

Enjoy Unrivaed Ultra320 SCSI Performance and Reliability

Key Advantages

- Incredible Single-Channel Ultra320 SCSI Performance
- Exceptional Data Reliability and Signal Quality
- Integrated Hardware RAID (0, 1)
- Wide Range of OS and System Support

Step Up to Ultra320 Performance

The LSI Logic LSI20320-R Ultra320 SCSI single-channel host adapter is the right choice for increasing storage performance within servers and high-performance workstations. With 320MB/s throughput and capability of up to 50,000 I/Os per second, this adapter is ideal for quickly moving large amounts of data. Designed to provide a dedicated connection to Ultra320 disk drives or storage enclosures, the LSI20320-R delivers sensational performance.

Exceptional Signal Integrity

The LSI20320-R not only moves data blazingly fast, it also insures unmatched data reliability and signal quality. With LSI Logic TolerANT technology, the card improves data integrity in less than ideal cabling environments. This is done through active negation on the drivers and input filtering on receivers of the controller. SureLINK domain validation verifies that all devices are able to communicate at the negotiated SCSI transfer rate and optimizes the connection between the card and each device on the bus. The net result is exceptional data reliability optimized performance.

Powered by Fusion-MPT

Based on LSI Logic's Fusion-MPT (Message Passing Technology) architecture, the LSI20320-R provides outstanding I/O performance while allowing extremely high host processor efficiency. Fusion-MPT permits an exceptionally thin device driver that's common to all Fusion-MPT devices for a given OS. This promotes higher performance and greatly reduces the integration and



testing effort for systems already qualified using Fusion-MPT powered devices.

OS Independent Hardware RAID (0,1)

LSI Logic Integrated RAID provides the reliability and performance benefits of disk mirroring (RAID 1) and striping (RAID 0). Integrated Mirroring™ (IM) provides data protection for the system boot volume by simultaneously writing redundant data across two to six disks. This provides fault tolerance and safeguards critical information. Integrated striping yields enhanced performance by aggregating the bandwidth of up to six disk drives. Integrated Striping provides a significant boost in applications where maximum performance is essential. LSI Logic Integrated RAID is OS-independent and does not require the use of special device drivers.

Dependable Quality and Reliability

For more than 15 years, LSI Logic has provided high-performance SCSI HBA solutions to leading server, disk array, and systems providers worldwide. Using only the highest quality components, LSI Logic host adapters are assembled and tested in world-class facilities to assure superior product reliability and performance. Because of stringent quality management programs, our host adapters carry a three-year limited warranty.

Wide Range of OS & System Support

The LSI20320-R supports all key 32-bit and 64-bit versions of Microsoft Windows, Linux, and Solaris as well as the x86, IA64, SPARC, and AMD64 system architectures. With this broad base of OS and System Support, the LSI20320-R is the ideal choice for attaching the most powerful Hard Disk Drives and SCSI peripherals to your workstation or server.

APPLICATIONS

- High performance workstations
- Entry-level and mid-range servers

TYPICAL USES

- Data intensive applications including print, email, web and database servers
- CAD
- Video/audio editing
- Data mining
- Desktop publishing
- Scientific simulation

FEATURES

- PCI-X to single-channel Ultra320 SCSI adapter
- Fusion-MPT™ architecture
- Integrated Hardware RAID (0,1)
- TolerANT™ technology improves signal quality
- SureLINK™ domain validation optimizes device connections
- Optional low profile bracket (MD2 form factor)
- Supports all major operating systems



LSI20320-R

ULTRA320 SCSI SINGLE-CHANNEL HBA

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CR20003

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LSI Logic LSI20320-R HBA

Solution Provided

Unrivalled single-channel Ultra320 SCSI performance for data intensive applications

Environment Envisioned

Ideal for maximizing storage performance within servers and high-performance workstations

SCSI Bus	Ultra320, LVD (Low Voltage Differential) and Ultra Wide SE (Single-Ended)
SCSI Processor	LSI53C1020
Host Bus Type	64-bit/133MHz PCI-X, backward compatible with PCI
PCI Card Type	Universal add-in card (3.3V and 5.0V signaling)
PCI Data Burst Transfer Rates	132MB/s (PCI 32-bit bus @ 33MHz) 264MB/s (PCI 64-bit bus @ 33MHz) 528MB/s (PCI 64-bit bus @ 66MHz) 800MB/s (PCI-X 64-bit bus @ 100MHz) 1056MB/s (PCI-X 64-bit bus @ 133MHz)
Internal Connector	One 68-pin HD
External Connector	One 68-pin VHDCI
Termination	Universal (LVD/SE) termination, auto cable detection
Device Support	Up to 15 internal/external SCSI devices
Physical Dimensions	6.6" x 2.5" or 16.76cm x 6.35cm, MD2
Operating Temperature	0°C to 55°C
Operating Voltage	+5V ±5%, 3.3V ±0.3V
System Architectures Supported	X86, IA64, SPARC, AMD64
Warranty	3 years, free advanced technical support, advanced replacement options
OS Support	<ul style="list-style-type: none"> Microsoft™ Windows® NT4.0, 2000 and Server 2003 Red Hat® Linux® 7.0, 7.1, 7.2, 8.0 (32- & 64-bit), 7.3, ASE 2.1 Caldera 3.1, 3.1.1 Solaris SPARC Novell® NetWare® 5.1 and 6.0 Suse® Linux® 7.2, 7.3, 8X (32- & 64-bit) Solaris X86 Open UNIX 8 SCO® OSR UNIX 5.0 SCO® UNIXWare 7.X
Compliances	CE, VCCI, Canada, C-Tick, FCC class B, UL 94VO

ORDERING INFORMATION

LSI20320-R-KIT	Individually packaged box with LSI20320-R HBA, one internal, five-drive LVD 68-pin, 42 inch cable with termination; CD with drivers, management utilities and user's guide, and optional low-profile bracket
LSI20320-R-B	Individually packaged box with LSI20320-R HBA and CD with drivers, management utilities and user's guide
LSI20320-R	Bulk packaged LSI20320-R HBA in multiples of 20
LSI20320L-R	Bulk packaged LSI20320L-R HBA in multiples of 20; low-profile bracket

THE ULTRA320 SCSI PERFORMANCE ADVANTAGE

Ultra320 SCSI is the seventh generation of SCSI I/O technology and is the most robust and powerful I/O solution on the market today. Arm yourself with a superior OEM-tested LSI Logic Host Bus Adapter today.

