FUJITSU

Data Sheet LSI MegaRAID SAS9285CV-8e SAS RAID 5/6 controller

LSI MegaRAID® SAS9285CV-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.

MegaRAID SAS9285CV-8e SAS RAID 5/6 controller

The MegaRAID® SAS9285CV-8e SAS RAID 5/6 controller is released in the current PRIMERGY server for connection of the ETERNUS JX40. The RAID stack is based on the LSI MegaRAID® and offers a high data throughput performance, a comprehensive error tolerance function and userfriendly management options. Management of the controller is integrated seamlessly into the Fujitsu Management concept. All controller functions are supported by the Fujitsu ServerView RAID Manager. The newest designs are based on architectures that support both SATA and SAS hard drives. The MegaRAID® SAS 9285-8e, with 8 external SAS/SATA ports, is the ideal solution for configuring external enclosures with either high-performance SAS drives or high-capacity SATA drives. The MegaRAID® SAS9285CV-8e SAS RAID 5/6 controller features an LSISAS2208 storage processor, the fastest DDRIII memory today, and an x8 PCI-Express host interface to provide the ultimate performance for external applications. The RAID controller supports all of the important RAID levels including RAID 6 and 60. The RAID controller offers maximum I/O performance and the highest data throughput, because it profits from stable and tried-and-tested RAID firmware on the basis of LSI MegaRAID[®]. The optional flash battery backup (FBU) module ensures the integrity of the data stored in the cache on the RAID controller in case of a power outage. In this event, the data will be copied to a non-volatile flash memory. The FBU provides a low-priced alternative to an uninterruptible power supply (UPS) and, when compared to battery backup up units (BBU), enables a long-term, secure store of data and better serviceability.



Main Features

- ETERNUS, FibreCAT Support
- High-performance cache; RAID 6 Support
- User-friendly management options
- Optional Flash Backup Unit (FBU)
- System integrators can use the controller in a standard housing design, which can be equipped with SAS hard disks

Benefits

- Supports up to 6 ETERNUS JX40 (up to 144 hard disks)
- Significant increase in performance due to a 1 GB controller cache. Meets highest security requirements without any data loss in case 2 disks per array fail
- Seamless integration of RAID management into the FTS management concept
- Ensures the integrity in case of power outage
- Long-term, secure store of data and better serviceability compared to BBU
- Reduction in total cost of ownership and maximization of the overall investment

Technical details

Technical details

Controller Silicon	RoC (RAID on Chip) LSI SAS2	2208				
Controller type	RAID 5/6 Ctrl.					
Certified or supported opera	ating Microsoft® Windows Server®	2012				
systems and virtualization s	-	[®] 2008				
	Microsoft [®] Windows Server [®]	[®] 2008 R2				
	Red Hat Enterprise Linux					
	Novell SUSE Linux Enterprise	e Server				
Number of ports	8 ports ext.					
Connector external	2x SSF-8088 (mini SAS)					
Number of external ports	8					
Data transfer rate up to	6 Gbit/s					
Bus type	PCIe 2.0					
Bus width	x8					
RAID Management	ServerView RAID Manager					
y - · · · · · ·	MegaCLI (command-line int	terface)				
	WebBIOS					
Key RAID Data Protection Fea	- RAID levels 0, 1, 5 and 6					
	- RAID spans 10, 50 and 60					
	- Online Capacity Expansion					
	- Online RAID level Migratio					
		- Auto resume after loss of system power during array rebuild or reconstruction (RLM)				
	- Fast initialization for quick					
		- Single controller multipathing (failover)				
		- Load Balancing				
		- Configurable stripe size up to 1MB				
		- Fast initialisation for quick array setuo				
		- Check consistency for background data integrity - Make Data Consistent (MDC)				
		- Patrol read for media scanning and repairing				
	- Up to 64 logical drives per	controller				
	- Up to 64 logical drives per - Up to 64TB LUN support DI	controller				
	- Up to 64 logical drives per - Up to 64TB LUN support DI - S.M.A.R.T support	controller DF-compliant				
	- Up to 64 logical drives per - Up to 64TB LUN support DI - S.M.A.R.T support	controller	:			
	- Up to 64 logical drives per - Up to 64TB LUN support DI - S.M.A.R.T support - Global and dedicated Hot S	controller DF-compliant	:			
	- Up to 64 logical drives per - Up to 64TB LUN support DI - S.M.A.R.T support - Global and dedicated Hot S - Automatic rebuild	controller DF-compliant	:			
	- Up to 64 logical drives per - Up to 64TB LUN support DI - S.M.A.R.T support - Global and dedicated Hot S - Automatic rebuild - Enclosure affinity	controller DF-compliant	:			
	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management 	controller DF-compliant	:			
RAID level	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) 	controller DF-compliant	<u>.</u>			
	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 	controller DF-compliant	·			
RAID controller cache size	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 	controller DF-compliant	: 			
RAID level RAID controller cache size RAID cache backup unit RAID controller notes	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB 	controller DF-compliant	: 			
RAID controller cache size RAID cache backup unit RAID controller notes	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU 	controller DF-compliant	·			
RAID controller cache size RAID cache backup unit RAID controller notes Interface technology	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) 	controller DF-compliant	Number of Connec-	Notes		
RAID controller cache size RAID cache backup unit RAID controller notes Interface technology Order code	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) SAS/SATA Product Name (FTS) 	controller DF-compliant Spare with Revertible Hot Spare support Height of bracket	Number of Connec- tors			
RAID controller cache size RAID cache backup unit RAID controller notes Interface technology Order code S26361-F3713-E1	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) SAS/SATA Product Name (FTS) RAID Ctrl SAS 6G 8Port ex 10 	controller DF-compliant Spare with Revertible Hot Spare suppor Height of bracket JB LSI Full Height (FH)	Number of Connec- tors 2	installed		
RAID controller cache size RAID cache backup unit RAID controller notes Interface technology Order code S26361-F3713-E1 S26361-F3713-E201	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) SAS/SATA Product Name (FTS) RAID Ctrl SAS 6G 8Port ex 10 	controller DF-compliant Spare with Revertible Hot Spare support Height of bracket B LSI Full Height (FH) B LSI Low Profile (LP)	Number of Connec- tors 2 2 2	installed installed		
RAID controller cache size RAID cache backup unit	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) SAS/SATA Product Name (FTS) RAID Ctrl SAS 6G 8Port ex 10 	controller DF-compliant Spare with Revertible Hot Spare support Height of bracket B LSI Full Height (FH) B LSI Low Profile (LP)	Number of Connec- tors 2	installed		
RAID controller cache size RAID cache backup unit RAID controller notes Interface technology Order code S26361-F3713-E1 S26361-F3713-E201	 Up to 64 logical drives per Up to 64TB LUN support DI S.M.A.R.T support Global and dedicated Hot S Automatic rebuild Enclosure affinity Enclosure management SES (inband) SGPIO (outband) 0, 1, 10, 5, 50, 6, 60 1 GB Optional FBU (based on LSI SAS2208) SAS/SATA Product Name (FTS) RAID Ctrl SAS 6G 8Port ex 10 	controller DF-compliant Spare with Revertible Hot Spare support Height of bracket B LSI Full Height (FH) B LSI Low Profile (LP)	Number of Connec- tors 2 2 2	installed installed		

Options

Order code	Product Name (FTS)	Notes
S26361-F3669-E155	RAID Ctrl FBU option with 55cm cable	installed - Super-capacitor incl. cable
S26361-F3669-E170	RAID Ctrl FBU option with 70cm cable	installed - Super-capacitor incl. cable
S26361-F3669-L110	FBU option with 25/55/70 cm cable	loose delivery - Super-capacitor incl. cables for all systems

Compliance

Compliance notes	According to the corresponding system
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu MegaRAID SAS9285CV-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/services/computing/

Software

www.fujitsu.com/software/

More information

Learn more about Fujitsu MegaRAID SAS9285CV-8e SAS RAID 5/6 controller, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. www.fujitsu.com/fts

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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