

Voltaire Grid Director 4200 QDR InfiniBand Switch

Read This First: Documentation Roadmap



This HP document roadmap describes how to access the documentation providing information about the Voltaire Grid Director 4200 QDR InfiniBand switch used in High Performance Computing solutions.

This guide supports the following HP part numbers:

HP Part Number	Description
615679-B21	Voltaire InfiniBand QDR 144-Port Switch Chassis
615680-B21	Voltaire InfiniBand QDR 144-Port Switch Fabric Board

Part number: **HP-V4200-1A**

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This document provides links to the Voltaire data sheets and user information describing the Voltaire Grid Director 4200 InfiniBand QDR switch. You can link directly to any of the documentation here to provide you with more information about your product.

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HP High Performance Computing InfiniBand Solutions

An integral component of an HP InfiniBand solution is the InfiniBand switch. The Voltaire Grid Director 4200 InfiniBand switch has leaf boards, power supply units, fan modules, management modules, and other field swappable devices to use, manage, and service the switch.

The HP InfiniBand network also includes the HCAs (host channel adapters). The HCAs have two form factors: one with standard PCI form factor for HP ProLiant DL and SL servers, and another with the mezzanine form factor for HP ProLiant BL server blades. The components that contain PCI or HCA cards are visible and manageable parts of your HP InfiniBand network. An HP HCA can be a single-port or dual-port PCI card or HP BladeSystem InfiniBand mezzanine HCA.

This document contains links to the documentation that describe the Voltaire Grid Director 4200 InfiniBand switch.

All of the documentation referenced in this document is currently available on the [Voltaire](#) website.

If you have any comments about this document, please send them to:

<http://www.hp.com/bizsupport/feedback/ww/webfeedback.html>

For technical support and updates, contact your HP representative.

NOTE: Some ProLiant servers might not require an InfiniBand HCA to be installed. For more information, contact and HP representative.

Voltaire Grid Director 4200 QDR InfiniBand Switch

The Voltaire Grid Director 4200 has 162 40 Gb/s InfiniBand ports (delivering 2.72 Tb/s), less than 100 nanoseconds of port-to-port latency, and two 1/10Gb Ethernet ports bridging traffic in less than two microseconds.

Features of the Voltaire 4200 switch include:

- 12-slot, 19" rack mountable chassis, 15U high
- Low latency, hardware-based bridging between InfiniBand and Ethernet
- Provides high performance connectivity to Ethernet-based services and resources
- 162 x 40 Gb/s InfiniBand ports (QDR)
- Ultra-low latency: between 100 and 300 nanoseconds port-to-port
- Available bandwidth: up to 11.52 Tb/s
- Embedded subnet manager

The following table provides links to the documentation and firmware for the Voltaire Grid Director 4200 QDR InfiniBand switch:

Documentation/Specifications	Link
Voltaire Grid Director 4200 QDR InfiniBand Switch Data Sheet	Data Sheet
Voltaire Grid Director 4200 QDR InfiniBand Switch Installation Manual	Installation Manual
Voltaire Grid Director 4200 QDR InfiniBand Switch User Manual	User Manual

Switch Management Software

The following table provides a link to the recommended switch management software for the Voltaire Grid Director 4200 QDR InfiniBand switch used in High Performance Computing.

HP Part Number	Download Link
615679-B21	Software

NOTE: For technical support and updates, contact your HP representative.

HP High Performance Computing Information

The following websites provide more information on High Performance Computing solutions:

Link/Description

[HP BladeSystem Adapters and Mezzanines](#)

This site provides information on the full range of BladeSystem adapters and mezzanines available from HP for BladeSystem configurations.

[Voltaire website](#)

Check the Voltaire website for updates between releases of this document.

[Mellanox website](#)

Describes the various HP and Mellanox host channel adapter cards, providing specifications, required firmware and software for operating the cards, interfaces of the cards, and other related information.

Contact your HP representative if you need additional information.

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