

# Data Sheet

## FUJITSU JX40 S2 Subsystem

### High performance Direct Attached Storage (DAS) Subsystem

#### FUJITSU JX DAS Subsystem

Data centers today are evolving, adopting new technologies to meet the demands of digital transformation. This has contributed to an enormous increase in the amount of data created. As data grows, the storage requirements may exceed beyond the internal storage capacity of servers, affecting server performance. So the need to quickly and efficiently meet the growing server storage needs is more than ever.

Direct-attached storage (DAS) system provides a simple solution for storage expansion by directly attaching storage subsystems to the server via a host interface. FUJITSU JX DAS Subsystem offers a perfect DAS solution for PRIMERGY Servers that seamlessly extend server storage capacity in an easy and cost-effective way. FUJITSU JX DAS Subsystem provides fast time to value and are highly flexible with support for mixed storage device configurations. With support for fully redundant components and multiple RAID levels, it ensures a high level of availability and reliability.

#### JX40 S2

The FUJITSU JX40 S2 DAS Subsystem is a reliable and highly performant easy-to-use storage subsystem. It extends the storage capacity of FUJITSU PRIMERGY servers through a fastest 12 Gbit/s SAS connection. FUJITSU JX40 S2 subsystem provides high storage capacity with the flexibility to mix and match up to 24 x2.5" or 12 x3.5" SAS/ Nearline SAS HDDs or SSDs in a compact 2U enclosure. By cascading 4 enclosures, it can provide support up-to 96 x 2.5" or 48 x 3.5" disk drives with a maximum capacity of 737 TB (SSD with cascading). It is integrated with FUJITSU Software ServerView Suite for easy management and control. It is ideal for small and mid-range businesses looking for high performance, low footprint storage solutions. The most common workloads include storage virtualization, file servers, backup devices etc.



# Features & Benefits

Main Features	Benefits
<p>Scalable capacity</p> <ul style="list-style-type: none"><li>■ Direct Attached Storage (DAS) for PRIMERGY and other x86-based servers with 12 Gbit/s SAS connection</li></ul>	<ul style="list-style-type: none"><li>■ Up to 96x 2.5" / 48x 3.5" disk drives with a maximum storage capacity of 192 TB/576 TB (cascading); Expand storage capacity by up to 737 TB (SSD with cascading); Flexibility to mix and match different disk drive types - SAS / Nearline SAS HDDs and SSDs;</li><li>■ Scale as your storage demands grow</li></ul>
<p>Quality and reliability</p> <ul style="list-style-type: none"><li>■ Quality and reliability features</li></ul>	<ul style="list-style-type: none"><li>■ Hot-swap devices and hot-swap/redundant power supplies provide maximum uptime; Continuous operation during flexible drive replacements</li></ul>
<p>Flexible and modular</p> <ul style="list-style-type: none"><li>■ Flexible and modular components</li></ul>	<ul style="list-style-type: none"><li>■ Flexible and modular components enable easy deployment and management; Seamless integration with PRIMERGY Servers for storage expansion; Easy installation and control of the subsystem</li></ul>
<p>Simplified management</p> <ul style="list-style-type: none"><li>■ Simplified management features</li></ul>	<ul style="list-style-type: none"><li>■ Status of the components is signaled by LED displays and light-emitting diodes; Disk drive extension is completely managed by the server and can be used in all usage scenarios with certified PRIMERGY servers;</li><li>■ Integrated with standard FUJITSU server management ServerView Suite</li></ul>

# Technical details

Host Interfaces	SAS 3.0 I/O-module (expander)																																							
Connector Type	1 Port MiniSAS HD (SFF-8644)																																							
Supported PRIMERGY server controller	Fujitsu PRAID EP680e Fujitsu PRAID EP540e Fujitsu PRAID EP420e Fujitsu PSAS CP500e Fujitsu PSAS CP400e SAS Controller LSI MegaRAID SAS9285CV-8e SAS RAID 5/6 controller LSI MegaRAID SAS9286CV-8e SAS RAID 5/6 controller LSI SAS9200-8e 6Gb/s 8ext PCIe FH/LP SAS Controller																																							
Drive Type	2.5-inch, SAS (SED), 10,000 rpm (2.4TB / 1.8TB / 1.2TB / 600GB) 2.5-inch, SSD (SED), 10DWPD (1.6TB / 800GB / 400GB) 2.5-inch, SAS, 15,000 rpm (900GB / 600GB / 300GB) 2.5-inch, SAS, 10,000 rpm (2.4TB / 1.8TB / 1.2TB / 900GB / 600GB) 2.5-inch, Nearline SAS, 7,200 rpm (2TB / 1TB) 2.5-inch, SSD, 10DWPD (1.6TB / 800GB / 400GB) 2.5-inch, SSD, 3DWPD (6.4TB / 3.2TB / 1.6TB / 800GB) 2.5-inch, SSD, 1DWPD (15.36TB / 7.68TB / 3.84TB / 1.92TB / 960GB) 3.5-inch, Nearline SAS (SED), 7,200 rpm (16TB / 14TB / 12TB / 8TB / 6TB) 3.5-inch, Nearline SAS, 7,200 rpm (16TB / 14TB / 12TB / 8TB / 6TB / 4TB / 2TB)																																							
Drive interface	Serial Attached SCSI (12 Gbit/s)																																							
<b>Continuity management</b>																																								
Note	The product may in connection with and depending on the specific configuration include elements to support time- and performance-critical applications, however high availability (e.g., 99.9999%) and failsafe performance is not a standalone product feature. If and to the extent the product is to be used in such business-critical environments, it is within the sole responsibility of the user to set up the specific additional technical features (e.g., Storage Cluster), redundancies, and operational conditions as required to ensure such high availability or failsafe performance.																																							
<b>Management</b>																																								
Administration	Web-based graphical user interface																																							
Supported configurations	All major host operating systems, servers and business applications Detailed support matrix: <a href="http://ts.fujitsu.com/matrixep">http://ts.fujitsu.com/matrixep</a>																																							
<b>Installation specification</b>																																								
19" rackmount	Yes																																							
Dimension - per rack (W x D x H)	483 x 650 x 88 mm 19 x 25.6 x 3.5 inch																																							
Height Unit standard	2 U																																							
Height Unit Maximum	8 U																																							
Weight	35 kg (depending on the number of installed disks)																																							
Service Area	Front: 850 mm (33.5 inch) or more Rear: 850 mm (33.5 inch) or more																																							
Power voltage	AC 100 - 120 V / AC 200 - 240 V																																							
Power frequency	50 / 60 Hz																																							
Power supply efficiency	92% (80PLUS® GOLD)																																							
Notes	Efficiency and Power Factor for Power Supply Unit (JX40 S2 for 2.5inch/3.5inch) <table border="1"> <thead> <tr> <th>80PLUS®Efficiency</th> <th>Power factor</th> <th>Output</th> </tr> </thead> <tbody> <tr> <td>20% (*1)</td> <td>50% (*1)</td> <td>100% (*1)</td> </tr> <tr> <td>50% (*1)</td> <td>90.2%</td> <td>0.975</td> </tr> <tr> <td>80% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>90% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>92% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>95% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>98% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>100% (*1)</td> <td>92.5%</td> <td>0.975</td> </tr> <tr> <td>GOLD (*2)</td> <td>89.3%</td> <td>89.3%</td> </tr> <tr> <td>GOLD (*2)</td> <td>92.5%</td> <td>92.5%</td> </tr> <tr> <td>GOLD (*2)</td> <td>90.2%</td> <td>90.2%</td> </tr> <tr> <td>GOLD (*2)</td> <td>0.975</td> <td>0.975</td> </tr> </tbody> </table> <p>*1: Rated load against the rated output of the PSU. *2: 80PLUS® GOLD certified power supply units are used. 80PLUS® is a power saving program for electrical equipment promoted by the 80PLUS® program.</p>	80PLUS®Efficiency	Power factor	Output	20% (*1)	50% (*1)	100% (*1)	50% (*1)	90.2%	0.975	80% (*1)	92.5%	0.975	90% (*1)	92.5%	0.975	92% (*1)	92.5%	0.975	95% (*1)	92.5%	0.975	98% (*1)	92.5%	0.975	100% (*1)	92.5%	0.975	GOLD (*2)	89.3%	89.3%	GOLD (*2)	92.5%	92.5%	GOLD (*2)	90.2%	90.2%	GOLD (*2)	0.975	0.975
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**Environment**

Temperature (not operating)	0 - 50 °C
Temperature (operating)	10 - 40 °C (50 - 104 °F)
Humidity (operating)	20 - 80 % (relative humidity, non-condensing)
Humidity (not operating)	8 - 80 % (relative humidity, non-condensing)
Altitude	3,000 m (10,000 ft.)
Sound pressure (LpAm)	43.5 dB(A)
Sound power (LWAd; 1B = 10dB)	6.0 B
Noise notes	measured according to ISO7779 and declared according to ISO9296
Operating environment	FTS 04230 – Guideline for Data Center (installation specification)
Operating environment link	<a href="http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe">http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe</a>

**Compliance**

Product safety	UL 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1
Electromagnetic Compatibility	CNS 13438, FCC Part-15 Class A, ICES 003 Class A, EN 55022 Class A, VCCI Class A, AS/NZS CISPR 22 Class A
Electromagnetic Immunity	EN 55024
CE certification	2004/108/EC, 2006/95/EC, 2011/65/EC
Approvals	CB, CE, C-Tick, FCC, VCCI
Environmental compliance	RoHS compliant, WEEE compliant
Compliance notes	There is general compliance with the safety/EMC requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
Compliance link	<a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a>

**Warranty**

Warranty period	3 years
Warranty type	Onsite warranty
Warranty Terms & Conditions	<a href="http://www.fujitsu.com/support">www.fujitsu.com/support</a>
<b>Product Support - the perfect extension</b>	
Support Pack Options	Available in major metropolitan areas: 9x5, Next Business Day Onsite Response Time 9x5, 4h Onsite Response Time (depending on country) 24x7, 4h Onsite Response Time (depending on country)
Recommended Service	24x7, Onsite Response Time: 4h
Service Lifecycle	at least 5 years after shipment, for details see <a href="https://support.ts.fujitsu.com/">https://support.ts.fujitsu.com/</a>
Spare Parts availability	5 years
Service Weblink	<a href="http://www.fujitsu.com/services/product-services">www.fujitsu.com/services/product-services</a>

### Fujitsu products, solutions & services

In addition to FUJITSU JX40 S2, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

#### Fujitsu Portfolio

Built 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 offerings. This allows customers to select 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 JX40 S2, 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

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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### Disclaimer

Please note that the data sheet reflects the technical specification with the maximum selection of components for the named system and not the detailed scope of delivery. The scope of delivery is defined by the selection of components at the time of ordering. The product was developed for normal business use.

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