Ultra Series

32/64-bit PCI-to-Ultra SCSI Adapters

The QLogic Ultra Series features high-performance, third generation Ultra SCSI adapter boards representing the best in SCSI processor integration, supporting transfer rates up to 40MB/s per channel. Targeted at high performance workstations, servers and storage, the Ultra series is based on a highly integrated design, making it the most cost effective Ultra SCSI solution in the industry. QLogics Ultra Series includes the single-channel QLA1040 boards and the dual-channel QLA1240 boards.

SUPERIOR ARCHITECTURE AND PERFORMANCE. The Ultra Series adapters are based on QLogic's high-performance processor architecture which utilizes multiple on-chip processors to manage the SCSI bus protocol and host system interface, permitting the boards to routinely complete SCSI I/O instructions, as well as manage many types of exception or error conditions, without host CPU intervention. This powerful combination of performance and host-CPU independence makes the Ultra Series ideal for performance sensitive environments.

SOFTWARE SOLUTIONS. The Ultra Series supports a high-level host software interface common to all QLogic parallel SCSI and Fibre Channel products. This important feature enables nearly complete host software compatibility between the QLogic's parallel SCSI and Fibre Channel applications, allowing customers to retain the host software investment when migrating to future interface technologies. Plus, our advanced software interface makes any future software development easy. Combined with a configuration utility that provides tunable parameters for application-specific needs, the Ultra Series from QLogic is more than just hardware - it's a complete I/O solution.

PROVEN INTEROPERABILITY. The Ultra Series from Qlogic offers broad compatibility across SCSI-2, SCSI-3, Ultra SCSI and Wide Ultra SCSI platforms making it one of the most versatile SCSI adapters in the market today. As a leader in interoperability, QLogic performs extensive compatibility testing, and provides support for all the major operating systems. You can feel confident that a QLogic SCSI connection is the right connection.

- SCSI transfer rates to 40MB/s per channel
- 32-bit and 64-bit / 33 MHz models
- Single and dual channel models
- Single-ended and differential models
- Supports initiator and target modes
- Low host-CPU utilization
- High-level software interface for easy software development
- Configuration Utility supports application tuning
- Flash ROM BIOS
- Broad compatibility across all major

Qlogic Corp.

The Connection is Critical

Technical Specifications

Ultra Series

	Single-Channel Boards	Dual-Channel Boards
Boards	QLA1040/1041	QLA1240/1240D
Chip	ISP1040	ISP1240
SCSI Ports	One	Two
Onboard Intelligence	Single chip, dual processor design: integrated RISC engine and SCSI Executive Processor	Single chip, three processor design: integrated RISC engine and two SCSI Executive Processors
DMA Channels	128-byte data DMA FIFO and one 64-byte command DMA FIFO	Two 512-byte data DMA FIFOs per channel and one 128-byte command DMA FIFO
PCI	32-bit / 33 MHz	64-bit / 33 MHz
RAM	64 Kbytes Static RAM	128 Kbytes Static RAM
Data Transfer Rates	Up to 40 MB/s per channel	
SCSI Data Width	8-bit narrow, 16-bit wide, single-ended (QLA1040/1240) differential (QLA1041/1240D)	
Peripheral Support	Compatible with SCSI-2, SCSI-3, Ultra SCSI and Wide SCSI	
Host Bus	Conforms to PCI Local Bus specification	
Form Factor	17.78 cm x 10.67 cm (7.0" x 4.2")	
Temperature	**Operating**: 0°C/32°F to 55°C/131°F **Storage**: -20°C/-4°F to 70°C/158°F	
Humidity	**Relative**: -10% to 90% (noncondensing) **Storage**: 5% to 95% (noncondensing)	
Compatibility	Windows 95, Windows 98, Windows NT 4.0, Windows 2000, NetWare 4/5, OS/2 Warp 4.0, Unixware 2.1/7.X, SCO 5.0	Windows 95, Windows 98, Windows NT 4.0, Windows 2000, NetWare 4/5, OS/2 Warp 4.0, Unixware 2.1/7.X, SCO 5.0, Solaris X86 2.6, I²O

	Ports	Drive type	Termination	Connectors
QLA1040	one	single ended	Active, software controlled	One external 68-pin, high density connector, one 68 pin internal connector, one 50-pin internal ribbon connector
QLA1041	one	differential	Passive (socketed resistors)	One external 68-pin, high density connector, one 68 pin internal connector, one 50-pin internal ribbon connector
QLA1240	two	single ended	Active, software controlled	One internal 68-pin, high density connector, 2 external VHDCI connectors
QLA1240D	two	differential	Passive (socketed resistors)	Two external 68-pin VHDCI connectors

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