

NVIDIA WORKSTATION PROFESSIONAL GRAPHICS SOLUTIONS

Model	GPU Specifications			Graphics and Compute				Display Technology							Options						
	NVIDIA® CUDA® Processing Cores ^{1a}	GPU Memory	Memory Bandwidth	Graphics Performance Score ¹	Floating-Point Performance—Single Precision (Gigaflops, Peak)	Floating-Point Performance—Double Precision (Gigaflops, Peak)	Error-Correcting Code (ECC) Memory	Dual-Link DVI ⁸	DisplayPort 1.1 ¹²	DisplayPort 1.2 ¹²	HDMI Via Adaptors	Maximum Active Displays	FSAAs (Maximum)	FXAA Antialiasing	TXAA Antialiasing	NVIDIA® SLI ⁹	NVIDIA Quadro® Mosaic™ Technology	HD SDI Capture/Output	GPU Direct for Video	Graphics Synchronization ⁹	NVIDIA 3D Vision™ / 3D Vision Pro ¹⁰
NVIDIA® Tesla® GPU Computing Processor																					
Tesla K20 New!	2496	TBA	TBA		TBA	TBA	✓											✓			
Tesla C2075	448	6.0 GB	144 GBps		1030	515	✓	1			1							✓			
NVIDIA® Quadro® 3D Desktop Workstation Professional Graphics Boards																					
ULTRA- HIGH END																					
Quadro 6000	448	6.0 GB	144 GBps	49	1030	515	✓	1	2		2	2	64x	✓	✓	✓	✓	✓	✓	✓	✓
HIGH-END																					
Quadro K5000 New!	1536	4.0 GB	173 GBps	58	2150	90	✓	2		2	4	4		✓	✓	✓	✓	✓	✓	✓	✓
Quadro K5000 for Mac New!	1536	4.0 GB	173 GBps	58	2150	90	✓	2		2 ¹⁴	4	4	64x	✓		✓	✓	✓	✓	✓	✓
Quadro 5000	352	2.5 GB	120 GBps	43	718	359	✓	1	2		2	2	64x	✓		✓	✓	✓	✓	✓	✓
Quadro 4000	256	2.0 GB	90 GBps	37	486	243		1	2		2	2	64x	✓		✓	✓	✓	✓	✓	✓
Quadro 4000 for Mac	256	2.0 GB	90 GBps		486	243		1	1		2	2	64x ⁷							✓	✓
MID-RANGE																					
Quadro 2000	192	1.0 GB	42 GBps	29				1	2		2	2	64x	✓		✓				✓	✓
Quadro 2000D	192	1.0 GB	42 GBps	28				2			2	2	64x	✓		✓				✓	✓
ENTRY-LEVEL																					
Quadro 600	96	1.0 GB	26 GBps	19				1	1		2	2	64x	✓		✓				✓	✓
Quadro 410	192	512 MB	14 GBps	18				1		1	2	2	32x	✓	✓	✓				✓	✓
NVIDIA Quadro 3D Mobile Workstation Professional Graphics Boards																					
17" PLATFORM																					
Quadro K5000M New!	1344	4.0 GB	96 GBps	²			✓	²	²		²	64x	✓	✓		✓				✓	✓
Quadro 5010M	384	4.0 GB	83 GBps	²			✓	²	²		²	64x				✓				✓	✓
Quadro K4000M New!	960	4.0 GB	90 GBps	²				²	²		²	64x	✓	✓		✓				✓	✓
Quadro 4000M	336	2.0 GB	80 GBps	²				²	²		²	64x				✓				✓	✓
Quadro K3000M New!	576	2.0 GB	90 GBps	²				²	²		²	64x	✓	✓		✓				✓	✓
Quadro 3000M	240	2.0 GB	80 GBps	²				²	²		²	64x				✓				✓	✓
15" PLATFORM																					
Quadro K2000M New!	384	2.0 GB	29 GBps	²				²	²		²	64x	✓	✓		✓				✓	✓
Quadro 2000M	192	2.0 GB	29 GBps	²				²	²		²	64x				✓				✓	✓
Quadro K1000M New!	192	2.0 GB	29 GBps	²				²	²		²	64x	✓	✓		✓				✓	✓
Quadro 1000M	96	2.0 GB	29 GBps	²				²	²		²	64x				✓				✓	✓
Quadro K500M New!	192	1.0 GB	13 GBps	²				²	²		²	64x	✓	✓		✓				✓	✓
NVIDIA Quadro Plex Scalable Visualization Systems																					
Quadro Plex 7000	1024	12.0 GB	178 GBps		1341	671	✓	4			4	4	128x			128x	✓	⁴		✓	✓
NVIDIA NVS™ Commercial Graphics Solutions																					
QUAD DISPLAY																					
NVIDIA NVS 510 x16	192	2.0 GB	28.5 GBps					4		4	4	4				✓					
Quadro NVS 450	16	512 MB	11 GBps ³					-		4	4	4				✓					
Quadro NVS 420 x16 or x1	16	512 MB	11 GBps ³					-		4 ⁶	4	4				✓					
DUAL DISPLAY																					
NVIDIA NVS 310 x16	48	512MB	14 GBps							2	2	2				✓					
NVIDIA NVS 300 x16 or x1	16	512 MB	13 GBps					2 ⁵		2 ⁵	2	2				✓					
Quadro NVS 295 x16 or x1	8	256 MB	11 GBps							2	2	2				✓					

For more information on NVIDIA NVS mobile solutions, please visit <http://www.nvidia.com/object/notebook-nvs.html>

- Relative performance score represents the geometric mean of the Viewperf 11 viewsets and is intended to provide a relative performance difference.
- Application scaling may vary. SPECviewer[®] 11 for more information visit www.spec.org
- Workstation performance and display support will vary by OEM; please see www.spec.org or OEM specifications for details.
- Per GPU memory bandwidth.
- Capture-compatible only.
- Supports dual SL-DVI-I/VGA/DP through DM559 connector.
- Supports quad DP/SL-DVI through VHDCI connector.
- 8x on Mac OSX, 64x on Windows.
- Maximum display resolution: 330M Pixels/sec (ex 2560x1600 @ 60Hz or 1920x1200@120Hz) NVIDIA Quadro K-series have Display Port 1.2, others Display Port 1.1.
- Quadro K-series GPUs are only compatible with Quadro Sync. Other GPUs listed are compatible only with Quadro G-Sync II.
- Requires 3D Vision-ready display. Visit www.nvidia.com/3dvision
- Quadro K-series and Quadro 410 GPUs are only compatible with Tesla K20. Other GPUs listed are compatible only with Tesla C2075.
- Adaptors available for DVI-SL, DVI-DL, HDMI, and VGA.
- CUDA Parallel Processing Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.
- On Mac OSX, DisplayPort 1.2 multi-streaming feature is currently not supported. DisplayPort 1.2 is fully supported on Windows using Bootcamp.

For more information on NVIDIA Workstation products, visit www.nvidia.com/workstation

© 2012 NVIDIA Corporation. NVIDIA, the NVIDIA logo, Quadro, Tesla, Maximus, SLI, CUDA, and 3D Vision are trademarks and/or registered trademarks of NVIDIA Corporation. All rights reserved. All company and product names are trademarks or registered trademarks of the respective owners with which they are associated. Features, pricing, availability, and specifications are all subject to change without notice.



NVIDIA® PROFESSIONAL WORKSTATION SOLUTIONS CREATE WITHOUT THE WAIT.

Experience blazing performance across a broad range of manufacturing, media and entertainment, science, and energy applications. Transform your workflow with professional workstation solutions built by NVIDIA.

NVIDIA® QUADRO® 3D WORKSTATION PROFESSIONAL GRAPHICS SOLUTIONS

Designed and built specifically for professional workstations, NVIDIA Quadro GPUs power more than 150 professional applications across a broad range of industries. Professionals trust them to deliver the best possible experience in applications such as Adobe® CS6, Avid Media Composer, Autodesk Inventor, Dassault Systemes CATIA and SolidWorks, Siemens NX, PTC Creo, and many more.



NVIDIA® TESLA® GPU COMPUTING PROCESSORS

NVIDIA Tesla GPU parallel processors provide the highest-performance NVIDIA CUDA® acceleration for your workflow. Designed for professional systems and demanding professional applications, Tesla GPUs do the complex calculations required for CAE/CFD calculations, seismic processing, ray-traced rendering, compositing, image processing, physics, and effects many times faster than a CPU.



NVIDIA® NVS™ COMMERCIAL GRAPHICS SOLUTIONS

NVIDIA NVS graphics boards provide robust IT management tools for seamless enterprise deployment. This makes them the unrivaled solution across financial institutions, emergency call centers, digital signage systems, and other mission-critical environments.



NVIDIA® MAXIMUS™ PLATFORM

NVIDIA Maximus-powered workstations combine the industry-leading professional 3D graphics capability of NVIDIA Quadro GPUs and the high-performance computing power of NVIDIA Tesla GPUs. Tesla co-processors automatically perform the heavy lifting of rendering or CAE computations, freeing the Quadro GPUs to do what they do best—enabling rich interactive graphics. With Maximus, engineers, artists, designers, or scientists can now interact with high-performance visuals while also performing simulations or renderings on the same system.