

### Overview

### Models

NVIDIA Quadro NVS 280 PCI-Express graphics controller kit.	DY650A
Includes: PCA with ATX & low-profile brackets, VGA pigtail cable, CD and manual.	
Optional Cable Kit:	DL139A
DMS-59 to Dual DVI Cable Kit for NVIDIA NVS series graphics cards	

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### Introduction

The award winning Quadro NVS series is the standard for corporate graphics. Quadro NVS 280 PCI-E is a low-profile dual display graphics card with 64MB DDR memory that delivers tremendous flexibility with support for dual-analog and/or digital displays. The NVIDIA Quadro NVS series provides rock-solid hardware that delivers ultra-sharp images at the highest resolution and refresh rates. It is tested for compatibility with all major financial, non-linear editing (NLE), and electronic design automation (EDA) applications. Combined with NVIDIA's nView multi-display technology, Quadro NVS provides corporate IT departments unprecedented control of the desktop experience.

The NVIDIA Quadro NVS 280 PCI-E Graphics Controller together with HP workstations deliver productivity with stability, high image quality, and fast performance.

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### Performance & Features

The NVIDIA Quadro NVS 280 PCI-E Graphics Controller is optimized for professional 2D workstation configurations. It comes with enhanced, customized multi-display drivers, including nView multi-display desktop and application management software. Key features include:

- Permits work to be viewed on two monitors with nView multi-display software
  - Dual 350-MHz RAMDACs deliver crystal-clear images
  - Dual TMDS transmitters support the latest flat-panel monitors, up to 1600 x 1200 on both displays
  - Single high-density connector supports dual-analog or digital (with optional cable) displays
  - Unified driver architecture (UDA) provides easy installation and manageability
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### Compatibility

The NVIDIA Quadro NVS 280 PCI-E graphics controller is supported on the following HP Personal Workstations: xw4200, xw4300, xw6200, xw8200 and xw9300.

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### Service and Support

The NVIDIA Quadro NVS 280 PCI-E has a one-year limited warranty or the remainder of the warranty of the HP product in which it is installed. Technical support is available seven days a week, 24 hours a day by phone, as well as online support forums. Parts and labor are available on-site within the next business day. Telephone support is available for parts diagnosis and installation. Certain restrictions and exclusions apply.

### Technical Specifications

<b>Form Factor</b>	Low profile, both ATX and low profile brackets included
<b>Graphics Controller</b>	Integrated Quadro 280 2-D graphics processor unit (GPU)
<b>Bus Type</b>	PCI-Express x16
<b>RAMDAC</b>	Dual 350 MHz integrated
<b>Memory</b>	64 MB DDR SDRAM unified frame buffer, Z-buffer and Texture storage
<b>Connectors</b>	Single High-density DMS-59 Flex Connector
<b>Multi-monitor support</b>	Dual integrated analog display controllers supporting up to two analog displays at 2048x1536 @ 60Hz or two digital displays at 1600x1200 @ 60Hz
<b>Additional product features</b>	<p><b>Controller clock speed</b> 250 MHz</p> <p><b>Color planes</b> 32-bit color buffer</p> <p><b>Overlay planes</b> 1 16-bit Video overlay plane</p> <p><b>Maximum vertical refresh rate</b> 85 Hz</p> <p><b>Dual DVI Support</b> Yes (with kit DL139A)</p> <p><b>High-definition Video Processor (HDVP)</b> Full-screen, full-frame video playback of HDTV and DVD content            DVD-ready motion compensation for MPEG-2            Independent hardware color controls for video overlay            Hardware color-space conversion (YUV 4:2:2 and 4:2:0)            IDCT motion compensation            5-tap horizontal by 3-tap vertical filtering            8:1 up/down scaling</p>
<b>PCI Express</b>	Supports X16 PCIe
<b>Available graphics drivers</b>	Microsoft Windows® XP, Windows 2000 (Provides full native Dual View mode, Span or Big Desktop mode, and Clone mode) HP qualified drivers may be preloaded or available from the HP support Web site: <a href="http://welcome.hp.com/country/us/eng/software_drivers.html">http://welcome.hp.com/country/us/eng/software_drivers.html</a> .

NVIDIA Quadro NVS 280 PCI-E Graphics Controller display resolutions & refresh rates	Analog Resolution	Maximum Colors Supported	Maximum Refresh Rate
		640 x 480	16.7 M
	800 x 600	16.7 M	240 Hz
	1024 x 768	16.7 M	240 Hz
	1152 x 864	16.7 M	170 Hz
	1280 x 1024	16.7 M	150 Hz
	1600 x 1200	16.7 M	100 Hz
	1920 x 1080	16.7 M	85 Hz
	1920 x 1200	16.7 M	85 Hz
	1920 x 1440	16.7 M	75 Hz
	2048 x 1536	16.7 M	60 Hz
	Digital Resolution	Maximum Colors Supported	Maximum Refresh Rate
	640 x 480	16.7 M	75 Hz
	800 x 600	16.7 M	75 Hz
	1024 x 768	16.7 M	75 Hz
	1152 x 864	16.7 M	60 Hz
	1280 x 1024	16.7 M	60 Hz
	1600 x 1200	16.7 M	60 Hz

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