

Overview

Models

ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card

VN566AA

Introduction

If you are seeking stable 2D and advanced 3D graphics performance; look no further. The ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card is an excellent choice for your small business or large enterprise engaging in video conferencing or 3D image manipulation. Improve your everyday business PC experience with faster frame rates and excellent visual quality.

The ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card provides a Full Height, PCI Express x16 graphics card based on the ATI RV730 Pro Graphics Processor. It supports Dual Display video output through its two DisplayPort and one Dual-Link DVI-I connectors and delivers superior PCI Express (PCIe) features including:

- Flexibility for new applications
- Full 16-lane PCIe bus support
- Support for PCIe x16 2.0 compliant systems

NOTE: Graphics cards use part of the total system memory (RAM) for graphics performance. System memory dedicated to graphics performance is not available for other use by other programs.

Key Benefits

- 1 GB dedicated on-board graphics frame buffer memory - no need to share PC system memory.
- Excellent video conferencing or 3D image manipulation solutions
- Conforms to full PCI Express 2.0 specification for full height form factor (x16 lanes native PCI Express implementation).
- Provides two DisplayPort and one Dual Link DVI-I output ports.
- DirectX 10.1 support in hardware for optimal performance in DX10 applications.
- OpenGL 2.0 support in hardware for optimal performance with OpenGL applications.
- ATI Avivo technology for improved image and video playback.

Memory	Peak theoretical memory bandwidth
1 GB DDR3 128 bit	16.0 GB/s

Compatibility

The ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card is compatible with the HP Compaq dc7900 Microtower, HP Compaq 6000 Pro Microtower, HP Compaq 6005 Pro Microtower, HP Compaq 8000 Elite Convertible Minitower, HP Compaq 8100 Elite Convertible Minitower, HP Compaq 8200 Elite Microtower, HP Compaq 8200 Elite Convertible Minitower, HP Elite 7100 Microtower, and HP Elite 7200 Microtower Business PCs.

Service and Support

Your Option Limited Warranty is a one (1) year (HP Option Limited Warranty Period) parts replacement warranty on any HP-branded or Compaq-branded options (HP Options). If your HP Option is installed in an HP Hardware Product, HP may provide warranty service either for the HP Option Limited Warranty Period or the remaining Limited Warranty Period of the HP Hardware Product in which the HP Option is being installed, whichever period is the longer but not to exceed three (3) years from the date you purchased the HP Option.



Technical Specifications

Bus type	PCI Express (x16 lanes)
Maximum vertical refresh rate	85 Hz
Display support	Integrated 400 MHz RAMDAC
Display max resolution	2560 x 1600 digital, 2048 x 1536 analog

ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card display resolutions and refresh rates

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

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

* Only supported when using a dual-link DVI or DP connection

NOTE: 60-R denotes reduced blanking timings are used on single-link DVI connections and may be used with other digital connections

Board display options Supports two displays via included two DisplayPort and one Dual Link DVI-I connectors.

Board configuration	Specification	Description
	Graphics Chip	RV730 Pro
	Core clock	725 MHz
	Memory clock	500 MHz
	Frame buffer	1 GB DDR3, 128 bit wide

Languages supported 24 languages: English, Arabic, Chinese Simplified, Chinese Traditional, Czechoslovakian, Danish, Dutch, Finnish, French, German, Greek, Hebrew, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Spanish, Swedish, Thai, Turkish

Operating systems support Windows 7 Home Basic*, Windows 7 Home Premium*, Windows 7 Professional Edition 32*, Windows 7 Professional Edition 64*, Windows 7 Ultimate Edition 32*, Windows 7 Ultimate Edition 64*, Windows Vista Business 64**, Windows Vista Business 32**, Windows Vista Home Basic 32**, Windows XP Professional or Windows XP Home 32**.

*This system may require upgraded and/or separately purchased hardware and/or a DVD drive to install the Windows 7 software and take full advantage of Windows 7 functionality. See <http://www.microsoft.com/windows/windows-7/> for details.

** Certain Windows Vista product features require advanced or additional hardware. Windows Vista



Technical Specifications

Upgrade Advisor can help you determine which features of Windows Vista will run on your computer. To download the tool, visit: <http://www.windowsvista.com/upgradeadvisor>. For Windows Vista system requirements, visit: <http://www.windowsvista.com/systemrequirements>.

Linux x86 and x86_64 distributions using XFree86 or X.Org***.

*** Linux drivers are available from ATI's website and may be available in a Linux distribution. Refer to the Open Source and Linux from HP website: <http://www.hp.com/wwsolutions/linux/products/clients/> for support information.

Core power

56 W

Option kit contents

- ATI Radeon HD 4650 DP (1GB) PCIe x16 Graphics Card with full height bracket attached
- DVI to VGA adapter
- DisplayPort to DVI-D adapter
- Software CD with graphics drivers
- Warranty documentation

Compliance standards

EMC Emissions:

- a) FCC Part 15, Subpart B - Unintentional Radiators, Class B Computing Devices for Home & Office Use
- b) CISPR22: 1997/EN 55022:1998 - Class B - Limits and methods of measurement of radio disturbance characteristics of Information Technology Equipment
- c) Canadian Standard ICES-003 is equivalent to CISPR22
- d) Taiwanese Standard BSMI
- e) Japanese VCCI
- f) Australian C-Tick
- g) Korean (MIC)

EMC Immunity:

CISPR 24:1997/EN 55024:1998 - Information Technology Equipment - Immunity Characteristics - Limits and Methods of Measurement.

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