FUJITSU

Data Sheet
FUJITSU PRAID EP540e

RAID Controller SAS 12Gbit/s 4GB cache based on LSI MegaRAID® 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.

PRAID EP540e
The Fujitsu RAID ControllerPRAID EP540e with 8 external SAS ports sets new speed and data security standards for external storage. It includes the latest PCI Express 3.0 and 12 Gb/s SAS 3.0 technology and is designed for configuring external storage enclosures with high-performance SAS hard disk drives (HDDs), high-capacity SATA HDDs or application-accelerating solid state drives (SSDs). The RAID stack is based on the LSI MegaRAID® and offers high data throughput, a comprehensive fault tolerance function and user-friendly management

options. Moreover, the Controller management is integrated seamlessly into the Fujitsu server management concept. All controller functions are supported by the Fujitsu ServerView RAID Manager. The PRAID EP540e offering up to double the data transfer rate of 6 Gb/s SAS solutions, 12 Gb/s SAS allows the SAS infrastructure to deliver bandwidth that can fully utilize that of PCI Express 3.0 with a single controller card. The EP540e delivers 72-bit DDR4 interface that drives 4 GB cache memory. Regardless of the drive speed, it delivers significant performance improvements in both read and write applications. Powerful online management service programs (Fujitsu 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 0, 1, 5, 6, 10, 50 and 60.

Main Features	Benefits
Number of supported drives	
■ ETERNUS JX40 Support	■ Supports up to 4 ETERNUS JX40 (up to 96 hard disks)
RAID levels	
■ RAID levels	■ RAID spans 10, 50 and 60 for more data security
Scalable performance	
■ 4GB cache	■ 4GB 2133MHz DDR4 cache memory; Significant increase in performance due to a 4 GB controller cache. Meets highest security requirements without any data loss in case 2 disks per RAID 6 array fail
Simplified management	
■ User-friendly management options	■ Seamless integration of RAID management

Technical details

Technical details

Controller Silicon	RoC (RAID on Chip) LSI SAS3516
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	2x SFF8644 (Mini-SAS HD)
Number of Connectors	8
Number of external ports	8
Data transfer rate up to	12 Gbit/s
Bus type	PCIe 3.0
Bus width	x8
RAID Management	ServerView RAID Manager StoreCLI (command-line interface) UEFI HII

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 (RLM)
	- Single controller multipathing (failover)
	- Load Balancing
	- Configurable stripe size up to 1MB
	- Fast initialisation for quick array setup
	- Check consistency for background data integrity
	- SSD support with SSD Guard™ technology
	- Patrol read for media scanning and repairing
	- Up to 64 logical drive 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 (outband)
	- Shielded state drive diagnostic technology

RAID level	0, 1, 10, 5, 50, 6, 60
RAID cache backup unit	Optional FBU
RAID controller notes	based on LSI SAS3516
Interface technology	SAS

Order code	Product Name	Height of bracket	RAID controller cache size	Number of Connectors
S26361-F4063-E204	PRAID EP540e LP	Low Profile (LP)	4 GB	2
S26361-F4063-E4	PRAID EP540e FH	Full Height (FH)	4 GB	2
S26361-F4063-L504	PRAID EP540e FH/LP	Full Height / Low Profile	4 GB	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 PRAID EP540e, 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 PRAID EP540e, 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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