

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:

DMS-59 to Dual DVI Cable Kit for NVIDIA NVS series graphics cards

DL139A

#### Introduction

The award wining 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.

### 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

## Compatibility

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

## 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.



## **QuickSpecs**

## Technical Specifications

Form Factor Low profile, both ATX and low profile brackets included **Graphics Controller** Integrated Quadro 280 2-D graphics processor unit (GPU)

**Bus Type** PCI-Express x16

**RAMDAC** Dual 350 MHz integrated

Memory 64 MB DDR SDRAM unified frame buffer, Z-buffer and Texture storage

Connectors Single High-density DMS-59 Flex Connector

Dual integrated analog display controllers supporting up to two analog displays at 2048x1536 @ 60Hz Multi-monitor support

or two digital displays at 1600x1200 @ 60Hz

Additional product

features

Controller clock speed 250 MHz

Color planes 32-bit color buffer

Overlay planes 1 16-bit Video overlay plane

Maximum vertical refresh 85 Hz

rate

**Dual DVI Support** Yes (with kit DL139A)

High-definition Video

Full-screen, full-frame video playback of HDTV and DVD content

Processor (HDVP) 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

**PCI Express** Supports X16 PCle

Available graphics drivers Microsoft Windows® XP, Windows 2000 (Provides full native Dual View mode, Span or Big Desktop

mode, and Clone mode)

Analoa Resolution

HP qualified drivers may be preloaded or available from the HP support Web site:

http://welcome.hp.com/country/us/eng/software drivers.html.

| NVIDIA Quadro NVS 280 |
|-----------------------|
| PCI-E Graphics        |
| Controller display    |
|                       |

| Control    | ler d | isp  | lay    |       |
|------------|-------|------|--------|-------|
| resolution | ons à | & re | efresh | rates |

| , androg moderation | maximom Coloro Copponica | maximom nonocim naio |
|---------------------|--------------------------|----------------------|
| 640 x 480           | 16.7 M                   | 240 Hz               |
| 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                |
|                     |                          |                      |

Maximum Colors Supported

| Digital Resolution | Maximum Colors Supported | Maximum Ketresh Kat |
|--------------------|--------------------------|---------------------|
| 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               |
|                    |                          |                     |



Maximum Refresh Rate

# **QuickSpecs**

## NVIDIA Quadro NVS 280 PCI-E Graphics Controller

Technical Specifications

1600 x 1200

16.7 M

60 Hz

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