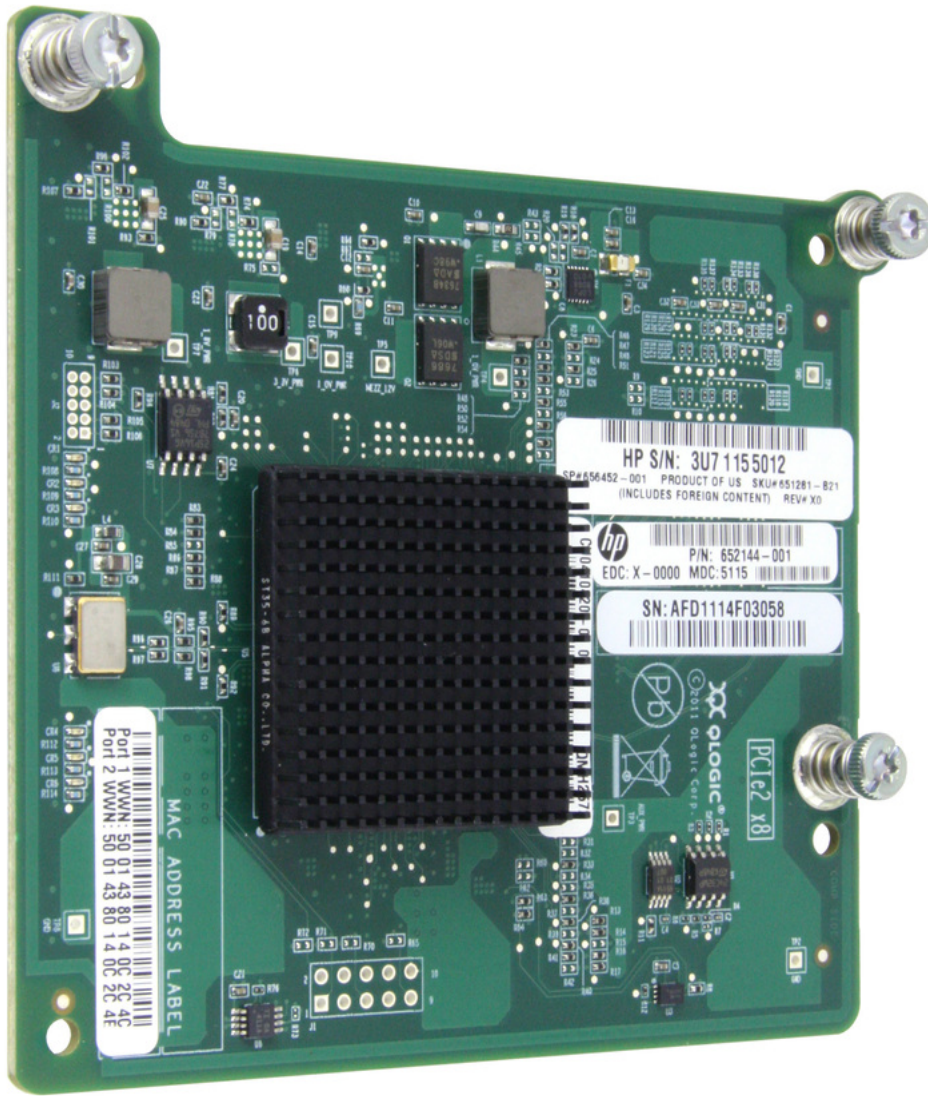


### Overview

#### **HPE QMH2572 8Gb FC HBA for HPE BladeSystem c-Class**

The QMH2572 8Gb FC HBA is a dual channel PCI Express Fibre Channel mezzanine card that provides reliable, high-performance connectivity at up to 8Gb/s. This is a Type A mezzanine card for HPE BladeSystem c-Class that is compatible with HPE ProLiant Server blades starting with Gen8. It is optimized for HPE and is also supported by third-party SAN vendors. For details on supported HPE Fibre Channel SAN Switches, please consult the SAN Design Reference Guide at the following WEB address: <https://www.hpe.com/us/en/networking/switches.html>.

Overview



HPE QMH2572 8Gb FC HBA for HPE BladeSystem c-Class

## Platform Information

### Models

HPE QMH2572 8Gb Fibre Channel Host Bus Adapter for BladeSystem c-Class 651281-B21

**Kit Contents** HPE QMH2572 8 GB FC HBA for HPE BladeSystem c-Class  
Quick install card  
Product warranty statement

### Compatibility - Supported Servers

BL460c Gen9  
BL660c Gen9  
WS460c Gen9

**NOTE:** The HPE QMH2572 8Gb FC HBA for HPE BladeSystem c-Class must be deployed with the c-Class BladeSystem infrastructure and will only work with the BL c-Class Server Enclosures.

**NOTE:** The HPE QMH2572 8Gb FC HBA for HPE BladeSystem c-Class is not compatible with HPE ProLiant G7 and earlier server blades.

**NOTE:** This is a Type A mezzanine card, and can be configured in either Type A or Type B slots on HPE ProLiant Gen8 Server Blades.

### Interoperability - HPE Storage and Third Party Switches

8Gb Switches and Directors  
4Gb Switches and Directors  
2Gb Switches and Directors

Compatible with Fibre Channel switches including Hewlett Packard Enterprise and third party vendors including Cisco, Brocade, and McDATA

Compatible with 8Gb and 16Gb HPE BladeSystem c-Class Fibre Channel switches and Virtual Connect Modules

HPE 4Gb Fibre Channel Pass Thru Module for BladeSystem c-Class\*

**NOTE:** \*Servers must connect to a SAN and never directly to a storage device.

## Standard Features

### At a Glance Features

- Advanced embedded support for virtualized environments
  - Supports virtualized servers for overall effective server utilization
  - Allows multiple logical (virtual) connections to share the same physical ports
  - 256 queue pairs for intensive virtualization
  - Prioritization of queues prevents conflicts between multiple queues
- Fault tolerant 8Gb HBA Architecture
- Reduced power consumption
  - Latest generation technology saves power
  - Reduced number of components on each FC HBA reduces overall power consumption
- PCI Express Bus: Gen I (x8), Gen II (x4)
- Two 8Gb/s Fibre Channel ports
- 8/4/2 automatic speed negotiation without throttling down to the lowest target speed on the network
- Multi-Path support for redundant HBAs and paths including Linux driver failover
- Superior performance capable of sustaining up to 200,000 I/Os per second per channel
- RoHS compliance
- QLogic SANsurfer Manager for centralized management and remote control of distributed HBAs
- Operating Systems and Virtualization Software Supported: Windows Server 2008, VMware 4.1, VMware 5.0, RHEL 5.7, RHEL 6.0, SLES 10, SLES 11, Solaris 10 x86. For full list of compatible Operating Systems please visit: <http://spock.corp.hp.com>
- Performance Optimized
  - Reduces response time of mission critical Datacenter applications and backup windows
  - 2X throughput of 4Gb
- Virtualization Optimized
  - Delivers enhanced security, Quality-of-Service and Dynamic Provisioning during live migration
- Power Optimized
  - Adaptive power management techniques to ensure lowest power & cooling enabled by QLogic StarPower™ Technology
- RAS Optimized
  - Highest Data Integrity; Overlapping Protection Domains (OPD) extended for control and data paths
- Security Optimized
  - SAN-level authentication (FC-SP), fabric-level isolation (NPIV and end-to-end data integrity (T10))
- Management Optimized
  - Unified driver model eliminates potential interop issues between firmware and driver versions and cuts upgrade time in half
  - Common drivers for 8Gb, 4Gb and 2Gb

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### Warranty

Maximum: The remaining warranty of the HPE product in which it is installed (to a maximum three-year, limited warranty).

Minimum: One year limited warranty.

## Standard Features

**NOTE:** Additional information regarding worldwide limited warranty and technical support is available at: <http://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/index.aspx#.V4e3tPkrJhE>

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## Service and Support

**Service and Support** **NOTE: This adapter is covered under HPE Support Services/ Service Contract applied to the HPE ProLiant Server or enclosure. No separate HPE Support Services# need to be purchased.**

Most HPE branded options sourced from HPE that are compatible with your product will be covered under your main product support at the same level of coverage, allowing you to upgrade freely. Additional support is required on select workload accelerators, switches, racks and UPS options 12KVA and over. Coverage of the UPS battery is not included under HPE support services; standard warranty terms and conditions apply.

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### Warranty and Support Services

Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS options 12KVA and over. Coverage of the UPS battery is not included under TS support services; standard warranty terms and conditions apply.

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### Protect your business beyond warranty with HPE Support Services

HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to HPE to help prevent problems and solve issues faster. HPE Support Services enable you to choose the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement to the support you need for your IT and business. Protect your product, beyond warranty.

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### Parts and Materials

Hewlett Packard Enterprise will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements. Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services. The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

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### For more information

Visit the Hewlett Packard Enterprise Service and Support [website](#).

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## Technical Specifications

<b>System Unit</b>	<b>Dimensions (L x W)</b>	3.5 in x 3.9 in
<b>Power and Environmental Specifications</b>	<b>Media Ports</b>	N/A (Always connects to BladeSystem interconnect module)
	<b>Power - Max</b>	Two 7.56 W
	<b>Power - Typical</b>	4.13 W on x8 PCIe Gen 1 3.8 W possible on x4 PCIe Gen 2 with PCIe Gen 2 capable system
	<b>Temperature - Operating</b>	10° to 70°C (55° to 158°F) at sea level with an altitude derating of 1.0°C per every 305 m (1,000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of options installed. System performance may be reduced if operating with a fan fault or above 30°C (86°F).
	<b>Temperature - Non-Operating</b>	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
	<b>Humidity - Operating</b>	10 to 90% relative humidity (Rh), 28°C (82.4°F) maximum wet bulb temperature, non-condensing.
	<b>Humidity - Non-operating</b>	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
	<b>Altitude - Operating</b>	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	<b>Altitude - Non-operating</b>	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
<b>Environment-friendly Products and Approach - End-of-life Management and Recycling</b>	<p>Hewlett Packard Enterprise offers end-of-life <b>product return, trade-in, and recycling programs</b> in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.</p> <p>The EU WEEE Directive (2012/19/EU) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the <b>Hewlett Packard Enterprise web site</b>. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.</p>	

## Summary of Changes

Date	Version History	Action	Description of Change
25-Aug-2017	From Version 8 to 9	Changed	Compatibility and Service and Support sections were updated.
		Removed	Related Options section was removed.
05-Dec-2016	From Version 7 to 8	Changed	Overview, Product Highlights and Related Options sections were updated.
23-Sep-2016	From Version 6 to 7	Changed	QuickSpecs sections were updated.
17-Jul-2015	From Version 5 to 6	Changed	Product Highlights and Related Options sections were updated.
		Removed	Obsolete SKUs were removed: UE478E, UE439E, UE480E, UE728E, UE436E, UE729E, UE437E, UA042E, UE438E, UA040E.
13-Feb-2015	From Version 4 to 5	Changed	Overview and Product Highlights sections were updated.
18-Apr-2014	From Version 3 to 4	Changed	Changes made in Service and Support section.
31-Aug-2012	From Version 2 to 3	Changed	Changes were made in Overview and Product Highlights sections.
08-Jun-2012	From Version 1 to 2	Changed	Modified URL in Overview, Compatibility and Technical Specifications.
06-Mar-2012	Version 1	New	New QuickSpecs



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