

Overview

Models

AMD FirePro 2270 512MB Graphics Card

QK551AA

Introduction

The AMD FirePro 2270 512MB Graphics Cards provide a low profile, PCI Express x16 graphics add-in card solution based on the AMD FirePro™ 2270 GPU. These cards support Dual Display video output through its DMS-59 connector.

An ideal solution for desktop PC customers seeking stable 2D and advanced 3D graphics performance, the AMD FirePro 2270 512MB Graphics Cards are an excellent choice for small business users engaging in Web conferencing or video or photo editing, while improving your everyday business PC experience with better graphics and excellent visual display quality.

The AMD FirePro 2270 512MB Graphics Cards deliver superior PCI Express (PCIe) features including:

- Unprecedented flexibility for new applications and enhanced performance
- Full 16 lane PCIe bus support with peak bandwidth support

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

- 512 MB of DDR3 dedicated on-board graphics frame buffer memory removing the need to share PC system memory
- Featuring the AMD FirePro 2270 GPU
- Conforms to full PCI Express 2.0A specification for low profile form factor (x16 lanes native PCI Express implementation)
- Provides Dual VGA output ports:
 - Dual DVI-I outputs provided by optional HP DMS59 DVI Dual-head Connector Cable (Kit DL139A)
 - Dual multi-mode DisplayPort outputs provided by optional HP DMS-59 to Dual DisplayPort (Kit XP688AA)
- HDCP supported on DVI outputs (DVI Requires optional kit DL139A)
- DirectX 11 support in hardware for optimal performance in DX11 applications.
- AMD Avivo technology for improved image and video playback.
- OpenGL 4.0 support in hardware for optimal performance with OpenGL applications
- Passive heatsink for silent operation

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<u>Memory</u>	<u>Peak theoretical memory bandwidth</u>
512 MB DDR3 64 bit	9.6 GB/s

Compatibility

HP Compaq 4000 Pro SFF, HP Compaq 6005 Pro MT, HP Compaq 6005 Pro SFF, HP Compaq 6200 Pro MT, HP Compaq 6200 Pro SFF, HP Compaq 8200 Elite SFF, HP Compaq 8200 Elite CMT, HP Compaq 8200 Elite MT

NOTE: The AMD FirePro 2270 512MB Graphics Cards do not support Dual-link DVI capable monitors.

NOTE: Not all models are available in all regions.

Overview

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

AMD FirePro 2270 512MB Graphics Card

Form Factor	Low Profile, Half Length, 2.3" x 6.6"
Graphics Controller	AMD FirePro 2270 GPU
Input/Output connectors	DMS-59 connector that supports breakout cables for dual VGA or dual DVI output.
Board display options	Supports two displays via included DMS-59 to dual VGA cable or 2 DVI monitors via optional DMS-59 to dual DVI cable kit part number: DL139A.

Display Output

Board configuration	Specification	Description
	Graphics Chip	AMD FirePro 2270 GPU
	Core clock	600 MHz
	Memory clock	600 MHz
	Frame buffer	512 MB DDR3, 64 bit wide
Bus type	PCI Express™ x16 Generation 2.0	
Memory	512MB DDR3	
Maximum vertical refresh rate	85 Hz	
Display support	Integrated 400 MHz RAMDAC	
RAMDAC	400 MHz DAC, 10-bit per channel	
Display max resolution	Digital 1920x1200 Analog 2048x1536	

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	60*
2048x1536	75	60*
2560x1440	N/A	60*
2560x1600	N/A	60*

*Requires use of optional DMS59 to dual DisplayPort cable XP688AA

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

Technical Specifications

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.
Available Graphics Drivers	Genuine Windows 7 Professional (64-bit and 32-bit) Genuine Windows Vista Business (64-bit and 32-bit) Microsoft Windows XP Professional (32-bit) HP qualified drivers may be preloaded or available from the HP support Web site: http://welcome.hp.com/country/us/en/support.html
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 Ultimate 32†, Windows Vista Ultimate 64†, Windows Vista Business 32†, Windows Vista Business 64†, Windows Vista Home Basic 32†, Windows Vista Home Basic 64†, 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. Windows 7 Business disk may be included for future upgrade if desired. To qualify for this downgrade an end user must be a business (including governmental or educational institutions) and is expected to order at least 25 customer systems with the same custom image † Certain Windows Vista product features require advanced or additional hardware. Windows Vista 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.
Supported Graphics APIs	DirectX 11 and OpenGL 4.0
Maximum power consumption	17W
Option kit contents	<ul style="list-style-type: none">● AMD FirePro 2270 512MB Graphics Card with full height bracket attached● DMS 59 to dual VGA cable● Software CD with graphics drivers● Low profile bracket to convert the card for use in a low profile chassis● Warranty documentation
Compliance standards	<u>EMC Emissions:</u> 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 (KCC)

Technical Specifications

EMC Immunity:

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

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