



# QMI2572

**Dual Port 4Gb FC to PCIe Expansion Card (CIOv) for IBM® BladeCenter® Servers**

**IBM Part Number: 46M6065**



**QMI2572 Host Bus Adapter.** The QMI2572 is a PCI Express (PCIe), dual port, 4Gb FC expansion card for IBM BladeCenter servers.

**Virtualization Optimized.** The QMI2572 supports N\_Port ID Virtualization (NPIV) by allowing multiple logical (virtual) connections to share the same physical port. Each logical connection has its own resources and the ability to be managed independently.

**Power Optimized.** The QMI2572 takes advantage of QLogic StarPower technology, ensuring power efficiency. QLogic StarPower technology offers dynamic power management to provide the necessary PCI Express bandwidth at the lowest power consumption. Low-power switching power supplies and thermally efficient layout allows the QMI2572 to operate without any additional airflow, making it a *Cool HBA*.

**RAS Optimized.** The QMI2572 provides the highest data integrity by ensuring Overlapping Protection Domains (OPD) on both the control and data paths. The dual-port design protects against “single point of failure” via BladeCenter midplane routing to redundant switch modules.

**Security Optimized.** The QMI2572 enables SAN-level authentication by supporting Fibre Channel-Security Protocol (FC-SP).

**Management Optimized.** The QMI2572 is backward compatible with 2Gb speeds. A single common driver per operating system for two generations of FC HBAs (4Gb and 2Gb) simplifies deployment. QLogic’s unified driver model (firmware embedded in the driver) eliminates potential interoperability issues between firmware and driver versions. The QMI2572’s API compatibility with 2Gb products accelerates deployment while ensuring application compatibility.

**Investment Protection.** For over 15 years, QLogic has been a technological leader with products that address the current needs of customers, yet provide strong investment protection to support emerging technologies and standards. QLogic stands alone in the industry with its product portfolio depth and experience in successfully delivering technological solutions that address the needs of today and tomorrow.

**Fibre Channel Specifications****Negotiation**

- 4/2-Gbps auto-negotiation

**IOPS**

- 200,000 initiator IOPS per port

**Class of service**

- 3

**Topology**

- FC-AL, FC-AL2, point-to-point, switched fabric

**Protocols**

- FCP-3-SCSI
- FC-Tape (FCP-2)

**PCI Express Interface****Compliance**

- *PCI Express Base Specification* rev. 2.0
- *PCI Bus Power Management Interface Specification* rev. 1.2

**Physical and electrical**

- IBM BladeCenter PCIe mezzanine slot connector
- StarPower link training
  - Maximum x4 lanes for Gen2 rate
  - Maximum x8 lanes for Gen1 rate

**HBA Specifications****Airflow**

- Provided by BladeCenter enclosure

**Power consumption**

- 4.7 watts (typical) – Gen1 x8
- 3.7 watts (typical) – Gen2 x4

**Form factor**

- IBM CIOv form factor

**Temperature**

- 0°C/32°F to 55°C/131°F (operating)
- -40°C/-40°F to 70°C/158°F (non-operating)

**Relative Humidity**

- 10% to 90% (operating, non-condensing)
- 5% to 93% (non-operating, non-condensing)

**RoHS compliance**

- RoHS 6

**Tools and Utilities****Management tools**

- SANsurfer® FC HBA Manager
- SANsurfer FC HBA CLI

**Device utilities**

- Utilities for flashing bootcode
- Linux® scripting tools

**Boot support**

- BIOS, FCode, UEFI

**APIs**

- SNIAS HBA API V2, SMI-S, FDMI

**Platform/Operating System Support****Hardware platforms (BladeCenter servers)**

- HS22

**Operating systems**

- Windows Server® 2003 and 2008
- Linux Red Hat® AS 4.x, 5.x
- Novell® SLES 9, 10
- NetWare® 6.5
- VMware® ESX 3.5 and ESXi 3.5 (targeted versions)
- AIX® (IBM supplied driver)

**Agency Approvals—EMI and EMC****US/Canada**

- FCC Part 15, Subpart B, Class A; ICES-003, Class A

**Europe**

- EN55022, Class A

**New Zealand/Australia**

- AS/NZS 3548 Class A

**Japan**

- VCCI V-3/2004.4, Class A

**Korea**

- MIC

**Taiwan**

- BSMI (CNS 13438)

**Agency Approvals—Safety****US/Canada**

- UL, cUL: UL60950, CSA C22.2 No.60950

**Europe**

- 73/23/ECC Low Voltage Directive:
  - TUV: EN60950-1:2001, EN60825-1:1994+A1+A2, EN60825-2:1994+A1

**Ordering Information****QMI2572**

- The QMI2572 is available from IBM (IBM part number: 46M6065)

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