Brocade 4 Gb FC HBAs for IBM System x

Fibre Channel SAN solutions for data centers with easy-to-manage virtualization
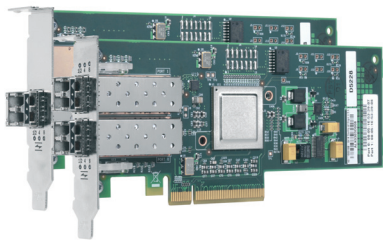
Highlights

- Maximizes I/O transfer rates with up to 500,000 IOPS per port at 4 Gbps

- Utilizes N_Port Trunking capability to create a single logical 4 Gbps high-speed link[1]

- Supports virtualized environments with N_Port ID Virtualization (NPIV) for 255 virtual ports

The Brocade 4 Gb Fibre Channel (FC) single-port and dual-port host bus adapters (HBAs) provide a new level of server connectivity through unmatched hardware and unique software features and performance.

End-to-end storage networking

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

Brocade HBAs in IBM® System x® servers enable the use of NPIV and Adaptive Networking and provide Quality of Service (QoS) from the virtual port throughout the fabric. Brocade Data Center Fabric Manager (DCFM) provides a unified, end-to-end management across fabrics with unique features such as virtual machine visibility, and real-time performance monitoring. DCFM is integrated with IBM Systems Director.

Strategic data center fabric architecture

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 that simplifies connectivity, optimizes performance and scalability, and reduces cost and risk. It combines storage, networking and servers into a converged infrastructure composed of FC switches, directors and backbones.

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 4 Gb HBAs are in the ServerProven® program, enabling compatibility among IBM and partner products.

Brocade 4 Gb FC Host Bus Adapters for System x at a glance

Part number	59Y1987 (single-port), 59Y1993 (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 4 Gbps on 62.5/125 µm Multi-Mode Fibre (MMF)
Bus interface	PCIe Gen 2.0 compatible (x8), with MSI-X and INTx
Operating Non-operating	0ºC/32ºF to 50ºC/122ºF -43ºC/-40ºF to 73ºC/163ºF
Operating Non-operating	5% to 93% (relative humidity, non-condensing) 5% to 95% (relative humidity, non-condensing)
Power dissipation	6 W (typical) x 4 lanes; reduced in green power mode
Operating voltage	3.3 V
Transceivers	4 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, Brocade HCM, IBM Systems Director
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, VMware
Protocols	SCSI-FCP, FCP-2, FC-SP
Form factor	Low-profile MD2 form factor PCIe card
Dimensions	16.77 cm x 6.89 cm (6.60 in. x 2.71 in.)
Limited warranty	1-year limited warranty. When installed in System x server cards assume system's base warranty and any IBM ServicePac® upgrade

For more information

U.S. **ibm.com**/servers/systems/x
Canada **ibm.com**/systems/ca/en/servers/x/index.html

Buy Direct
U.S. 1-888-SHOP-IBM
Canada 1-888-411-1WEB