



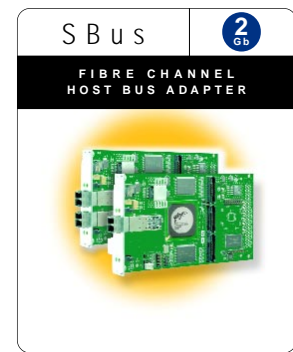
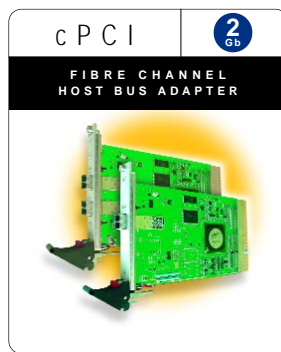
SANblade™

2Gb Fibre Channel
Host Bus Adapters

2300 SERIES



Award-winning QLogic SANblade 2300 Series Fibre Channel Host Bus Adapters (HBAs) offer 2 Gigabit (Gb) performance for demanding Storage Area Networks (SANs) and are available in PCI-X, CompactPCI (cPCI) and SBus form factors.



Applications | RAID | SANs | Data Warehousing | Clustering | Remote Backup | Near and On-line Storage | Video Editing and CAD | Box-to-Box | JBOD

QLogic SANblade HBAs are the industry's highest-performing and most widely deployed host adapter solutions for server, networking, storage and clustering solutions.

LEADING SINGLE CHIP INTEGRATION. SANblade 2300 Series HBAs have uniquely integrated a RISC processor, the Fibre protocol engine and transceivers into a single, efficient Fibre Channel controller chip. The QLogic Fibre Channel controller chip results in fewer components, lower power consumption, reduced heat dissipation, a smaller form factor, increased reliability and a lower total cost of system integration ideal for high-density requirements.

RECORD-BREAKING PERFORMANCE. Independent performance benchmarks continue to affirm that SANblade 2300 Series HBAs are the leading transaction-process host adapters. *Network Computing* recognized the 2300 Series HBA as Editor's Choice and Product of the Year for its superior driver implementation, ease of use and impressive performance. A primary performance advantage is the 2300's ability to complete I/O requests independent of the host, increasing overall system efficiency.

BROAD OEM ACCEPTANCE. The 2300 Series HBAs are validated by every major OEM including Dell, EMC, HDS, HP, IBM, and Sun. The 2300's extensive certification from major server and storage manufacturers make it the perfect choice for multi-platform requirements.

MULTI-PROTOCOL SUPPORT. The SANblade 2300 supports multiple protocols including SCSI, IP, Virtual Interface (VI), FC-Tape and FICON for multi-platform and multi-application design. Comprehensive protocol support provides host and storage OEMs the flexibility to develop a wide range of SAN and server clustering solutions.

Easy Management. The QLogic SANsurfer Management Suite™, included with the 2300 Series, simplifies management by making setup, configuration and maintenance easy and enabling features such as remote management and failover. The SANblade 2300 is also fully compatible with management applications that support the SNIA HBA API, allowing IT managers to reduce HBA management time and lower their total cost of ownership.

PROVEN ARCHITECTURE. The SANblade 2300 architecture is the result of more than 15 years of progressive development and testing. QLogic's proven architecture delivers higher overall reliability and enables advanced functionality such as single chip integration, placing QLogic years ahead of its competitors. The SANblade 2300 also has proven interoperability with hard drives, tape drives, RAID controllers, tape libraries, servers, storage subsystems and video workstations.



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SANblade 2300 Series

RISC Processor	Enhanced RISC processor integrated into Fibre Channel Controller							
RAM	2MB per FC port on QLA235x; 256KB per FC port on all other Fibre Channel HBAs							
Onboard Intelligence	Single chip engine includes enhanced RISC processor, Fibre Channel Protocol manager, PCI-X DMA controller, 2-Gigabit transceivers, and on-chip frame buffers							
Onboard DMA Channels	5-channel DMA controller: Two data, one command, one auto-DMA request and one auto-DMA response							
Frame Buffers	Integrated 10 Kbyte frame buffer FIFO. Receive FIFO = 6K; Transmit FIFO = 4K per channel							
Topology	FC-AL, FC-AL-2, Point-to-point, Switched Fabric							
Fabric Support	FL_Port, F_Port							
Class of Service	Class 1, 2 and 3 Fibre Channel service							
Transfers	Full Duplex in all topologies							
Protocols	Supports SCSI, IP and protocols concurrently; FC Tape. QLA2350/QLA2352 HBA also support VI protocol							
Host bus	Conforms to PCI-X Specification 1.0 and PCI Local Bus Specification 2.2; cPCI - Hot-swap Specification 2.1; SBus IEEE 1496-1993							
Fibre Channel Data Transfers	Up to 400 MB/s per channel with Full Duplex							
Power Consumption		PCI Copper	PCI Optic	PCI-X Copper	PCI-X Optic		cPCI	SBus
					66MHz HBAs	133MHz HBAs		
	Single Channel	~4 Watts	~5 Watts	~3.65 Watts	~4.75 Watts	~6.5 Watts	~5.0 Watts	~9 Watts
	Dual Channel	N/A	~11 Watts	N/A	~10.5 Watts	~7.5 Watts	~6.0 Watts	~10 Watts
	Quad Channel	N/A	NA	N/A	N/A	~16 Watts	N/A	N/A
Form Factor	Standard Short Card PCI-X		Low Profile PCI-X		cPCI			SBus
	6.875" x 4.200"		6.600" x 2.536"		6.299" x 3.937"			5.776" x 3.300"
Temperature	Operating: 0°C/32°F to 55°C /131°F Quad Channel: 0°C/32°F to 40°C /104°F w/no air flow or 0°C/32°F to 55°C /131°F w/100 lf/min airflow Storage: -20°C/-4°F to 70°C/ 158°F							
Humidity	Operating: 10% to 90% (non-condensing) Storage: 5% to 95% (non-condensing)							
SANblade Manager™ HBA Management Software	Easy to use, Java-based, configuration, diagnostics and analysis utility. Includes persistent binding capabilities and failover functionality							
SANblade Control FX	Wizard-based utility provided for installation, configuration and diagnostic functions							
Software Drivers	PCI-X HBAs: Windows NT, XP, and 2000, Solaris SPARC, Linux, Novell Netware cPCI and SBus HBAs: Solaris SPARC.							



Novell



	Media	Ports	64-Bit Bus	Form Factor	Bracket Size	Connector
QLA2310	Copper	One	66MHz, PCI-X	Short Card	Standard	One external HSSDC copper
QLA2310F	Multi-mode Optic	One		Short Card	Standard	One external SFF LC
QLA2310FL	Multi-mode Optic	One		Low Profile MD2	Low Profile	One external SFF LC
QLA2340	Multi-mode Optic	One	133MHz, PCI-X	Low Profile MD2	Standard	One external SFF LC
QLA2340L	Multi-mode Optic	One		Low Profile MD2	Low Profile	One external SFF LC
QLA2342	Multi-mode Optic	Two		Low Profile MD2	Standard	Two external SFF LC
QLA2342L	Multi-mode Optic	Two		Low Profile MD2	Low Profile	Two external SFF LC
QLA2344	Multi-mode Optic	Four		Short Card	Standard	Four external SFF LC
QLA2350	Multi-mode Optic	One		Low Profile MD2	Standard	One external SFF LC
QLA2352	Multi-mode Optic	Two		Low Profile MD2	Standard	Two external SFF LC
QCP2340	Multi-mode Optic	One	66MHz, cPCI	CompactPCI	Standard	One external SFF LC
QCP2342	Multi-mode Optic	Two		CompactPCI	Standard	Two external SFF LC
OSB2340	Multi-mode Optic	One	25MHz, SBus	SBus	Standard	One external SFF LC
OSB2342	Multi-mode Optic	Two		SBus	Standard	Two external SFF LC



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