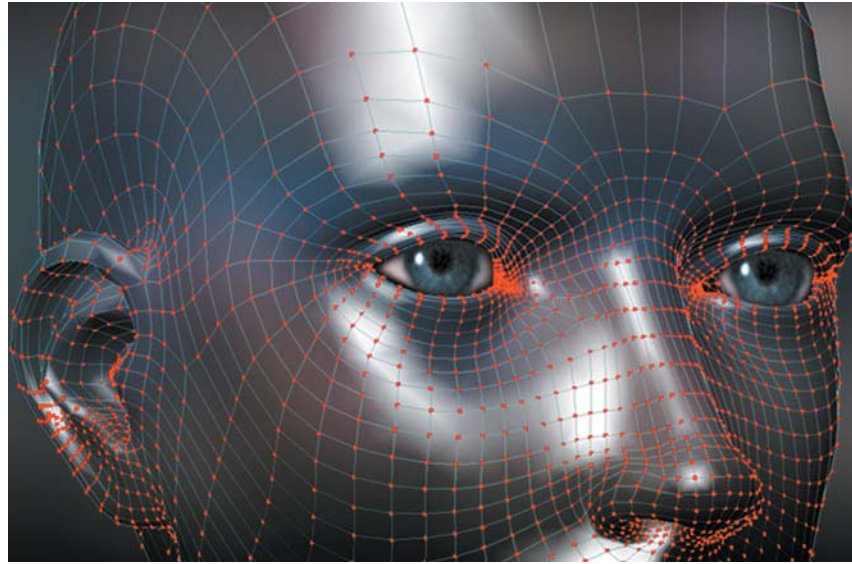


PCI Express Graphics Quick Reference Card

For HP Workstations using AMD Opteron™ & Intel® Pentium® & Xeon™ processors



Through our Leadership Graphics Program, HP Workstations provide the fastest access to the best graphics in the industry at varying performance and price points. Our 20 years of graphics expertise combined with strong vendor relationships ensure their graphics and our workstations are stable and powerful combinations.

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	NVIDIA Quadro NVS 280 (PCIe or PCI)	NVIDIA Quadro NVS 400 (PCI)	ATI FireGL V3100 (PCIe)	NVIDIA Quadro FX 540 (PCIe)	ATI FireGL V5100 (PCIe)	NVIDIA Quadro FX 1400 (PCIe)	NVIDIA Quadro FX 3450 (PCIe)	NVIDIA Quadro FX 4500 (PCIe)
	Professional 2D graphics in a low profile card, highest bandwidth achieved with PCIe	Up to quad monitor support from a single PCI card, with the capability of 2 cards per system (8 monitors!)	Performance leading graphics at an entry-level price	Entry-level 3D graphics with an HD capability	The ultimate price/performance leader for engineers and artists	Mainstream graphics with high-end precision, power, and programmability	Powerful 3D computing with unlimited programmability and uncompromised performance & features	Ultimate 3D visualization with the latest generation graphics processing power
Supported HP Workstations	xw4200, xw4300 xw6200, xw8200, xw9300 (PCIe only)	xw4200, xw6200	xw4200, xw4300 xw6200, xw8200	xw4200, xw4300 xw6200, xw8200, xw9300	xw4200, xw4300 xw6200, xw8200	xw4200, xw4300 xw6200, xw8200, xw9300	xw4200, xw4300 xw6200, xw8200, xw9300	xw4200, xw4300 xw6200, xw8200, xw9300
Supported operating systems	Microsoft® Windows® 2000 Professional, Windows XP Professional or x64 Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional or x64, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional & x64, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional & x64, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional & x64, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional & x64, Red Hat Enterprise Linux WS3	Windows 2000 Professional, Windows XP Professional & x64, Red Hat Enterprise Linux WS3
Available video (FB) memory	64 MB	64 MB	128 MB	128 MB	128 MB	128 MB	256 MB	512 MB
SLI for NVIDIA Quadro supported	No	No	No	No	No	Yes	Yes	Yes
Memory type	DDR	DDR	DDR	DDR	DDR	DDR	GDDR3	GDDR3
Texture memory	Unified w/FB	Unified w/FB	Unified w/FB	Unified w/FB	Unified w/FB	Unified w/FB	Unified w/FB	Unified w/FB
Texture memory at 1280 x 1024 resolution	NA	NA	112 MB	112 MB	112 MB	112 MB	240 MB	496 MB
Number of displays supported	2	4	2	2	2	2	2	2
Digital video output support	yes	yes	yes	yes	yes	yes	yes	yes
Connectors	1 DMS-59 connector with dual VGA cable or optional DMS-59 to dual DVI cable kit	dual DMS-59 connector with dual VGA cable or optional DMS-59 to dual DVI cable kit	1 DVI-I and 1 VGA connector with VGA pigtail cable	1 DVI-I and 1 VGA connector with VGA pigtail cable, plus 10-pin HD out	2 DVI-I with VGA pigtail cable and 1 3-pin mini DIN stereo output	2 DVI-I connector with VGA pigtail cable and 1 3-pin mini DIN stereo output	2 DVI-I (1 single link and 1 dual link) with VGA pigtail cable and one 3-pin mini DIN stereo output	2 DVI-I (2 dual link) with VGA pigtail cable and one 3-pin mini DIN stereo output
Display configurations	VGA+VGA, Digital + Digital (with opt. cable)	Quad VGA, Dual VGA+Dual Digital (with opt. cable), Quad Digital (with opt. cables)	VGA+VGA, VGA + Digital	VGA+VGA, VGA + Digital	VGA+VGA, VGA + Digital, Digital + Digital	VGA+VGA, VGA + Digital, Digital + Digital	VGA+VGA, VGA + Digital, Digital + Digital	VGA+VGA, VGA + Digital, Digital + Digital
Max. VGA display resolution	2048 x 1536	2048 x 1536	2048 x 1536	2048 x 1536	2048 x 1536	2048 x 1536	2048 x 1536	2048 x 1536
Max. digital display resolution	1600 x 1200	1280 x 1024	1600 x 1200	1600 x 1200	2048 x 1536	1600 x 1200	3840 x 2400	3840 x 2400
Host interface	PCI Express or PCI	PCI	PCI Express	PCI Express	PCI Express	PCI Express	PCI Express	PCI Express
Number of slots required	1 PCIe x16 or PCI	1 PCI	1 PCIe x16	1 PCIe x16	1 PCIe x16	1 PCIe x16	1 PCIe x16	1 PCIe x16
OpenGL ISV certifications	no	no	yes	yes	yes	yes	yes	yes
Hardware double buffered overlay	no	no	yes	yes	yes	yes	yes	yes
Vertex and pixel shaders	no	no	yes	yes	yes	yes	yes	yes
Full scene AA (4X supersampled) @ 1280 x 1024	no	no	yes	yes	yes	yes	yes	yes
Stereo viewing support	no	no	no	no	yes	yes	yes	yes
Hardware accumulation buffer	no	no	no	no	no	yes	yes	yes
Multiple color look up tables	no	no	no	no	no	no	yes	yes