

SANblade

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

QLA2342/ QLA2342L





Features

- Unique, single-integrated Fibre Channel controller for added reliability and optimum performance
- Autonegotiation of Fibre Channel speed bit rate (1 Gbps or 2 Gbps)
- 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

WHY QLOGIC? Designed and deployed by major server and storage OEMs, the QLogic SANblade QLA2342 and QLA2342L host bus adapters (HBAs) offer two independent channels of 2-Gbps Fibre Channel combined with 64-bit, 133-MHz PCI-X. Enabling double IOps with only one PCI/PCI-X slot, the QLA2342 and QLA2342L eliminate traditional host bottlenecks that impede the high performance of 2-Gbps Fibre Channel. This union of the fastest I/O and host technologies creates the perfect balanced solution.

COST EFFECTIVE. These HBAs are based on unique, single-chip fibre channel controller architecture from QLogic. For a powerful, scalable solution that maximizes bandwidth and PCI/PCI-X slot usage while maintaining a cost-effective price per port, the QLA2342 is the ultimate choice.

If you are looking for low-profile boards for 1U and 2U servers, the QLA2342L, a low-profile version of the QLA2342L is the perfect fit.

LEADING SINGLE CHIP INTEGRATION. The QLA2342/2342L uniquely integrates a RISC processor, a Fibre protocol engine, and transceivers into a single, efficient FC controller chip that increases reliability and performance by lowering CPU utilization.

BROAD OEM ACCEPTANCE. The QLA2342/2342L HBA is validated by every major OEM including Dell, EMC, HDS, HP, IBM, and Sun. The QLA2342/2342L extensive certification from major server and storage manufacturers makes it the perfect choice for multiplatform requirements.

EASY MANAGMENT. The QLogic SANsurfer Management Suite™ is available free of charge. This software set simplifies management by making setup, configuration, and maintenance easy, along with features such as remote management, load balancing, failover, and target persistent binding. In addition, the easy to use SANblade Control FX wizard-based application is available on Windows™, Linux®, and Solaris® operating systems. SANblade Control FX provides simple, local host initialization, configuration, and diagnostic functions. The QLA2342/2342L is also fully compatible with management applications that support the SNIA API, allowing IT managers to reduce HBA management time and lower their total cost of ownership.

PROVEN ARCHITECTURE. The QLA2342/2342L architecture is the result of more than 15 years of progressive development and testing. Proven architecture from QLogic delivers higher overall reliability and enables advanced functionality with its single-chip integration, placing QLogic years ahead of its competitors. The QLA2342/2342L also has proven interoperability with all major software applications, hardware platforms, and operating systems.

THE BOTTOM LINE. Driving the standard for interoperability with extensive FC testing in SAN environments, you can feel confident in choosing the QLogic solution.



TECHNICAL SPECIFICATIONS QLA2342/

QLA2342L

Host Bus Interface Specifications				
Speed	64-bit, 133-MHz PCI-X			
Voltage	3.3 V and 5.0 V buses supported			
Compliance	PCI Local Bus Specification rev. 2.2, PCI-X Addendum rev. 1.0a, PCI Hot Plug	PCI Local Bus Specification rev. 2.2, PCI-X Addendum rev. 1.0a, PCI Hot Plug Specification 1.0, PCI Bus Power Management Interface Specification rev 1.1		
Fibre Channel Specifications				
Speed	200 MBps maximum at half-duplex, 400 MBps maximum at full-duplex			
Compliance	Second Generation FC Generic Services Definition (FC-GS-2), Third Generation FC Generic Services Definition (FC-GS-3), Fibre Channel-Physical and Signaling Interface (FC-PH), SCSI-3 Fibre Channel Protocol (SCSI-FCP), Fibre Channel-Arbitrated Loop-2 (FC-AL-2), Fibre Channel-Private Loop Direct Attach Technical Report (FC-PLDA), RFC 2625 IP and APR Over Fibre Channel, Fibre Channel Framing and Signaling (FC-FS)			
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.			
	Physical Sp	ecifications		
Ports	Two			
Media	Multimode optic			
Optics	Short wave laser			
Form factor	Low-profile MD2: 16.93 cm×5.15 cm (6.7*×2.5")			
Bracket size	QLA2342: standard size; QLA2342L: low-profile size			
Connectors	Two LC-style connectors that support non-OFC, multimode fibre optic cabling using small form factor optical transceiver modules			
Power consumption	~ 8.0 watts			
	Environment and Equi	pment Specifications		
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		Agency Approvals—EMI and EMC	
US/Canada Europe	UL, cUL	US Canada Europe	FCC Part 15, Class B Industry Canada ICES-003, Class B 89/336/EEC EMC Directive CE Mark : EN55022: 1998 /CISPR22:1997 Class B EN55024: 1998 EN61000-3-2:1995 EN61000-3-3:1994	
	EN60825-1: 1994-A11 EN60825-2: 1994	Japan Taiwan New Zealand/Australia Korea	VCCI, Class B CNS 13438 Class B AS/NZS 3548 Class B MIC	
	Soft	ware		
SANblade	Easy to use, Java-based, configuration, diagnostics and analysis HBA management application for heterogeneous SAN management across multiple hosts. Includes failover, LUN			
Manager SANblade control FX	masking, and persistent binding capabilities. Wizard-based utility provided for installation, configuration, persistent binding, and diagnostic functions on the local host.			
SANblade CLI	Command line interface (CLI) based application 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, Solaris SPARC, Linux (32-bit and 64-bit), Novell NetWare			
Flash utilities	Configuration utilities resident with BIOS and Fcode			
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Boot support	Configuration utilities resident with BIOS and Fcode Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode			
	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode	nformation		
	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode	nformation		
Boot support	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode Ordering In		and Quick Start Guide	
Boot support QLA2342	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode Ordering It Ships to OEMs in an individually packed box with a standard size bracket		and Quick Start Guide	
Boot support QLA2342 QLA2342-CK	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode Ordering In Ships to OEMs in an individually packed box with a standard size bracket Ships in an individually packed box with a standard size bracket, spare low-pro		and Quick Start Guide	
QLA2342 QLA2342-CK QLA2342-BK	Intel x86: BIOS (32-bit), EFI (64-bit); Solaris SPARC: FCode Ordering In Ships to OEMs in an individually packed box with a standard size bracket Ships in an individually packed box with a standard size bracket, spare low-pro Ships in a bulk box in quantities of 20 or 50 with standard size brackets	ofile bracket, SANsurfer [®] CD,		





















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