

PART NUMBER:
VCQK6000-PB

PNY Quadro K6000
UNBEATABLE MEMORY
AND GRAPHICS PERFORMANCE



The NVIDIA® Quadro® K6000 by PNY GPU leverages the new NVIDIA Kepler™ architecture to deliver the world's most compatible and power-efficient solution for accelerating professional applications.

The NVIDIA Quadro K6000 graphics card is the ultimate expression of NVIDIA's expertise in professional graphics, empowering artists, designers, and engineers to realize their biggest visions. It combines **12 GB of memory, 2880 NVIDIA CUDA® parallel processing cores,** accelerated double-precision computation, plus the ability to **drive up to four ultra-high-resolution displays** or projectors. This makes the Quadro K6000 the superior choice to bring your largest and most complex projects to life.

Designed and built specifically for professional workstations, NVIDIA Quadro GPUs power more than 200 professional applications across a broad range of industries including manufacturing, media and entertainment, sciences, and energy. Professionals trust them to realize their most ambitious visions—whether it's product design, visualization and simulation, or spectacular visual storytelling—and get results to market faster.

NVIDIA Quadro by PNY GPUs are designed, built, and tested by NVIDIA specifically for professional workstations powering more than 150 professional applications across a broad range of industries, including manufacturing, media and entertainment, sciences, and energy.

For maximum application performance, add an NVIDIA Tesla® by PNY K20 co-processor to your workstation and experience the power of NVIDIA Maximus™ technology.

QUADRO K6000 - PRODUCT SPECIFICATIONS

GPU MEMORY	12 GB GDDR5
MEMORY INTERFACE	384-bit
MEMORY BANDWIDTH	288 GB/s
CUDA CORES	2880
SYSTEM INTERFACE	PCI Express 3.0 x16
MAX POWER CONSUMPTION	225 W
THERMAL SOLUTION	Ultra-quiet active fansink
FORM FACTOR	110 mm (H) x 265 mm (L) Dual Slot, Full Height
DISPLAY CONNECTORS	1 x DVI-DL 1 x DVI-DL 2 x DP1.2 1 x Stereo
MAX SIMULTANEOUS DISPLAYS	4
MAX DP 1.2 RESOLUTION	3840 x 2160 @ 60 Hz
MAX DVI-DL RESOLUTION	2560 x 1600 @ 60 Hz 1920 x 1200 @ 120 Hz
MAX VGA RESOLUTION	2048 x 1536 at 85 Hz
GRAPHICS APIS	Shader Model 5.0, OpenGL 4.3, DirectX 11
COMPUTE APIS	CUDA, DirectCompute, OpenCL
PACKAGE CONTENT	- 2 x DP to DVI (SL) adapter P/N: GSP-DPDMISL - DVI to VGA adapter P/N: GSP-DVIVGA - Stereo Additional Connector P/N: GSP-STEREOG4000-PB
PART NUMBER	VCQK6000-PB

PNY PROFESSIONAL RANGE OF PRODUCTS

 Professional Solutions <small>NVIDIA Quadro® / NVIDIA Tesla® / Prevail SSDs</small>	 QUADRO 410	 QUADRO K600	 QUADRO K2000	 QUADRO K2000D	 QUADRO K4000	 QUADRO K5000 MAC	 QUADRO K5000	 QUADRO K6000
CUDA PARALLEL PROCESSING CORES	192	192	384	384	768	1536	1536	2880
FRAME BUFFER MEMORY	512 Mo DDR3	1 GB DDR3	2 GB GDDR5	2 GB GDDR5	3 GB GDDR5	4 GB GDDR5	4 GB GDDR5	12 GB GDDR5
MEMORY INTERFACE	64-bit	128-bit	128-bit	128-bit	192-bit	256-bit	256-bit	384-bit
MEMORY BANDWIDTH	14 GB/s	29 GB/s	64 GB/s	64 GB/s	134 GB/s	173 GB/s	173 GB/s	288 GB/s
MAX POWER CONSUMPTION	38 W	41 W	51 W	51 W	80 W	122 W	122 W	225 W
GRAPHICS BUS	PCI Express 2.0 x16	PCI Express 2.0 x16	PCI Express 2.0 x16	PCI Express 2.0 x16	PCI Express 2.0 x16	PCI Express 3.0 x16	PCI Express 3.0 x16	PCI Express 3.0 x16
DISPLAY CONNECTORS	(1) DVH (1) DP 1.2	(1) DVH (1) DP 1.2	(1) DVH (2) DP 1.2	(1) DVH (1) DVI-D (1) mDP 1.2	(1) DVH (2) DP 1.2	(1) DVH (1) DVI-D (2) DP 1.2 (1) Optional Stereo	(1) DVH (1) DVI-D (2) DP 1.2 (1) Optional Stereo	(1) DVH (1) DVI-D (2) DP 1.2 (1) Optional Stereo
FORM FACTOR	69 mm (H) x 160 mm (L) Single Slot	69 mm (H) x 160 mm (L) Single Slot	110 mm (H) x 200 mm (L) Single Slot	110 mm (H) x 200 mm (L) Single Slot	110 mm (H) x 240 mm (L) Single Slot	110 mm (H) x 265 mm (L) Dual Slot	110 mm (H) x 265 mm (L) Dual Slot	110 mm (H) x 265 mm (L) Dual Slot
THERMAL SOLUTION	Active	Active	Active	Active	Active	Active	Active	Active
NVIDIA® 3D VISION® AND 3D VISION PRO	Support via USB	Support via USB connection to 3D Vision Hub	Support via USB connection to 3D Vision Hub	Support via USB connection to 3D Vision Hub	3D Vision and 3D Vision Pro via USB and optional 3-pin connection to 3D Vision Pro hubs	Support via 3 pin mini DIN	Support via 3 pin mini DIN	Support via 3 pin mini DIN
LOW PROFILE	Yes	Yes	Yes	No	No	No	No	No
PART NUMBERS	VCG410-PB	VCGK600-PB	VCGK2000-PB	VCGK2000DVI-PB	VCGK4000-PB	VCGK5000MAC-PB	VCGK5000-PB	VCGK6000-PB
EAN	3536403341299	3536403342173	3536403342098	3536403342135	3536403342050	3536403341770	3536403341503	TBC

 Professional Solutions <small>NVIDIA Quadro® / NVIDIA Tesla® / Prevail SSDs</small>	 QUADRO SYNC	 QUADRO SDI CAPTURE	 QUADRO SDI OUTPUT
ADD-ON CARD FOR	Quadro K4000 Quadro K5000	Quadro K4000 Quadro K5000	Quadro K4000 Quadro K5000
BUS TYPE	-	PCI-E 2.0 x8	-
CONNECTORS	2x RJ-45 1x BNC	5x BNC	3x BNC 1x DVI-D In
FEATURES	Genlock Frame Lock Swap Lock Synchronization of several workstations, visualisation clusters, caves, videowalls	4x HD-SDI Capture 1x HD-SDI Output 8-Bit, 10-Bit, 12-Bit Ancillary Data SDI capture and postprocessing in realtime. Genlock Preview output.	2x HD-SDI Output 8-Bit, 10-Bit, 12-Bit Ancillary Data SDI output and postprocessing in realtime. Genlock

 Professional Solutions <small>NVIDIA Quadro® / NVIDIA Tesla® / Prevail SSDs</small>	 TESLA C2075	 TESLA K20
PEAK DOUBLE PRECISION FLOATING POINT PERFORMANCE	515 Gflops	1.17 Tflops
PEAK SINGLE PRECISION FLOATING POINT PERFORMANCE	1030 Gflops	3.52 Tflops
MEMORY BANDWIDTH (ECC OFF)	148 GB/sec	208 GB/sec
MEMORY SIZE (GDDR5)	6 GB	5 GB
CUDA CORES	448	2496
PART NUMBERS	TCS2075-PB	TCSK20CARD-PB
EAN	3536403340193	3536403341695

PNY PROFESSIONAL SSDs	 PREVAIL 3K	 PREVAIL 5K	 PREVAIL ELITE
120 GB	SSD9SC120GCDA-PB	SSDPREV120G5K01-PB	SSD9SC120GEDA-PB
240 GB	SSD9SC240GCDA-PB	SSDPREV240G5K01-PB	SSD9SC240GEDA-PB
480 GB	SSD9SC480GCDA-PB	SSDPREV480G5K01-PB	SSD9SC480GEDA-PB