

# Data Sheet

## Fujitsu PRAID EP420e

RAID Controller SAS/SATA 12Gbit/s 2GB cache based on LSI MegaRAID® for external storage devices

The RAID architecture (Redundant Array of Independent Disks) combines multiple storage devices, including hard drives and NVMe devices, into a single logical unit. Redundancy data is generated from data segments (barring RAID 0) and distributed across the devices. Consequently, operating systems interact with this collective array rather than the individual devices. The core purpose of RAID is to enhance data availability, reducing potential disruptions from storage devices failures. The effectiveness of a RAID setup largely depends on the RAID controller in use. Choose Fujitsu RAID controllers for a blend of modern technology and proven experience, providing the data protection that businesses need today.

**PRAID EP420e**

The Fujitsu RAID Controller PRAID EP420e with 8 external SAS and SATA 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 EP420e 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 EP420e delivers two 1.2 GHz Power PC processor cores and 72-bit DDRIII interface that drives 2 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. The Advanced Software Options in combination with Solid State Disks in front of HDD volumes can create high-capacity, high-performance controller cache pools, depending on the load profile. A free of charge test version is available at PRIMERGY-PM. Link: <http://docs.ts.fujitsu.com/dl.aspx?id=c816a64f-8b6d-47df-ba31-836874f08c07>



Main Features	Benefits
Number of supported drives <ul style="list-style-type: none"><li>■ ETERNUS JX40 Support</li></ul>	■ Supports up to 4 ETERNUS JX40 (up to 96 hard disks)
RAID levels <ul style="list-style-type: none"><li>■ RAID levels</li></ul>	■ RAID spans 10, 50 and 60 for more data security
Scalable performance <ul style="list-style-type: none"><li>■ 2GB cache</li></ul>	■ 2GB 1333MHz DDRIII cache memory
Simplified management <ul style="list-style-type: none"><li>■ User-friendly management options</li></ul>	■ Seamless merging of the RAID management into system management

# Technical details

## Technical details

Controller Silicon	RoC (RAID on Chip) LSI SAS3108
Adapter Type	RAID 5/6 Ctrl.
Released drivers list link	<a href="http://support.ts.fujitsu.com/Download/Index.asp">http://support.ts.fujitsu.com/Download/Index.asp</a>
Number of ports	8 ports ext.
Connector external	2x SFF8644 (Mini-SAS HD)
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) Ctrl + R
Key RAID Data Protection Feature	<ul style="list-style-type: none"> <li>- RAID levels 0, 1, 5 and 6</li> <li>- RAID spans 10, 50 and 60</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 setup</li> <li>- Check consistency for background data integrity</li> <li>- SSD support with SSD Guard™ technology</li> <li>- Patrol read for media scanning and repairing</li> <li>- Up to 64 logical drive support</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 (outband)</li> </ul> </li> <li>- Shielded state drive diagnostic technology</li> </ul>
RAID level	0, 1, 10, 5, 50, 6, 60
RAID cache backup unit	Optional FBU
RAID controller notes	based on LSI SAS3108
Interface technology	SAS/SATA

Order code	Product Name	Height of bracket	RAID controller cache size	Number of Connectors
S26361-F3847-L502	PRAID EP420e FH/LP	Full Height / Low Profile	2 GB	2

Options		
Order code	Product Name	Notes
S26361-F5243-E125	RAID Ctrl FBU option for PRAID EP4xx with 25cm cable	installed - Super-capacitor incl. cable
S26361-F5243-E200	TFM PRAID EP420i/e	installed - Transportable Flash Module - contains flash memory and control logic for Flash Backup Unit (FBU) – required for FBU option
S26361-F5243-L110	RAID Ctrl FBU option for PRAID EP4xx with 25cm, 55cm, 70cm cable	installed - Super-capacitor incl. cable

## Compliance

Compliance notes	According to the corresponding system
Compliance link	<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 PRAID EP420e, 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.

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

**More information**

Learn more about Fujitsu PRAID EP420e, 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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