



# NVIDIA QUADRO FX by PNY TECHNOLOGIES



www.pny.eu	Entry-Level					Mid-Range			High-End	Ultra High-End			
	NVIDIA Quadro FX 350 (P280)	NVIDIA Quadro FX 370 (P588)	NVIDIA Quadro FX 550 (P456)	NVIDIA Quadro FX 560 (P456)	NVIDIA Quadro FX 570 (P588)	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)	
<b>Bus Connector</b>	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	PCI-Express x16	
<b>PCI-E Bandwidth</b>	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)	PCI-E Gen2 Compatible 16 GB/s (8GB/s each direction)	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)	
<b>GPU NVIDIA Quadro</b>	G72GL	G84-825	NV43GL	G73GL	G84-850	G71GL	G84-875	G71GL	G71GL	G80GL	G71GL	G80GL	
<b>Core Clock</b>	550 MHz	360 MHz	360 MHz	350 MHz	460 MHz	325 MHz	460 MHz	450 MHz	500 MHz	500 MHz	650 MHz	600 MHz	
<b>Frame Buffer</b>	128 MB	256 MB	128 MB	128 MB	256 MB	256 MB	512MB	256 MB	1024 MB (2x 512 MB)	768 MB	1024 MB	1536MB	
<b>Memory Interface</b>	64 bit	64 bit	128 bit	128 bit	128 bit	128 bit	128 bit	256bit	384bit	256bit	384bit	384bit	
<b>Memory Type</b>	DDR2 SDRAM	DDR2 SDRAM	GDDR3 SDRAM	GDDR3 SDRAM	DDR2 SDRAM	GDDR3 SDRAM	DDR2 SDRAM	GDDR3 SDRAM	GDDR3 SDRAM	GDDR3 SDRAM	DDR2 SDRAM	GDDR3 SDRAM	
<b>Memory Clock</b>	202.5 (405) MHz	400 (800) MHz	400 (800) MHz	300 (600) MHz	400 (800) MHz	625 (1250) MHz	400 (800) MHz	660 (1320) MHz	600 (1200) MHz	600 (1200) MHz	500 (1000) MHz	800 (1600) MHz	
<b>Memory Bandwidth</b>	6.5 GB/sec.	6.4 GB/sec.	12.8 GB/sec.	19.2 GB/sec.	12.8 GB/sec.	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.	
<b>RAMDAC</b>	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	2x Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	Dual 400 MHz	
<b>Power consumption</b>	30 Watt	35 Watt	26 Watt	30 Watt	38 Watt	65 Watt	42 Watt	80 Watt	146 Watt	134 Watt	95 Watt	171 Watt	
<b>PCI Express Power Connector</b>	-	-	-	-	-	-	-	1	2	1	1	2	
<b>Outputs</b>	1x VGA, 1x DVI-I	2 x DVI-I	2 x DVI-I	2 x DVI-I, 1x HDTV	2 x DVI-I	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	
<b>Max Displays / Card</b>	2	2	2	2	2	2	2	2	4	2	2	2	
<b>Dual-Link DVI-H outputs</b>	No	1	No	1	2	2	2	2	4	2	2	2	
<b>Adapters (Included)</b>	1x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA	2x DVI-I to VGA	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	
<b>HDTV Output</b>	-	-	-	7 pin mini DIN	-	7 pin mini DIN	7 pin mini DIN	-	-	-	-	-	
<b>HDCP Support</b>	-	Yes	-	-	Yes	-	Yes	-	-	Yes	-	Yes	
<b>Stereo connector</b>	-	-	-	-	-	-	-	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN	3 pin mini DIN	
<b>Genlock / Framelock</b>	-	-	-	-	-	-	-	-	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	
<b>2D/3D</b>	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	2D/3D	
<b>2D/3D max resolution analog</b>	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	2048x1536 @ 85 Hz	
<b>2D/3D max resolution digital</b>	1900x1200 @ 60 Hz	1900x1200 @ 60Hz Single Link 2560x1600 @ 60Hz Dual Link	1900x1200 @ 60 Hz	1900x1200 @ 60Hz Single Link 2560x1600 @ 60Hz Dual Link	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	2560x1600 @ 60Hz	
<b>Full-Scene Antialiasing max. (FSAA)</b>	8x	16x	8x	8x	16x	8x	32x	12x	16x	32x	16x	32x	
<b>C-Programming Environment</b>	-	Yes	-	-	Yes	-	Yes	-	-	Yes	-	Yes	
<b>OpenGL</b>	2.0	2.1	2.0	2.0	2.1	2.0	2.1	2.0	2.0	2.0	2.0	2.0	
<b>Shader Model</b>	3.0	4.0	3.0	3.0	4.0	3.0	4.0	3.0	3.0	4.0	3.0	4.0	
<b>DirectX</b>	9.0c	10.0	9.0c	9.0c	10.0	9.0c	10.0	9.0c	9.0c	10.0	9.0c	10.0	
<b>SLI frame rendering</b>	-	-	-	-	-	-	-	Yes	Yes	Yes	Yes	Yes	
<b>Number of Slots</b>	1	1	1	1	1	1	1	1	2	2	2	2	
<b>Physical dimensions</b>	16,76cm x 11,12cm (6,6" x 4,376")	16,76cm x 11,12cm (6,6" x 4,376")	17,24cm x 11,12cm (6,8" x 4,376")	17,24cm x 11,12cm (6,8" x 4,376")	16,76cm x 11,12cm (6,6" x 4,376")	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")	
<b>Universal Driver</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Cooling System</b>	Fan sink (active) 12Volt DC 28 dB	Fan sink (active) 12Volt DC 29 dB	Fan sink (active) 12Volt DC 23 dB	Fan sink (active) 12Volt DC 23 dB	Fan sink (active) 12Volt DC 29 dB	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	
<b>Guarantee</b>	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	3 years	
<b>Geometry (Triangles per Sec.)</b>	55 Million	66 Million	66 Million	126 Million	137 Million	144 Million	191 Million	174 Million	208 Million	250 Million	225 Million	300 Million	
<b>Fill Rate (Texels per Sec.)</b>	2,0 Billion	2,9 Billion	1,4 Billion	2,8 Billion	3,7 Billion	6,0 Billion	7,4 Billion	9,4 Billion	12,0 Billion	12,0 Billion	15,6 Billion	19,2 Billion	
<b>Article No. Retail</b>	VCQFX350-PCIE-PB	VCQFX370-PCIE-PB	VCQFX550-PCIE-PB	VCQFX560-PCIE-PB	VCQFX570-PCIE-PB	VCQFX1500-PCIE-PB	VCQFX1700-PCIE-PB	VCQFX3500-PCIE-PB	VCQFX4500X2-PCIE-PB	VCQFX4600-PCIE-PB	VCQFX5500-PCIE-PB	VCQFX5600-PCIE-PB	
<b>EAN code</b>	3536403330996	3536403331133	3536403331009	3536403331016	3536403331157	3536403331139	3536403331171	3536403331030	3536403331276	3536403331849	3536403331191	3536403331863	
<b>Article No. 10 pack Bulk</b>	VCQFX350-PCIEBLK-1	VCQFX370-PCIEBLK-1	VCQFX550-PCIEBLK-1	VCQFX560-PCIEBLK-1	VCQFX570-PCIEBLK-1	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>												
<b>3dsmax-04</b>	16.69	25.61	19.56	27.90	30.02	30.63	34.73	33.36	34.22	36.82	36.09	36.40
<b>catia-02</b>	19.70	35.86	23.63	38.92	41.57	40.44	44.47	43.06	42.65	45.21	44.86	46.79
<b>ensight-03</b>	7.94	17.85	9.05	16.05	23.03	17.18	29.38	17.47	24.97	41.64	27.43	46.59
<b>light-08</b>	23.73	35.20	32.68	37.24	37.68	37.39	37.76	37.51	37.60	37.99	37.45	37.67
<b>maya-02</b>	34.35	52.19	44.21	71.94	73.01	85.31	110.80	108.10	112.20	172.70	137.00	192.50
<b>proe-04</b>	15.88	26.54	16.24	28.45	32.48	31.18	39.51	37.22	38.80	40.04	42.08	40.03
<b>sw-01</b>	21.80	34.36	25.32	36.44	44.84	41.16	56.12	49.84	54.34	73.48	60.62	77.50
<b>tcvis-01</b>	4.52	6.94	4.40	6.87	9.09	7.95	15.04	10.56	11.78	14.58	16.32	17.26
<b>ugnx-01</b>	2.43	6.93	5.36	9.53	8.91	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.