FUJITSU

Data Sheet
FUJITSU RAID Controller - SAS 6Gb/s RAID 5/6 512MB (D2616)

based on LSI MegaRAID® for internal 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.

RAID Controller - SAS 6Gb/s RAID 5/6 512MB (D2616)
The 8 port Fujitsu D2616 SAS/SATA RAID controller sets new standards in the fields of speed and data security for internal server memories. With a data transfer of up to 6Gb/s per port the PRIMEGY Modular RAID Controller family is extended to included the latest technology.
The RAID stack is based on the LSI MegaRAID® and offers high data throughput, a 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.
6Gb/s SAS is designed for backward compatibility with 3Gb/s SAS as well as with 6Gb/s and 3Gb/s SATA hard drives. Regardless of the drive speed, 6Gb/s MegaRAID® controllers will deliver significant performance improvements in both read and write applications, as compared with their 3Gb/s predecessors. Other new features of the 6Gb/s SAS 2.0 controllers 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.
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 management service programs (FTS's ServerView RAID Manager), which are simple to operate and quick to install, provide the administrator with unparalleled flexibility and access to the arrays.
The RAID controller supports all of the important RAID levels including RAID 6 and 60. RAID 6 tolerates up to two simultaneous drive failures and thus also the option of managing non-recoverable media errors during rebuilds. This is especially advantageous if a large number of high-capacity hard disk drives are used for each RAID array.
Consistency testing and Patrol Read, sophisticated background service processes, which locate and

Main Features	Benefits
■ 6Gb/s SAS ports PCI Express® 2.0 x8	■ Connect up to 8 HDDs (in future also up to 20 HDDs)
■ LSISAS2108 6Gb/s RAID-on-Chip	■ RAID levels 0, 1, 5 and 6 for more data security
■ 512MB 800MHz DDRII cache memory	■ RAID spans 10, 50 and 60 for more data security
■ Optional Battery Backup Unit (BBU)	■ For data security in case of power failure
■ User Management Options	■ Seamless merging of the RAID management into system management

Technical details

Technical details

Controller Silicon	RoC (RAID on Chip) LSI SAS2108
Controller type	RAID 5/6 Ctrl.
Operating system	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 int.
Connector internal	SSF-8087
Data transfer rate up to	6 Gbit/s
Bus interface	PCIe 2.0 x8
Bus type	PCIe 2.0
Bus width	x8
RAID Management	ServerView RAID Manager MegaCLI (command-line interface) WebBIOS
Key RAID Data Protection Feature	RAID levels 0, 1, 5, and 6 RAID spans 10, 50 and 60 Online Capacity Expansion (OCE) Online RAID Level Migration (RLM) Auto resume after loss of system power during array rebuild or reconstruction Configurable stripe size up to 1MB Fast initialization for quick array setup Check Consistency for background data integrity - Make Data Consistent (MDC) Patrol read for media scanning and repairing 64 logical drive support Up to 64TB LUN support DDF-compliant Configuration on Disk (COD) S.M.A.R.T support Global and dedicated Hot Spare with Revertible Hot Spare support - Automatic rebuild - Enclosure affinity Enclosure management - SES (inband) - SGPIO (sideband)
RAID level	0, 1, 10, 5, 50, 6, 60
	0, 1, 5, 6
RAID cache backup unit	Optional BBU for selected systems
	Optional BBU
RAID controller notes	(based on LSI SAS2108)
Interface technology	SAS/SATA
	HDD SAS

Order code	Product Name	RAID controller cache size	Number of Connectors	Related product
S26361-F3554-E512	RAID Ctrl SAS 6G 5/6 512MB (D2616)	512 MB Cache	2	PRIMERGY Server
S26361-F3554-L512	RAID Ctrl SAS 6G 5/6 512MB (D2616)	512 MB Cache	2	PRIMERGY Server
S26361-F3976-E3	RAID Ctrl SAS 6G 5/6 512MB (D2616)	512 MB Cache	2	CELSIUS Workstation
S26361-F3976-L3	RAID Ctrl SAS 6G 5/6 512MB (D2616)		2	CELSIUS Workstation

Compliance

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

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu with RAID Controller - SAS 6Gb/s RAID 5/6 512MB (D2616), 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 RAID Controller - SAS 6Gb/s RAID 5/6 512MB (D2616), please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website. http://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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