



SANblade Express

2-Gbps Fibre Channel to PCI-X
Host Bus Adapters

QLA[®]200
Family

Features

- Easy, reliable, scalable, high-performance, resilient host bus adapter (HBA) with optimized price/performance/functionality for SMBs
- 2-Gbps Fibre Channel
- 133 MHz, 32-bit PCI-X support
- Integrated single-chip solution
- Enhanced reliability
- Windows[®] 2000, Windows Server[™] 2003, Linux[®], and Solaris[™] x86 support
- Enhanced ease-of-use
 - Plug and play
 - Preconfigured settings
 - Auto-install software with wizards
 - Quick start guide
- Enhanced level of support: online, by phone, and via email, all available over extended hours
- Web based online training for installation and configuration



Why a QLA200? The QLA200 offers a reliable, high-performance, dependable storage area network (SAN) to the small and medium business (SMB) market. The QLA200:

- Is easy to use
- Has demonstrated robustness (highest mean-time between failures (MTBF))
- Has proven quality

Ease of Use. Designing a successful user experience requires understanding their needs, expectations, experience, and usage patterns. By applying this knowledge to the HBA and software, QLogic has created a design that requires minimum user effort while providing maximum user satisfaction. The wide adoption of installation/configuration wizards eliminates the complexity and intricacies of Fibre Channel SANs. Emphasis on ease-of-use at every step assures a successful, enhanced user experience. Default factory settings and autodetect configuration (similar to Windows[®] XP) eliminates the need to know about each and every knob and button on the dashboard.

Plug and play. The QLA200's technology makes a huge leap in out-of-the-box plug and play SAN setup. An illustrative quick-start guide, a detailed user manual, and extended support (including online, via email, and by phone) makes installation, configuration, maintenance, and upgrades easy for even a novice user. In addition, the QLA200 package is available in eight languages, making it even

easier for geographically diverse end-customers to adopt the SAN infrastructure.

True Value. Rather than a philosophy of one size fits all, the QLA200 technology addresses the needs of the SMB market segment. QLogic brings optimal performance (400 MBps throughput) for the best possible price to SMB customers. QLogic has worked with its customers to determine the ideal feature set and with suppliers to adopt highly reliable, low-cost components.

Why QLogic? The QLogic QLA200 HBA family is the defacto standard for small-medium business (SMB) HBAs. All major OEMs have selected the QLA200 HBA family as the result of:

- QLogic's ground-up approach to developing an SMB HBA (not just a *make-from*).
- Reflection of a much deeper understanding of the end-user's needs.
- Closely working with OS vendors (such as Microsoft[®]) to simplify and provide a single application to manage HBAs, switches, and disk drives.



Host Bus Interface Specifications	
Speed	133-MHz, 32-bit PCI-X 1.0
Voltage	3.3 V and 5 V bus supported
Compliance	Conforms to <i>PCI-X Addendum rev. 1.0a</i> , <i>PCI Local Bus Specification rev. 2.2</i> , <i>PCI Hot Plug Specification 1.0</i> , <i>PCI Bus Power Management Interface Specification rev 1.1</i>
Fibre Channel Specifications	
Speed	200 MBps maximum at half-duplex, 400 MBps maximum at full-duplex (2-Gbps speed only)
Compliance	<i>Second Generation FC Generic Services Definition (FC-GS-2)</i> , <i>Third Generation FC Generic Services Definition (FC-GS-3)</i> , <i>Fibre Channel-Physical and Signaling Interface (FC-PH)</i> , <i>SCSI-3 Fibre Channel Protocol (SCSI-FCP)</i> , <i>Fibre Channel-Arbitrated Loop-2 (FC-AL-2)</i> , <i>Fibre Channel-Private Loop Direct Attach Technical Report (FC-PLDA)</i> , <i>Fibre Channel Framing and Signaling (FC-FS)</i>
Topology	FC-AL, FC-AL-2, switched fabric (F-Port)
Class of service	Class 3 Fibre Channel service
Protocol	SCSI (FCP), tape (FCP-2)
Logins and exchanges	Up to 16 total logins in private loop (FC-AL/FC-AL-2) topology, 8 (target) logins in fabric (F-Port connect) topology, and up to 64 FCP/FCP-2 exchanges
FC frame size	2K fixed
Buffer credits	2 credits issued
Physical Specifications	
Ports	One
LEDs	Two
Media	Multimode optic
Optics	Short wave laser
Form factor	Low-profile MD1: 11.99 cm x 6.44 cm (4.721" x 2.536")
Bracket size	Standard size, with optional low profile size
Connectors	LC-style connector that supports non-OFC, multimode fibre optic cabling using a small form factor optical transceiver module
Power consumption	~ 5.0 watts
RoHS compliant	Yes
Environment and Equipment Specifications	
Airflow	0 l/m
Temperature	Operating: 0°C/32°F to 55°C/131°F. Storage: -20°C/-4°F to 70°C/158°F
Humidity	Relative (noncondensing): 10% to 90%, Storage: 5% to 95%
Distance	2 Gbps: 300 meters 50/125 µm fiber, 150 meters 62.5/125 µm fiber.
Cable	50/125µm multimode fiber, 62.5/125 µm multimode fiber.
Multi-switch fabric	Supports up to two switches
Agency Approvals—Product Safety (Preliminary)	
US/Canada	UL, cUL UL60950-1 CSA C22.2 No.6950 Class 1 Laser Product per DHHS 21CFR J
Europe	73/23/ECC Low Voltage Directive: TUV: EN60950-1: 2001 EN60825-1: 1994+A1+A2 EN60825-2: 1994 +A1
Agency Approvals—EMI and EMC (Preliminary)	
US	FCC Part 15, Class A
Canada	Industry Canada ICES-003, Class A
Europe	89/336/EEC EMC Directive CE Mark : EN55022: 1998 /CISPR22:1997 Class A EN55024: 1998 EN61000-3-2:2000 EN61000-3-3:2001;A1:2001
Japan	VCCI, Class A
Taiwan	CNS 13438 Class A
New Zealand/Australia	AS/NZS 3548 Class A
Korea	MIC Class A
Software	
SANsurfer HBA Manager	Easy to use, autoconfiguration, wizard-based HBA management application with preconfigured settings.
Operating system drivers	Windows Server 2003, Windows 2000, Linux (Red Hat 8, 9, Advanced Server 2.1 and 3.0; SuSE® SLES 8), Solaris x86. Only 32-bit variants are supported. A single common driver supports the QLA200 and all 2-Gbps QLogic FC HBAs.
Flash utilities	Configuration utilities resident with boot code
Boot support	Intel x86: BIOS (32-bit)
Localization	Available in English, French, German, Chinese, Japanese, Portuguese, Italian, Spanish, and Korean.
Ordering Information	
QLA200-BK	Ships in a bulk box in quantities of 20, 50, or 100 with standard size brackets
QLA200-CK	Ships in an individually packed box with a standard size bracket and a spare low-profile bracket, QLA2xx CD, and Quick Start Guide



[www.qlogic.com]

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