro P620	Quadro P2000	Quadro RTX 4000
	Mobile	Quadro P1000	Quadro P2000	Quadro P4200

IMAGE EDITING / ARTISTIC DESIGN

		GOOD	BETTER	BEST
Adobe® Photoshop® CC	Desktop	Quadro P620	Quadro P2000	Quadro RTX 4000
	Mobile	Quadro P600	Quadro P1000	Quadro P3200
Adobe® Illustrator® CC	Desktop	Quadro P620	Quadro P2000	Quadro RTX 4000
	Mobile	Quadro P600	Quadro P1000	Quadro P3200
Allegorithmic Substance Designer	Desktop	Quadro P2000	Quadro RTX 4000	Quadro RTX 5000
	Mobile	Quadro P2000	Quadro P4200	Quadro P5200
Allegorithmic Substance Painter	Desktop	Quadro RTX 4000	2x Quadro RTX 4000	Quadro RTX 6000
	Mobile	Quadro P4200	Quadro P5200	Quadro P5200

1 Mobile GPUs are for ANSYS HFSS and CST STUDIO only | 2 SOLIDWORKS Visualize users may require more powerful and/or multiple GPUs for improved rendering performance, depending on rendering frequency and scene complexity.
3 NVIDIA OptiX | **Please request that your customer contact their software provider for the latest information on application certifications and support.**

PROFESSIONAL GRAPHICS VS CONSUMER GRAPHICS

NVIDIA makes industry-leading graphics cards for a variety of uses.

When you come across a customer who is using gaming cards for professional applications, make sure they are aware of the unique benefits that NVIDIA Quadro graphics cards offer.

BENEFITS OF PROFESSIONAL GRAPHICS OVER CONSUMER GRAPHICS

Quadro hardware is built for years of non-stop use

> Quadro cards are built for use 24 hours a day, 7 days a week
> Extended availability and support is offered on all professional cards, including bug fixes for professional applications

Quadro boards are built for workplace environments

> Quadro cards have more memory, smaller footprints and consume less power
> Deployment can be for tens or hundreds of PCs in offices
> **Application certified:** Quadro cards and drivers are tested to work flawlessly on 100% of certified professional software applications

Quadro provides enterprise support tools for remote administration and deployment as well as professional features such as:

> **NVIDIA® nView®** for desktop management, allowing users to create grids and snap applications to them
> **NVIDIA Mosaic** for combining multiple displays into one large display seamlessly without tearing
> **Advanced 3D stereo** supports stereoscopic 3D display on HDMI 3D TVs, projectors and displays allowing for viewing images and ultrasounds in 3D

PERFORMANCE	QUADRO	GAMING	INTEGRATED
Professional application specific feature development and tuning	•		
Driver optimizations to maximize professional application performance	•		
Unique features to support professional workflows	•		
IT tools for easy deployment & management	•		
Gaming Profile*	•		
Extreme performance scaling with Multi-GPU	•		

RELIABILITY			
Professional application specific testing by NVIDIA	•		
100+ professional application certifications by ISVs	•		
Certified across workstation platforms by leading OEMs	•		
Unified rock-solid driver with deterministic release schedule	•		
Tested and certified by NVIDIA and OEM partners to run 24/7 with reliability & stability	•		
Extended availability	•		

SUPPORT			
Deep workflow experience across vertical industries	•		
Long-Life Cycle availability and support	•		
Bulk availability for large Enterprises	•		
Global technical pre-sales and post-sales support	•		
Online end-user forums for fast support from SMEs	•		

* Most games will run fine on Quadro graphics cards. Enable Game Development profile if any unexpected results occur while gaming.

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