

# Data Sheet

## LSI MegaRAID SAS 9286CV-8e SAS RAID 5/6 controller

MegaRAID® SAS 9286CV-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 SAS 9286CV-8e SAS RAID 5/6 controller

The MegaRAID® SAS9286CV-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 user-friendly 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 9286CV-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® SAS9286CV-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 RAID controller already includes the TFM (Transportable Flash Module) and the control logic for optional Flash Backup Unit (FBU). This 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	Benefits
<ul style="list-style-type: none"> <li>■ ETERNUS JX40 Support</li> <li>■ High-performance cache; RAID 6 Support; PCIe 3.0 Support</li> </ul>	<ul style="list-style-type: none"> <li>■ Supports up to 4 ETERNUS JX40 (up to 96 hard disks)</li> <li>■ Significant increase in performance due to a 1 GB controller cache. Meets highest security requirements without any data loss in case 2 disks per RAID 6 array fail</li> </ul>
<ul style="list-style-type: none"> <li>■ User-friendly management options</li> </ul>	<ul style="list-style-type: none"> <li>■ Seamless integration of RAID management into the FTS management concept</li> </ul>
<ul style="list-style-type: none"> <li>■ TFM (Transportable Flash Module) already integrated containing the flash memory and control logic for optional Flash Backup Unit (FBU)</li> <li>■ System integrators can use the controller in a standard housing design, which can be equipped with SAS hard disks</li> </ul>	<ul style="list-style-type: none"> <li>■ Ensures the integrity in case of power outage</li> <li>■ Long-term, secure store of data and better serviceability compared to BBU</li> <li>■ Reduction in total cost of ownership and maximization of the overall investment</li> </ul>

# Technical details

## Technical details

<b>Controller Silicon</b>	RoC (RAID on Chip) LSI SAS2208
<b>Controller type</b>	RAID 5/6 Ctrl.
<b>Operating system pre-installed</b>	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.
<b>Released drivers list link</b>	<a href="http://support.ts.fujitsu.com/Download/Index.asp">http://support.ts.fujitsu.com/Download/Index.asp</a>
<b>Number of ports</b>	8 ports ext.
<b>Connector external</b>	2x SSF-8088 (mini SAS)
<b>Data transfer rate up to</b>	6 Gbit/s
<b>Bus type</b>	PCIe 3.0
<b>Bus width</b>	x8
<b>RAID Management</b>	ServerView RAID Manager MegaCLI (command-line interface) WebBIOS
<b>Key RAID Data Protection Feature</b>	<ul style="list-style-type: none"> <li>- RAID levels 0, 1, 5 and 6</li> <li>- RAID spans 10, 50 and 60</li> <li>- TFM (Transportable Flash Module) included</li> <li>- Online Capacity Expansion (OCE)</li> <li>- Online RAID level Migration (RLM)</li> <li>- Auto resume after loss of system power during array rebuild or reconstruction (RLM)</li> <li>- Single controller multipathing (failover)</li> <li>- Load Balancing</li> <li>- Configurable stripe size up to 1MB</li> <li>- Fast initialisation for quick array setuo</li> <li>- Check consistency for background data integrity - Make Data Consistent (MDC)</li> <li>- Patrol read for media scanning and repairing</li> <li>- Up to 64 logical drives per controller</li> <li>- DDF compliant Configuration on Disk (COD)</li> <li>- S.M.A.R.T support</li> <li>- Global and dedicated Hot Spare with Revertible Hot Spare support               <ul style="list-style-type: none"> <li>- Automatic rebuild</li> <li>- Enclosure affinity</li> </ul> </li> <li>- Enclosure management               <ul style="list-style-type: none"> <li>- SES (inband)</li> <li>- SGPIO</li> </ul> </li> </ul>
<b>RAID level</b>	0, 1, 10, 5, 50, 6, 60
<b>RAID cache backup unit</b>	Optional FBU
<b>RAID controller notes</b>	(based on LSI SAS2208)
<b>Interface technology</b>	SAS/SATA

Order code	Product Name	Height of bracket	Number of Connectors	Notes
MCX0JSR41	RAID Ctrl SAS 6G 8Port ex 1GB LP LSI V3	Low Profile (LP)	2	installed
S26361-F3713-E203	RAID Ctrl SAS 6G 8Port ex 1GB LP LSI V3	Low Profile (LP)	2	installed
S26361-F3713-L503	RAID Ctrl SAS 6G 8Port ex 1GB LSI V3	Full Height / Low Profile	2	loose delivery

Order code	Product Name	Notes
S26361-F3669-L110	FBU option with 25/55/70 cm cable	loose delivery - Super-capacitor incl. cables for all systems

## Compliance

<b>Compliance notes</b>	According to the corresponding system
<b>Compliance link</b>	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>

# More information

## Fujitsu products, solutions & services

In addition to Fujitsu with MegaRAID SAS 9286CV-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/](http://www.fujitsu.com/global/products/computing/)

### Software

[www.fujitsu.com/software/](http://www.fujitsu.com/software/)

## More information

Learn more about FUJITSU Server MegaRAID SAS 9286CV-8e SAS RAID 5/6 controller, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. [www.fujitsu.com/primergy](http://www.fujitsu.com/primergy)

## Fujitsu green policy innovation

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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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