

Data Sheet

LSI SAS9280-8e SAS RAID 5/6 controller

LSI MegaRAID® SAS9280-8e for external storage devices

The RAID concept (Redundant Array of Independent Disks) refers to several independent hard disks which form a large logical drive when switched together.

Redundancy information is calculated from several data blocks (except for RAID 0) and saved distributed to the individual hard disks. Your operating system no longer accesses the individual hard disks, but the array.

The actual objective of the RAID concept is to increase availability and prevent downtimes in the event of a hard disk failure. However, the theoretical security of the RAID concept is only as good as the RAID controller used. Benefit from the Fujitsu RAID controllers where technology, experience and practical implementation all ensure the security that your company needs in the event of an emergency.

SAS9280-8e SAS RAID 5/6 controller

The RAID controller MegaRAID® SAS 9280-8e is released in the current PRIMERGY server for connection of the ETERNUS JX40 or FibreCAT SX40. The RAID stack is based on the LSI MegaRAID® and offers a high data throughput performance, comprehensive error tolerance function and user-friendly management options. Management of the controller is integrated seamlessly into the FTS Management concept. All controller functions are supported by the FTS ServerView RAID Manager. The newest external enclosure designs are based on architectures that support both SATA and SAS hard

drives. The MegaRAID® SAS 9280-8e, with eight external SAS/SATA ports, is the ideal solution for configuring these external enclosures with either high-performance SAS drives or high-capacity SATA drives. This second-generation MegaRAID® adapter features an LSISAS2108 storage processor, the fastest DDR2 memory today, and a x8 PCI-Express host interface to provide the ultimate performance for external applications. Since system builders can use the MegaRAID® SAS 9280-8e to support one enclosure design that can be populated with either SAS or SATA hard drives, they can ultimately reduce the total cost of ownership, maximize the overall value of the investment, and reduce the number of supported versions. The RAID controller supports all of the important RAID levels including RAID 6 and 60. This is especially advantageous if a large number of low-priced SATA high-capacity hard disk drives are used for each RAID array.

Consistency testing and Patrol Read, sophisticated background service processes, which locate and repair faulty media blocks, provide unmatched data protection functions for business-critical applications. The RAID controller offers maximum I/O performance and the highest data throughput because it profits from a stable and tried-and-tested RAID firmware on the basis of LSI MegaRAID®. Due to the support of 64-bit addressing, a robust set of RAID features and demanding error tolerance functions this controller provides high RAID performance and data availability. Powerful online



Main Features	Benefits
<ul style="list-style-type: none"> ■ ETERNUS, FibreCAT Support 	<ul style="list-style-type: none"> ■ Supports up to 6 ETERNUS JX40 or FibreCAT SX40 (up to 144 hard disks)
<ul style="list-style-type: none"> ■ High-performance cache; RAID 6 Support 	<ul style="list-style-type: none"> ■ Significant increase in performance due to a 512MB controller cache. Meets highest security requirements without any data loss in case 2 disks per array fail
<ul style="list-style-type: none"> ■ User-friendly management options 	<ul style="list-style-type: none"> ■ Seamless integration of RAID management into the FTS management concept
<ul style="list-style-type: none"> ■ Optional battery-backup module 	<ul style="list-style-type: none"> ■ Data security through backup power supply to safeguard the cache, in case of power outages
<ul style="list-style-type: none"> ■ System integrators can use the controller in a standard housing design, which can be equipped with SAS hard disks 	<ul style="list-style-type: none"> ■ Reduction in total cost of ownership and maximization of the overall investment

Technical details

Technical details

Controller Silicon	RoC (RAID on Chip) LSI SAS2108	
Controller type	RAID 5/6 Ctrl.	
Operating system pre-installed	Information to released operating systems can be found in the server datasheets. Details can be found in the released drivers list on the support portal.	
Released drivers list link	http://support.ts.fujitsu.com/Download/Index.asp	
Number of ports	8 ports ext.	
Connector external	SSF-8088	
Data transfer rate up to	6 Gbit/s	
Bus type	PCIe 2.0	
Bus width	x8	
RAID Management	ServerView RAID Manager MegaCLI (command-line interface) WebBIOS	
Key RAID Data Protection Feature	RAID Fault Tolerance and Flexibility Features - RAID levels 0, 1, 5 and 6 - RAID spans 10, 50 and 60 - Online Capacity Expansion (OCE) (only supported with one logical drive per RAID array) - Online RAID level Migration (RLM) - Variable Stripe Size for all logical drives - Fast initialization for quick array setup - Foreground initialization for RAID 1, 5, 10, 50, 6 and 60 - Background initialization for RAID 1, 5, 10, 50, 6 and 60 - Advanced error recognition of drives (Patrol Read) - Hot spare drives configurable (global/dedicated & enclosure affinity) - Static Hot Spare support (copy back) - Independent cache administration method per logical drive - Write-Back/Write-Through - Read-Ahead: normal / advanced - Cached I/O / Direct I/O - Up to 64 logical drives per controller	
RAID level	0, 1, 10, 5, 50, 6, 60	
RAID cache backup unit	Optional BBU	
RAID controller notes	(based on LSI SAS2108)	
Interface technology	HDD SAS	
Order code	Height of bracket	Number of Connectors
S26361-F3593-E1	Full Height (FH)	2
Compliance		
Compliance notes	According to the corresponding system	
Compliance link	https://sp.ts.fujitsu.com/sites/certificates	

More information

Fujitsu products, solutions & services

In addition to Fujitsu with SAS9280-8e SAS RAID 5/6 controller, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products

www.fujitsu.com/global/products/computing/

Software

www.fujitsu.com/software/

More information

Learn more about FUJITSU Server SAS9280-8e SAS RAID 5/6 controller, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/primergy

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.

Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT. Please find further information at <http://www.fujitsu.com/global/about/environment>



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2019-11-01 WW-EN

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