IBM BladeCenter : QLogic Virtual Fabric Extension Module

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At a glance

The QLogic Virtual Fabric Extension Module is the latest Ethernet switching option for the IBM® BladeCenter®. This offering allows BladeCenter integration with virtually any open-standards-based local area network (LAN).

Overview

Blades have made inroads into enterprise data centers by delivering higher density with a lower footprint and reduced costs for power and cooling compared to traditional rack servers. Now with multicore environments, there is an increased need for faster I/O such as 10 Gb Ethernet.

QLogic Virtual Fabric Extension Module for IBM BladeCenter

IBM has been at the forefront of offering new technology to clients. The QLogic Virtual Fabric Extension Module is another example of IBM's innovation. IBM was among the first to deliver Fibre Channel over Ethernet (FCoE) across System x® and BladeCenter and this new module takes this a step further by offering clients IO convergence inside the chassis. Clients using the BNT 10 Gb switch (part number 46C7191) for their LAN traffic can now combine it with this module and the QLogic CNA (#42C1830) to converge their LAN and SAN on a single network. This not only offers a simplified fabric, but also offers significant savings over separate 10 Gb/8 Gb infrastructure. Other than the cost and management savings, this solution provides the flexibility to upgrade existing chassis to implement IO convergence without replacing existing 10 Gb switch.

Additional information

All offers are subject to availability. IBM reserves the right to alter product offerings and specifications at any time without notice. IBM is not responsible for photographic or typographic errors.

IBM makes no representation or warranty regarding third-party products or services.

Key prerequisites

IBM BladeCenter H

Planned availability date

December 22, 2009

Description

BladeCenter continues to be a leader in the industry in delivering high levels of function and integration.

The QLogic Virtual Fabric Extension Module supports the BladeCenter H.

Key features:

- Fibre Channel over Ethernet (FCoE) Bridge module with internal, 10 Gb Ethernet midplane ports for 10 Gb Ethernet HSSM switch connectivity and external, 8 Gb Fibre Channel, SFP-enabled ports for target or fabric connectivity
- LSSM bridge form factor
- Ports
  - 8x internal 10 Gb Ethernet ports
  - 6x external 8 Gb Fibre Channel ports (require 8 Gb SFP+ optical transceivers)

Statement of general direction

In March, 2010, we will also support DS3000, DS4000™ and DS5000 plus the Cisco SAN Fabric.

Product positioning

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Product number

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                                                Part
Description                                     number

QLogic Virtual Fabric Extension Module          46M6172
 for IBM BladeCenter


Pseudo Options

                                                Part
Description                                     number


QLogic Virtual Fabric Extension Module in Bridge Bay 1    59Y2022
QLogic Virtual Fabric Extension Module in Bridge Bay 3    59Y2023
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Technical information

Physical specifications

- Approximate height: 29.5 mm (1.16 in)
- Approximate width: 118.1 mm (4.65 in)
- Approximate depth: 276.4 mm (10.88 in)

Operating environment

Temperature and altitude

- Operating:
  - 10° to 52° C (50° to 125.6° F) at an altitude of 0 to 914 m (0 to 3,000 ft)
  - 10° to 49° C (50° to 120.2° F) at an altitude of 0 to 3,000 m (0 to 10,000 ft)
- Non-operating:
  - 40° to 65° C (104° to 149° F) at an altitude of 0 to 12,000 m (0 to 39,370 ft)

Humidity

- Operating: 8% to 80%, noncondensing
- Non-operating: 5% to 80%, noncondensing

Agency approvals

Safety certifications

- US: UL 60950-1 Listed Accessory Report
- Canada: CAN/CSA C22.2 No. 60950-1-03
- IEC 60950-1/EN 60950-1 CB Report and Certificate
- GOST R IEC 60950-2002 is voluntary and is routinely requested by IBM-Russia to facilitate importation.

EMC/EMI certifications

- FCC - Title 47 CFR Part 15 Subpart B
- Canada - ICES-003
- Australia/New Zealand - C-Tick - AS/NZS CISPR 22
- CE Mark - EN55022:1998+A2:2003 and EN55024:2006
- VCCI - Japan VCCI April 2003
- MIC Notice No. 2001-115 and No. 2001-116 (Korea)
- GOST 29216-91 (Russia)
- CISPR 22 Class A
- Taiwan BSMI CNS 13438
- Turkey Communique No. 2004/9 and No. 2004/22
- Saudi Arabia - EMC.CVG, 28 October 2002
- China - GB 9524:1998

Energy Star compliance

Is this product Energy Star compliant? No

Note: The Energy Star emblem does not represent EPA endorsement of any product or service.

Hardware requirements

IBM Systems: The QLogic Virtual Fabric Extension Module (#46M6172) is supported on the following IBM platform.

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System name              Machine type

BladeCenter H            8852
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Non-IBM Systems: The QLogic Virtual Fabric Extension Module (#46M6172) is not supported on non-IBM platforms.

Software requirements

None; uses the BC operating system.

Compatibility

Use with BladeCenter Blade Server systems.

Supported with 8852 blade systems.

Note: Some configurations may not be compatible.

Limitations

None

Planning information

Additional cable orders required: No

Approximate installation time: 10 min.

Packaging (QLogic Virtual Fabric Extension Module)

One box

- Single box (HxDxW): 121 mm (4.75 in.) x 349 mm (13.75 in.) x 171 mm (6.75 in.)
- Weight: 1.1 kg (2.375 lb)

Shipment group

- QLogic Virtual Fabric Extension Module (#46M6172)
- Support CD
- Important Notices flyer

Security, auditability, and control

This product uses the security and auditability features of the host hardware, software, and application software.

Terms and conditions

This product is available from IBM under the terms and conditions for purchase.

Features and options only

```
Field Installable                Yes
Customer Setup                   Yes
Warranty Period*                 1 year[1]
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Service Type (CCE/CCR/CRU)                      CRU
Maintenance Agreement                           No
Optional Upgrade                                No
Licensed Programs                               No
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Programs included with this product are licensed under the terms and conditions of the License Agreements that are shipped with the feature or option.

All other terms and conditions are the same as those applicable to the IBM machine type in which the feature is installed.

[1] To obtain copies of the IBM Statement of Limited Warranty, contact your reseller or call IBM.

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http://www-1.ibm.com/servers/support/machine_warranties/machine_code.html

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http://www-304.ibm.com/systems/support/

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