

Overview

Models

HP Thunderbolt-2 PCIe 1-port I/O Card

F3F43AA

Introduction

This high speed serial interface enables fast data transfer from external peripherals such as external hard disks, digital cameras and video cameras. Nearly four times the transfer rate of USB3, it features one external Thunderbolt output port, one Display Port input port and one internal header. Thunderbolt™ 2 technology is a transformational high-speed, dual protocol I/O that provides unmatched performance over current I/O technologies with 20Gbps bi-directional transfer speeds. It provides flexibility and simplicity by supporting both data (PCIe) and video (DisplayPort) on a single cable connection that can daisy-chain up to six devices.

The HP Thunderbolt™ 2 PCIe Card is backward compatible to allow your Thunderbolt™ devices to operate with no cable adapters needed.

Thunderbolt technology dramatically increases the data transfer rate enabling faster backup, editing and file sharing, significantly reducing the time to complete key tasks. Thunderbolt technology was specifically designed with inherently low latency and highly accurate time synchronization capabilities. These features enable extremely accurate audio and video creation, playback and editing that no other standard interconnect technology can match.

Performance

The HP Thunderbolt™ 2 PCIe Card performs with data rates of up to 20 Gb/s.

NOTE: Actual performance will be lower based on protocol overhead and the peripherals attached.

Key Benefits

Data transfer between digital electronic devices that support the Thunderbolt™ or Thunderbolt™ 2 standard.

- 20Gbps bi-directional, dual channel data transfer
 - Data & Video on single cable with Dual-protocol (PCI Express and DisplayPort)
 - Daisy chain up to six devices
 - Compatible with existing DisplayPort devices
 - Low latency with highly accurate time synchronization
 - Uses native PCIe and DisplayPort protocol software drivers
 - Power over cable for bus-powered devices (electrical cables only)
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Overview

Compatibility

The HP Thunderbolt™ 2 PCIe Card is compatible with the HP Z820, Z620 and Z420 Workstations.

NOTE: Not all models are available in all regions.

The HP Thunderbolt™ 2 PCIe Card requires a DisplayPort input to enable downstream DisplayPort devices on the Thunderbolt™ daisy chain.

The HP Thunderbolt™ 2 PCIe Card is offered as a Certified System Solution with the compatible workstation platforms and select graphics cards only, which includes nVidia K2000, K4000, and K5000.

Service and Support

The HP Thunderbolt™ 2 PCIe Card has a one-year Limited Warranty or the remainder of the warranty of the HP supported 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. Certain restrictions and exclusions apply.

Technical Specifications

Data Transfer Rate	Supports up to 20 Gb/s (20,000 Mb/s)
Devices Supported	Thunderbolt™ certified devices
Bus Type	PCIe card, full or half height PCIe slots
Ports	One Thunderbolt™ 2 external 20-Pin output connectors (Rear)
Internal Connectors	One 5-Pin header connector
System Requirements	Genuine Windows 7 Professional 64-bit, Genuine Windows 8.1 64-bit, Intel i5 series or higher processor, 128-MB RAM, 1-GB Hard Drive, available PCIe slot.
Temperature - Operating	50° to 131° F (10° to 55° C)
Temperature - Storage	-22° to 140° F (-30° to 60° C)
Relative Humidity - Operating	20% to 80%
Compliances	FCC Part 15B, cULus 60950, CE Mark EN55022B(1995)/EN55024-1998 STD, Taiwan BSMI CNS13438, Korea MIC
Operating Systems Supported	Genuine Windows 7 Professional 64-bit, Genuine Windows 8.1 64-bit.
Kit Contents	HP Thunderbolt™ 2 PCIe 1-port I/O Card, full height and half height bracket, DisplayPort to DisplayPort cable, internal header cables(2), user documentation and warranty card.
Warranty	The HP Thunderbolt™ 2 PCIe 1-port I/O Card has a one-year Limited Warranty or the remainder of the warranty of the HP supported 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. Certain restrictions and exclusions apply.

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