Options

NVIDIA WORKSTATION PROFESSIONAL GRAPHICS SOLUTIONS

GPU Specifications

	Model	NVIDIA® CUDA® Processing Cores ¹³	GPU Memory	Memory Bandwidth	Graphics Performance Sco	Floating-Point Performanc Single Precision (Gigaflops, Peak)	Floating-Point Performand Double Precision (Gigaflops, Peak)	Error Correcting Code (ECC Memory	Dual-Link DVI®	DisplayPort 1.1 ¹²	DisplayPort 1.212	HDMI Via Adaptors	Maximum Active Displays	FSAA (Maximum)	FXAA and TXAA Antialiasin	NVIDIA® SLI®	NVIDIA Quadro® Mosaic™ Technology	HD SDI Capture/Output	GPUDirect for Video	Graphics Syncronization ⁹	NVIDIA 3D Vision"/ 3D Vision Pro 10	NVIDIA Maximus-Enabled
NVIDIA® Tesla® GPU Comput	ting Processor		<u> </u>																			
	Tesla K20 New!	TBA	TBA	TBA		TBA	TBA	1											/			
	Tesla C2075	448	6.0 GB	144 GBps		1030	515	1	1				1						1			
NVIDIA® Quadro® 3D Desktop	p Workstation Professional Graphics Board	ds .																				
ULTRA- HIGH END	Quadro 6000	448	6.0 GB	144 GBps	49	1030	515	/	1	2		2	2	64x		1	/	1	/	1	1	/
HIGH-END	Quadro K5000 New!	1536	4.0 GB	173 GBps	58	2150	90	1	2		2	4	4	64x	1	1	/	1	/	1	/	1
	Quadro 5000	352	2.5 GB	120 GBps	43	718	359	1	1	2		2	2	64x		1	1	1	1	1	1	1
	Quadro 4000	256	2.0 GB	90 GBps	37	486	243		1	2		2	2	64x			/	/	/		/	1
	Quadro 4000 for Mac	256	2.0 GB	90 GBps		486	243		1	1		2	2	64x ⁷							1	
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			1				1	1
ENTRY-LEVEL	Quadro 600	96	1.0 GB	26 GBps	19				1	1		2	2	64x			1	i			1	1
	Quadro 410	192	512 MB	14 GBps	18				1		1	2	2	32x	1		1				1	1
NVIDIA Quadro 3D Mobile Wo	orkstation Professional Graphics Boards																					
17" PLATFORM	Quadro K5000M New!	1344	4.0 GB	96 GBps	2			1	2	2			2	64x			1	l l			1	
	Quadro 5010M	384	4.0 GB	83 GBps	2			1	2	2			2	64x			1				1	
	Quadro K4000M New!	960	4.0 GB	90 GBps	2				2	2			2	64x	/		1				1	
	Quadro 4000M	336	2.0 GB	80 GBps	2				2	2			2	64x			1				J	
	Quadro K3000M New!	576	2.0 GB	90 GBps	2				2	2			2	64x	1		1				J	
	Quadro 3000M	240	2.0 GB	80 GBps	2				2	2			2	64x			1				/	
15" PLATFORM	Quadro K2000M New!	384	2.0 GB	29 GBps	2				2	2			2	64x			1				1	
	Quadro 2000M	192	2.0 GB	29 GBps	2				2	2			2	64x			1				J	
	Quadro K1000M New!	192	2.0 GB	29 GBps	2				2	2			2	64x	1		1				1	
	Quadro 1000M	96	2.0 GB	29 GBps	2				2	2			2	64x			1				1	
	Quadro K500M New!	192	1.0 GB	13 GBps	2				2	2			2	64x	1		1				1	
NVIDIA Quadro Plex Scalable	e Visualization Systems																-				- 1	l.
	Quadro Plex 7000	1024	12.0 GB	178 GBps		1341	671	1	4			4	4	128x		128x	1	4		1	1	
NVIDIA NVS™ Commercial Gr	raphics Solutions																					
QUAD DISPLAY	Quadro NVS 450	16	512 MB	11 GBps ³						4		4	4				/					
	Quadro NVS 420 x16 or x1	16	512 MB	11 GBps ³					46	46		4	4				1					
DUAL DISPLAY	NVIDIA NVS 310 x16	48	512MB	14 GBps							2	2	2				1					
				-					25	25		2	2				1					
DUAL DISPLAY	Quadro NVS 300 x16 or x1	16	512 MB	13 GBps					Ζ-													

Graphics and Compute

- 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. SPECviewperf® 11 for more information visit www.spec.org
- 2. Workstation performance and display support will vary by OEM; please see www.spec.org or
- OEM specifications for details
- 3. Per GPU memory bandwidth
- 4. Capture-compatible only
- 5. Supports dual SL-DVI-I/VGA/DP through DM559 connector
- 6. Supports quad DP/SL-DVI through VHDCI connector

- 7. 8x on Mac OSX, 64x on Windows
- 8. Maximum display resolution: 330M Pixels/sec (ex 2560x1600 @ 60Hz or 1920x1200@120Hz)
- 9. Quadro K-series GPUs are only compatible with Quadro Sync. Other GPUs listed are compatible only with Quadro G-Sync II.

Display Technology

- 10. Requires 3D Vision-ready display. Visit www.nvidia.com/3dvision
- 11. Quadro K-series GPUs are only compatible with Tesla K20. Other GPUs listed are compatible only with Tesla C2075.
- 12. Adaptors available for DVI-SL, DVI-DL, HDMI, and VGA
- 13. CUDA Parallel Processing Cores cannot be compared between GPU generations due to several important architectural differences that exist between streaming multiprocessor designs.

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





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® 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 coprocessors 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.

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

