

Product Brief

KEY FEATURES

- Eight internal 6Gb/s SATA+SAS ports
- Two Mini-SAS internal connectors (SFF-8087)
- RAID levels 0, 1, 5, 6,10, 50 and Single Disk
- LSISAS2108 6Gb/s RAID-on-Chip – 800MHz PowerPC[®]
- 512MB 800MHz DDRII cache memory
- Optional battery backup module with StorSave BBU
- Support for up to 96 SATA or SAS physical devices

KEY ADVANTAGES

- Superior Performance
- Maximum RAID 5 Reads: 2500MB/s
 Maximum RAID 5 Writes: 1100MB/s
- PCI Express 2.0 provides faster signaling for high- bandwidth applications
- Support for 3Gb/s and 6Gb/s, SAS and SATA, HDDs and SSDs
- StreamFusion+ improves multistream read and write performance

TYPICAL APPLICATIONS

- Video-On-Demand
- Video-Surveillance
- Video Creation + Editing
- Medical Imaging
- High-Performance Computing
- Web hosting
- Digital Content Archive and VTL
- Storage Appliance
- File, Web, Database, and Email Servers

3ware® SAS 9750-8i

Eight-Port 6Gb/s PCI Express[®] SATA+SAS RAID Controller Card

Unprecedented power in multi-stream RAID environments delivers high-performance and reliable data protection

Expand Your Horizon

LSI 3ware SATA+SAS RAID controllers provide a new level of reliability, availability, and performance to businesses that are facing storage challenges, particularly in sequential I/O intensive and multi-stream environments. This 3ware controller, great for inside-the-box connectivity, employs the latest in LSI RAID-on-Chip (ROC) technology and provides a higher standard of data protection and performance.

Offering data transfer rates of up to 6Gb/s per port, the latest generation of 3ware SATA+SAS controllers provide many new features while also ensuring investment protection for existing SATA and SAS implementations. LSI delivers unprecedented power in multi-stream RAID environments where performance, redundancy, and data protection are most important.

6Gb/s SAS Advantage

6Gb/s SAS is designed for backward compatibility with 3Gb/s SAS as well as with 3Gb/s SATA drives. In addition, 6Gb/s 3ware controllers deliver significant performance improvements in both read and write applications regardless of drive speed. StorSave™ strengthens array performance during peak usage by allowing the controller to use both controller cache and disk cache for RAID operations. Other new features of the 6Gb/s 3ware SATA+SAS controller cards include greater signal integrity using Decision Feedback Equalization, support for more sophisticated SAS topologies using Expander Self-discovery/Self-configuration, and additional safeguards to enhance data protection.

StreamFusion™+ Performance

3ware's advanced algorithms allow for optimized reads and writes in multi-stream environments. StreamFusion+ enables higher throughput even in degraded modes to deliver a superior standard of data protection and to boost performance. It is the result of countless hours of engineering aimed at delivering breakthroughs in high-load applications and providing enhanced features and functionality in all environments. Focusing on the latest technology trends and customer requirements, StreamFusion+ firmware reaffirms our commitment to customer success and industry leadership.



Remote Creation, Management and Monitoring with 3DM®2

3DM2 is powerful remote management software that simplifies the configuration, management and monitoring of 3ware storage arrays. 3DM2 provides an intuitive interface to remotely create, manage and monitor your 3ware RAID arrays and single disks in a robust, secure array management environment for your RAID protected data. Proven self-monitoring technologies and automatic notification services can maximize your storage availability while minimizing the pressure on system administrators.

Solution Provided Eight-port internal SATA-SAS solution for high-density servers and workstations using up to 96 drives with the flexibility to use both SAT and SAS hard drives and solid state drives (SDD) Physical Dimensions two profile (6x7 VL 32SG) Connectors Two Mini-SAS SFF 8087 internal connectors Device Support Up to 96 SATA and/or SAS hard drives and SDDs Host Bur Type selane PCI Express 2.0 Compliant Data Transfer Rates Up to 66Xb per port I/O Processor/SAS Controller LSISAS2108 RAID-on-Chip (ROC) Cache Memory S12M8 800MHz DDRI ISDRAM Battery Backup Unit LSISB8007, an intelligent battery backup module option that directly connects to the controller Key RAID Data Protection Features -SIMD levels 0, 1, 5, 6, 10, 50 and Single Disk -sapid RAID Recovery -SIMT Support for email notification -sapid RAID Recovery -Victor Express -Similar RAID Level NG 1, 5, 6, 10, 50 and Single Disk -sapid RAID Recovery -SIMT Support for years against failed -lip to 32 drives per unit support -used Balancing -used Singer Disk Activity Polices -SIMT Support for years against failed -lip to 32 drives per unit support -used Balancing -used Singer Disk Activity Polices -SIMT Support for years for SES 2, 0 via -used Singer Disk Activity Polices Operating Ventage -SiXM Support for years singe Acting Acting Activity Polices -Automatic mat		3ware SAS 9750-8i CONTROLLE	R CARD	
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Cache Memory512MB 800MHz DDR 115 DRAMBattery Backup UnitLSIBBU07, an intelligent battery backup module option that directly connects to the controllerKey RAID Data Protection FeaturesRAID levels 0, 1, 5, 6, 10, 50 and Single Disk • Rapid RAD Recovery • StreamFussion+ • Online Capacity Expansion (OCE) • Online RAID cevel Birgation (RLM) • StreamFussion+ • Single controller Multipathing (failover) • Single controller Multipathing (failover) • Single controller Multipathing (failover) • Single controller Multipathing (failover) • StreamFussion+ • Single controller Multipathing (failover) • Single controller Multipathin	Data Transfer Rates	Up to 6Gb/s per port		
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Key RAID Data Protection Features• RAID levels 0, 1, 5, 6, 10, 50 and Single Disk • Rapid RAID Recovery • StramFusion+ • Online RAID Level Migration (RLM) • Auto resume after loss of system power during array rebuild or reconstruction • Single controller Multipathing (failover) • Load Balancing • Load Balancing • Staggered drive spin-up support • Staggered drive spin-up support 	Cache Memory	512MB 800MHz DDR II SDRAM		
• Rapid RAD Recovery • StreamFusion+ • StreamFusion+ • StreamFusion+ • Online Capacity Expansion (OCE) • Online RAD Level Migration (RLM) • Up to 32 active units support • Up to 32 active units support • Support for greater than 2TB volumes • Support • Support for greater than 2TB volumes • Support • Automatic rebuild > Enclosure management for SES 2.0 via >>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	Battery Backup Unit	LSliBBU07, an intelligent battery backup module option that directly connects to the controller		
Operating Voltage+3.3VWarranty3 years, free advanced technical support, advanced replacement optionRegulatory CertificationsEN55022, EN55024, EN60950, EN 61000-3-2, EN 61000-3-3; FCC Class A, Class B; UL1950; UL; CSA C22.2; VCCI; RRL for MIC; BSMI; C-tickRAID Management3 ware* Disk Manager 2 (3DM*2) Command Line Utility (CLI) 3 ware BIOS Manager (3BM) SNMP supportOS SupportExtensive support includes Microsoft* Windows Vista*, Windows 7*, Windows Server* 2003/2008, Red Hat Linux*, SuSE Linux*, Fedora Core Linux*, FreeBSD*, and more. Vist the LSI download center for the most complete list of supported operating systems: Isi.com/support	Key RAID Data Protection Features	 Rapid RAID Recovery StreamFusion+ Online Capacity Expansion (OCE) Online RAID Level Migration (RLM) Auto resume after loss of system power during array rebuild or reconstruction Single controller Multipathing (failover) Load Balancing Variable stripe size support Fast initialization for quick array setup Background Task Activity Policies Multiple logical unit sizes and RAID levels on one card Bootable array support for greater fault tolerance of 	 SNMP support Emergency Flash Recovery protects against failed firmware upgrade Up to 32 active units support Up to 32 drives per unit support Support for greater than 2TB volumes S.M.A.R.T support Staggered drive spin-up support Drive insertion and removal notification Global Hot Spare Automatic rebuild - Enclosure management for SES 2.0 via l2C or in-band signaling 	
Warranty3 years, free advanced technical support, advanced replacement optionRegulatory CertificationsEN55022, EN55024, EN60950, EN 61000-3-2, EN 61000-3-3; FCC Class A, Class B; UL1950; UL; CSA C22.2; VCCI; RRL for MIC; BSMI; C-tickRAID Management3 ware® Disk Manager 2 (3DM®2) Command Line Utility (CLI) 3 ware BIOS Manager (3BM) 	Operating Temperature	Maximum ambient: 60°C (44.5°C w/iBBU)		
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BSMI; C-tick RAID Management 3ware* Disk Manager 2 (3DM*2) Command Line Utility (CLI) 3ware BIOS Manager (3BM) SNMP support OS Support Extensive support includes Microsoft* Windows Vista*, Windows 7*, Windows Server* 2003/2008, Red Hat Linux*, SuSE Linux*, Fedora Core Linux*, FreeBSD*, and more.	Warranty	3 years, free advanced technical support, advanced replacement option		
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Fedora Core Linux [®] , FreeBSD [®] , and more. Visit the LSI download center for the most complete list of supported operating systems: lsi.com/support	RAID Management	Command Line Utility (CLI) 3ware BIOS Manager (3BM)		
Ordering Information3ware SAS 9750-8i Single Pack P/N: LSI00214; 3ware SAS 9750-8i Kit P/N: LSI00213	OS Support	Fedora Core Linux [®] , FreeBSD [®] , and more.	Fedora Core Linux [®] , FreeBSD [®] , and more.	
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