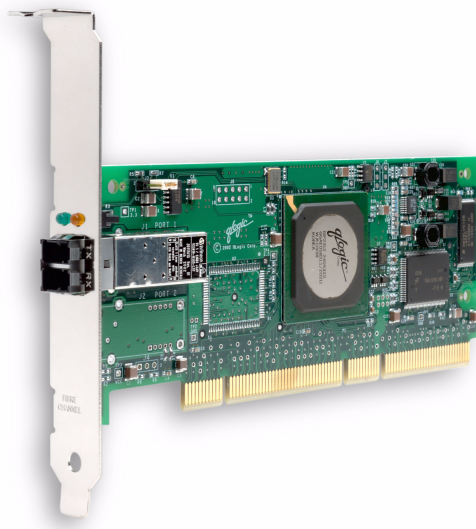


QLA2340/2340L Data Sheet

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



Designed and deployed by major server and storage OEMs, QLogic's SANblade QLA2340 and QLA2340L host bus adapters (HBAs) offer the ultimate in performance: 2-Gb Fibre Channel combined with 64-bit, 133-MHz PCI-X. Eliminating traditional host bottlenecks that impede the high performance of 2-Gb Fibre Channel, this union of the fastest I/O and host technologies creates the perfect balanced solution.

These HBAs are based on QLogic's unique single chip fibre channel controller architecture. These multimode optic HBAs are specifically designed for servers in direct attach storage (DAS) as well as storage area network (SAN) environments.

The QLA2340 is the right solution for the added boost in performance. If you are looking for low-profile boards for 1U and 2U servers, the QLA2340L, a low-profile version of the QLA2340, is the perfect fit.

Driving the standard for interoperability with extensive Fibre Channel testing in SAN environments, you can feel confident in choosing the QLogic solution.

Features

- Unique, single-integrated Fibre Channel controller for added reliability and optimum performance
- Autonegotiation of Fibre Channel speed bit rate (1 Gb or 2 Gb)
- Automatic topology detection
- Concurrent support for SCSI and IP protocols
- Simultaneous initiator and target mode support
- Easy detection of activities through an LED panel:
 - Power
 - Online
 - Signal acquired
 - Loss of synchronization
 - Firmware error
- HBA and LUN level failover
- Persistent binding
- LUN masking
- Local and remote management
- Load balancing for optimized performance
- Diagnostics
 - Loop back test
 - Read/write buffer tests

Host Bus Interface Specifications	
Speed	64-bit, 133-MHz PCI-X
Voltage	3.3 V and 5.0 V buses supported
Compliance	Conforms to <i>PCI Local Bus Specification</i> rev. 2.2, <i>PCI-X Addendum</i> rev. 1.0a, <i>PCI Hot Plug Specification</i> rev. 1.0, <i>PCI Bus Power Management Interface Specification</i> rev 1.1
Speed	200 MBps maximum at half-duplex, 400 MBps maximum at full-duplex
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>RFC 2625 IP and APR Over Fibre Channel</i> , <i>Fibre Channel Framing and Signaling (FC-FS)</i>
Topology	FC-AL, FC-AL-2, point to point, switched fabric (FL_Port and F_Port)
Class of service	Class 3 Fibre Channel service
Protocol	SCSI-FCP, IP, FC-TAPE
Buffer credits	For 512-byte frame size, 9 credits issued. For 2K-byte frame size, 3 credits issued.
HBA Physical Specifications	
Ports	One
Media	Multimode optic
Optics	Short wave laser
Form factor	Low-profile MD2: 16.93 cm x 5.15 cm (6.7" x 2.5")
Bracket size	QLA2340: standard size; QLA2340L: 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	~ 7.0 watts
HBA Environment	
Airflow	0 lf/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	1 Gbps: 500 meters 50/125 µm fiber, 300 meters 62.5/125 µm fiber 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
Agency Approvals—Product Safety	
US/Canada	UL, cUL UL60950 CSA C22.2 No.60950 Class 1 Laser Product per DHHS 21CFR (J)
Europe	73/23/ECC Low Voltage Directive: TUV: EN60950: 1992+A1.2.3.4.11 EN60825-1: 1994+A11 EN60825-2: 1994
Agency Approvals—EMI and EMC	
US	FCC Part 15, Class B
Canada	Industry Canada ICES-003, Class B
Europe	89/336/EEC EMC Directive CE Mark : EN55022: 1998/CISPR22:1997 Class B EN55024: 1998 EN61000-3-2:1995 EN61000-3-3:1994
Japan	VCCI, Class B
Taiwan	CNS 13438 Class B
New Zealand/	AS/NZS 3548 Class B
Australia	
Korea	MIC
Software	
SANblade Manager	Easy to use, Java-based, configuration, diagnostics and analysis HBA management application for heterogeneous SAN management across multiple hosts. Includes failover, LUN masking, and persistent binding capabilities.
SANblade Control FX	Wizard-based utility provided for installation, configuration, persistent binding, and diagnostic functions on the local host.
Operating System drivers	Windows Server 2003 (32-bit and 64-bit), Windows NT, Windows 2000, Windows XP, Solaris SPARC, Linux (32-bit and 64-bit), Novell NetWare
Flash utilities	Configuration utilities resident with BIOS and FCode
Boot support	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode
Ordering Information	
QLA2340	Ships to OEMs in an individually packed box with a standard size bracket.
QLA2340-BK	Ships to OEMs in a bulk pack box in quantities of 20, 50, or 100 with standard size brackets.
QLA2340-CK	Ships to authorized distributors and resellers in an individually packed box with a standard size bracket and the SANsurfer Management Suite CD.
QLA2340L	Ships to OEMs in an individually packed box with a low-profile size bracket.
QLA2340L-BK	Ships to OEMs in a bulk pack box in quantities of 20, 50, or 100 with low-profile size brackets.
QLA2340L-CK	Ships to authorized distributors and resellers in an individually packed box with a low-profile size bracket and the SANsurfer Management Suite CD.



QLogic Corporation
26650 Aliso Viejo Parkway
Aliso Viejo, CA 92656, (800) 662-4471 or (949) 389-6000

www.qlogic.com

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