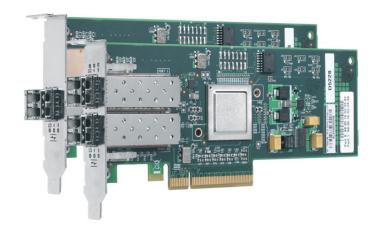


# **Brocade 8 Gb Fibre Channel Host Bus Adapters for IBM System x**



# **Highlights**

- Uniquely enables end-toend management on IBM® System x® storage components
- Maximizes I/O transfer rates with up to 500,000 IOPS per port at 8 Gbps
- Utilizes N\_Port Trunking capability to create a single logical
  8 Gbps high-speed link¹
- Supports virtualized environments with N\_Port ID
   Virtualization (NPIV) for
   255 virtual ports

The Brocade 8 Gb Fibre Channel single-port and dual-port host bus adapters (HBAs) provide a new level of server connectivity through unmatched hardware capabilities and unique software configurability. This new class of HBA is designed to help IT organizations deploy and manage true endto-end SAN services across next-generation data centers.

### **End-to-end storage networking**

As part of the Brocade DCF architecture, the Brocade single-port and dualport HBAs lay the foundation for extending fabric intelligence to servers, virtual machines, applications, and services—enabling end-to-end storage network management. Organizations have a platform to extend traditional Brocade fabric technologies—such as port trunking, load balancing, authentication, and encryption—to the HBA and server level.<sup>1</sup>

By installing Brocade HBAs in System x servers, organizations will have the foundation to leverage NPIV and Adaptive Networking to maintain Quality of Service (QoS) from the virtual port throughout the fabric. In addition, Brocade Data Center Fabric Manager (DCFM) provides unified, end-to-end management across fabrics with Brocade FC switches and HBAs in conjunction with System x servers.

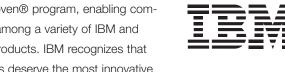
#### Strategic data center fabric architecture

Most data centers were designed to meet basic connectivity options for physical servers, switches and storage. As virtualization becomes more prevalent, however, organizations require new connectivity options with higher performance, guaranteed service levels, simplified management and greater data protection for both physical and virtualized environments.

The Brocade Data Center Fabric architecture provides a strategic framework to help simplify data center connectivity, optimize performance and scalability, and reduce cost and risk. It combines storage networking and server-to-server clustering into a converged infrastructure composed of FC switches, directors and backbones along with this new class of HBA.

#### **Maximizing investments**

To help optimize technology investments, IBM offers a single point of serviceability backed by industry-renowned education, support and training. In addition, Brocade 8 Gb HBAs are in the ServerProven® program, enabling compatibility among a variety of IBM and partner products. IBM recognizes that customers deserve the most innovative solutions.



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Planned for a future driver release.

# Brocade 8 Gb FC Host Bus Adapters for System x at a glance

Part number	46M6049 (single-port), 46M6050 (dual-port)
Performance	Up to 500,000 IOPS per port
Topology	Point-to-point (N_Port), switched fabric (N_Port)
Distance support	50 meters at 8 Gbps on 62.5/125 μm Multi-Mode Fibre (MMF)
Bus interface	PCI-Express Gen 2.0 Compatible (x8), with MSI-X and INTx
Airflow	No airflow required
Operating temperature Non-operating temperature	0°C/32°F to 50°C/122°F -43°C/-40°F to 73°C/163°F
Operating humidity Non-operating humidity	5% to 93% (relative, non-condensing) 5% to 95% (relative, non-condensing)
Power dissipation	6 W (typical) x 4 lanes; reduced in green power mode
Operating voltage	3.3 V
Transceivers	8 Gbps FC LC-style pluggable (SFP+), MMF (850 nm)
Bracket size	Standard: 1.84 cm x 12.08 cm (.73 in. x 4.76 in.) Low-profile: 1.84 cm x 8.01 cm (.73 in. x 3.15 in.)
Management suite	Brocade DCFM
Supported servers	Visit the ServerProven page for the latest supported servers at ibm.com/servers/eserver/serverproven/compat/us/
Operating Systems	Microsoft® Windows® 2003/2008, Linux® Red Hat and SUSE
Protocols	SCSI-FCP, FCP-2, FC-SP
Form factor	Low-profile MD2 form factor PCI-Express card
Dimensions	16.77 cm x 6.89 cm (6.60 in. x 2.71 in.)
Limited warranty	One-year limited warranty, or when installed in a System x Server these cards assume your system's base warranty and any IBM ServicePac® upgrade

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