



# NVIDIA QUADRO FX by PNY TECHNOLOGIES



www.pny.eu	Mid-Range		High-End	Ultra High-End			
	NVIDIA Quadro FX 1500 (P455)	NVIDIA Quadro FX 1700 (P588)	NVIDIA Quadro FX 3500 (P455)	NVIDIA Quadro FX 4500 X2 (P278)	NVIDIA Quadro FX 4600 (P356)	NVIDIA Quadro FX 5500 (P490)	NVIDIA Quadro FX 5600 (P357)
Bus Connector	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16
PCI-E Bandwith	8 GB/s (4 GB/s each direction)	PCI-E Gen2 Compatible 16 GB/s (8GB/s each direction)	8 GB/s (4 GB/s each direction)	8 GB/s (4 GB/s each direction)	8 GB/s (4 GB/s each direction)	8 GB/s (4 GB/s each direction)	8 GB/s (4 GB/s each direction)
GPU NVIDIA Quadro	G71GL	G84-875	G71GL	G71GL	G80GL	G71GL	G80GL
Core Clock	325 MHz	460 MHz	450 MHz	500 MHz	500 MHz	650 MHz	600 MHz
Frame Buffer	256 MB	512MB	256 MB	1024 MB (2x 512 MB)	768 MB	1024 MB	1536MB
Memory Interface	256bit	128 bit	256bit	256bit	384bit	256bit	384bit
Memory Type	GDDR3 SDRAM	DDR2 SDRAM	GDDR3 SDRAM	GDDR3 SDRAM	GDDR3 SDRAM	DDR2 SDRAM	GDDR3 SDRAM
Memory Clock	625 (1250) MHz	400 (800) MHz	660 (1320) MHz	600 (1200) MHz	600 (1200) MHz	500 (1000) MHz	800 (1600) MHz
Memory Bandwidth	40,0 GB/sec.	12,8 GB/sec.	42,2 GB/sec.	33,6 GB/sec.	67,2 GB/sec.	33,6 GB/sec.	76,8 GB/sec.
RAMDAC	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	2x Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz
Power consumption	65 Watt	42 Watt	80 Watt	146 Watt	134 Watt	95 Watt	171 Watt
PCI Express Power Connector	-	-	1	2	1	1	2
Outputs	2 x DVI-I, 1x HDTV	2 x DVI-I, 1x HDTV	2x DVI-I, 3D Stereo	4x DVI-I, 3D Stereo	2x DVI-I, 3D Stereo	2x DVI-I, 3D Stereo	2x DVI-I, 3D Stereo
Max Displays / Card	2	2	2	4	2	2	2
Dual-Link DVI-I outputs	2	2	2	4	2	2	2
Adapters (Included)	2x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA	4x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA
HDTV Output	7 pin mini DIN	7 pin mini DIN	-	-	-	-	-
HDCP Support	-	Yes	-	-	Yes	-	Yes
Stereo connector	-	-	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN
Genlock / Framelock	-	-	-	Optional w/ additional board P/N=VCQFX4500X2G-PCIE-PB	Optional w/ additional board P/N=VCQFX4600G-PCIE-PB	Optional w/ additional board P/N=VCQFX5500G-PCIE-PB	Optional w/ additional board P/N=VCQFX5600G-PCIE-PB
2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D
2D/3D max resolution analog	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz
2D/3D max resolution digital	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz
Full-Scene Antialiasing max. (FSAA)	8x	32x	12x	16x	32x	16x	32x
C-Programming Environment	-	Yes	-	-	Yes	-	Yes
OpenGL	2.0	2.1	2.0	2.0	2.0	2.0	2.0
Shader Model	3.0	4.0	3.0	3.0	4.0	3.0	4.0
DirectX	9.0c	10.0	9.0c	9.0c	10.0	9.0c	10.0
SLI frame rendering	-	-	Yes	Yes	Yes	Yes	Yes
Number of Slots	1	1	1	2	2	2	2
Physical dimensions	19,81cm x 11,123cm (7,8" x 4,376")	16,76cm x 11,12cm (6,6" x 4,376")	19,81cm x 11,12cm (7,8" x 4,376")	30,48cm x 11,12cm (12" x 4,376")	22,87cm x 11,12cm (9" x 4,376")	22,87cm x 11,12cm (9" x 4,376")	31,20cm x 11,12cm (12,283" x 4,376")
Universal Driver	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cooling System	Fan sink (active) 12 Volt DC 45 dB	Fan sink (active) 12Volt DC 29 dB	Fan sink (active) 12 Volt DC 45 dB	Fan sink (active) 12 Volt DC 34,5 dB	Fan sink (active) 12 Volt DC 31,5 dB	Fan sink (active) 12 Volt DC 37 dB	Fan sink (active) 12 Volt DC 31,5 dB
Guarantee	3 years	3 years	3 years	3 years	3 years	3 years	3 years
Geometry (Triangles per Sec.)	144 Million	191 Million	174 Million	208 Million	250 Million	225 Million	300 Million
Fill Rate (Texels per Sec.)	6,0 Billion	7.4 Billion	9,4 Billion	12,0 Billion	12,0 Billion	15,6 Billion	19,2 Billion
Article No. Retail	VCQFX1500-PCIE-PB	VCQFX1700-PCIE-PB	VCQFX3500-PCIE-PB	VCQFX4500X2-PCIE-PB	VCQFX4600-PCIE-PB	VCQFX5500-PCIE-PB	VCQFX5600-PCIE-PB
EAN code	3536403331139	3536403331171	3536403331030	3536403331276	3536403331849	3536403331191	3536403331863
Article No. 10 pack Bulk	VCQFX1500-PCIEBLK-1	VCQFX1700-PCIEBLK-1	VCQFX3500-PCIEBLK-1	VCQFX4500X2-PCIEBLK-1	VCQFX4600-PCIEBLK-1	VCQFX5500-PCIEBLK-1	VCQFX5600-PCIEBLK-1

3D Application Performance <sup>2</sup>							
3dsmax-04	30.63	34.73	33.36	34.22	36.82	36.09	36.40
catia-02	40.44	44.47	43.06	42.65	45.21	44.86	46.79
ensight-03	17.18	29.38	17.47	24.97	41.64	27.43	46.59
light-08	37.39	37.76	37.51	37.60	37.99	37.45	37.67
maya-02	85.31	110.80	108.10	112.20	172.70	137.00	192.50
proe-04	31.18	39.51	37.22	38.80	40.04	42.08	40.03
sw-01	41.16	56.12	49.84	54.34	73.48	60.62	77.50
tcvis-01	7.95	15.04	10.56	11.78	14.58	16.32	17.26
ugnx-01	10.66	14.29	14.91	17.24	25.20	22.07	31.16

<sup>2</sup>SPECviewperf® 9: for more information visit www.spec.org. Tested on 3 GHz Dual Core Duo Xeon®, Driver Release 97.00 (FX370, FX570, FX1700 tested with driver rel. 160+)

\* Features and specifications are subject to change without notice.