Models

NVIDIA® NVS 315 1GB PCIe x16 Graphics Card   E1C65AA

Introduction

Get efficient dual-display graphics performance in a PCI Express low-profile graphics card with the NVIDIA NVS 315 PCIe x16 1 GB Graphics Card, an ideal desktop graphics solution for professional business and commercial applications.

Performance and Features

- Enjoy the speed of 1 GB of dedicated DDR3 graphics memory. Help conserve power with NVIDIA Power Management technology, which helps reduces energy costs by adapting graphics power according to application usage.
- Maximize your productivity and drive two VGA, single link DVI or DisplayPort displays from a single card.
- Dramatically improve system performance with 48 CUDA parallel-computing cores that boost the power of the GPU and are compatible with CUDA-accelerated applications.
- Expand your view and drive dual displays from a single desktop with NVIDIA Mosaic Technology. Once the card is installed, the system can view both displays as a single unified desktop environment—no need to customize software.
- Be organized and more productive throughout the day with NVIDIA nView Desktop Management. Organize windows across your displays, maximize workspace, and use a single toolbar for both screens.

Compatibility

The NVIDIA NVS 315 is supported on the following platforms: HP ProDesk 600 TWR, SFF; HP EliteDesk 800 G1 TWR, SFF; HP Compaq 6305 Pro MT, SFF.

Service and Support

The NVIDIA NVS 315 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

Form Factor (H x L)	Low Profile: 2.713 × 6.15 in With full height bracket attached; Includes low profile bracket for installation into Small Form Factor chassis
Graphics Controller	NVIDIA® NVS 315
Bus Type	PCI Express x16, 2.0 compliant
Memory	Size: 1GB, 64bit wide bus Clock: 875 MHz Memory Bandwidth: 14 GB/s
Connectors	DMS-59, with support for dual VGA, dual DVI or dual DisplayPort with the appropriate adapter cable. **NOTE:** Optional cable required for DVI and DisplayPort connectivity.
Maximum Resolution	2048 x 1536 VGA; 1920x1200 DVI, 2560x1600 DisplayPort

Display resolutions and refresh rates

NOTE: Other resolutions may be available but are not recommended as the may not have been tested and qualified by HP.

Resolution	Maximum Refresh Rate (Hz)	
	Analog Connection	**Digital Connection**
640x480	85	60
720x480	85	60
720x576	85	60
800x600	85	60
1024x768	85	60
1280x720	85	60
1280x768	85	60
1280x1024	85	60
1440x900	75	60
1600x1024	85	60
1600x1200	85	60
1680x1050	75	60
1920x1080	85	60-R
1920x1200	85	60-R
1920x1440	85	N/A
2048x1536	75	N/A
2560x1440	N/A	60*
2560x1600	N/A	60*

* Display Port Only

Image Quality Features	The following video formats are supported: - MPEG2 - MPEG4 Part 2 Advanced Simple Profile - H.264 SVC codec support - Support for 3D Blu Ray (This has not been validated so I'm not sure I would list 3D BD support) - VC1 - DivX version 3.11 and later

Technical Specifications

- MVC

The NVS 315 GPU provides hardware acceleration for the computationally intensive parts of video processing, as well as provides improved video playback speeds via faster decode and transcode. HDCP is supported with digital display connections.

Display Output	Up to 2 displays in the following configurations:

Dual VGA :

- Drives two analog using the included HP DMS-59 to Dual VGA Cable

Dual DVI :

- Drives two DVI displays using optional HP DMS59 to DVI Dual-head Connector Cable (DL139A)*

Dual DisplayPort :

- Drives two DisplayPort displays using optional HP DMS-59 to Dual DisplayPort Kit (XP688AA)*
- Display Port features supported when used with optional cable.
  - High Bit Rate link training
  - Audio
  - Multi Mode Compliant

*This item is optional and sold separately.

Shading Architecture	Shader Model 5.0
Supported Graphics APIs	DX11, OpenGL 4.1
Agency Approvals	BSMI, CE Mark, C-tick, FCC, ICES/C.I.S.P.R., KCC, UL, VCCI
Available Graphics Drivers	Windows 8, Windows 8 Pro, Windows 7 Professional (64-bit and 32-bit) Red Hat Enterprise Linux (RHEL) SUSE Linux Enterprise Desktop 11 (64-bit and 32-bit) HP qualified drivers may be preloaded or the latest HP qualified drivers are available from the HP support Web site: http://welcome.hp.com/country/us/en/support.html SUSE Linux Enterprise drivers may also be obtained from: ftp://download.nvidia.com/novell or http://www.nvidia.com
Power Consumption Note	19 Watts (Maximum) **NOTE:** The thermal solution used on this card is a temperature controlled active fan heatsink to minimize acoustic noise
Kit Contents	NVIDIA NVS 315 1GB PCIe x16 Graphics Card with attached full height bracket HP DMS 59 to dual VGA cable Low profile bracket Software Driver CD Documentation

Technical Specifications