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 offers 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 high storage device capacity in a 4U Enclosure. It can support up to 60 x 3.5 inch disk drives, delivering a capacity of up to 720 Terabytes (2.5 inch devices can be installed in the same slot as the 3.5 inch devices using 3.5 inch mounting frames that are provided). A total capacity of 1,440 Terabytes can be delivered by attaching up to 2 enclosures directly to a server. It is integrated with FUJITSU Software ServerView Suite for easy management and control. It is ideal for enterprises looking for high capacity storage solution including virtualization, Microsoft Exchange server or HPC workloads etc.
## Features & Benefits

<table>
<thead>
<tr>
<th>Main Features</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Performance and flexibility</strong></td>
<td></td>
</tr>
<tr>
<td>- Direct Attached Storage (DAS) for PRIMERGY and other x86 industry-standard servers with 12 Gbit/s SAS connection</td>
<td>- Reliable storage capacity for biggest data volume</td>
</tr>
<tr>
<td>- Up to 120 large capacity Nearline SAS storage devices, expand storage capacity by up to 1,440 Terabyte</td>
<td>- Flexible configuration options: capacity optimized or speed-optimized</td>
</tr>
<tr>
<td><strong>Quality and reliability</strong></td>
<td></td>
</tr>
<tr>
<td>- Components like hot-plug disk drives and power supply modules can be replaced while the server is running</td>
<td>- Hot-swap devices and hot-swap/redundant power supplies provide maximum uptime</td>
</tr>
<tr>
<td>- The redundant hot-plug power supply units can be connected with phase redundancy via separate power lines</td>
<td>- Continuous operation during flexible disk drive replacements</td>
</tr>
<tr>
<td>- Optimum and secure cooling of the drives is ensured by two independent fans</td>
<td></td>
</tr>
<tr>
<td><strong>Ease of use</strong></td>
<td></td>
</tr>
<tr>
<td>- Flexible and modular components for easy deployment and management</td>
<td>- Seamless Integration with PRIMERGY Servers</td>
</tr>
<tr>
<td>- Status of the component is signalized by LC displays and LEDs</td>
<td>- Easy installation and control of the subsystem</td>
</tr>
<tr>
<td>- Disk drive extension is completely managed by the server (connected to HBA/RAID card installed into servers) and can be used in all usage scenarios with certified PRIMERGY servers</td>
<td></td>
</tr>
<tr>
<td>- Integrated with standard FUJITSU Software ServerView Suite</td>
<td></td>
</tr>
</tbody>
</table>
Technical details

Supported RAID levels
0, 1, 1+0, 5, 5+0, 6, 6+0

Host Interfaces
SAS 3.0 I/O-module (expander)

Connector Type
1 Port MiniSAS HD (SFF-8644)

Supported PRIMEnergy server controller
Fujitsu PSAS CP400e SAS Controller
Fujitsu PRAlD EP420e

Maximum Storage Capacity
1,440 (Cascading) TB

Drive Type
3.5-inch, Nearline SAS, 7,200 rpm (12 TB / 10 TB / 8 TB / 6 TB / 4 TB / 2 TB)
3.5-inch, SAS, 10,000 rpm (1.2 TB / 900 GB)
2.5-inch, SAS, 15,000 rpm (600 GB / 300 GB)
2.5-inch, SSD (1.92 TB / 960 GB / 1.6 TB / 800 GB / 400 GB)

Drive interface
Serial Attached SCSI (12 Gbit/s)

Installation specification

19" rackmount
Yes

Dimension - per rack (W x D x H)
482 x 980 x 176 mm
19 x 38.6 x 6.9 inch

Height Unit standard
4 U

Height Unit Maximum
8 U

Weight
max. 100 kg (depending on the number of installed disks)

Service Area
Front: 800 mm (31.5 inch) or more
Rear: 800 mm (31.5 inch) or more

Power voltage
AC 100 - 120 V / AC 200 - 240 V

Power frequency
50 / 60 Hz

Power supply efficiency
92 % (80 PLUS gold)

Maximum Power Consumption
AC 100 - 120 V: 1300 W (1320 VA)
AC 200 - 240 V: 1300 W (1320 VA)

Power phase
Single (phase redundancy possible)

Environment

Maximum Heat Generation
AC 100 - 120 V: 4700: kJ/h
AC 200 - 240 V: 4700: kJ/h

Temperature (not operating)
0 - 50 °C

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

Compliance

Product safety
UL 60950-1, CSA-C22.2 No. 60950-1, EN 60950-1, IEC 60950-1

Electromagnetic Compatibility
CNS 1343B, 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

Approvals
CB, CE, C-Tick, EAC, FCC, VCCI

Environmental compliance
RoHS compliant, WEEE compliant
## Compliance

<table>
<thead>
<tr>
<th>Compliance notes</th>
<th>There is general compliance with the safety 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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance link</td>
<td><a href="https://sp.ts.fujitsu.com/sites/certificates">https://sp.ts.fujitsu.com/sites/certificates</a></td>
</tr>
</tbody>
</table>

## Warranty

<table>
<thead>
<tr>
<th>Warranty period</th>
<th>1 year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warranty type</td>
<td>Onsite warranty</td>
</tr>
</tbody>
</table>

## Product Related Services - the perfect extension

<table>
<thead>
<tr>
<th>Support Pack Options</th>
<th>Available in major business areas:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9x5, Next Business Day Onsite Response Time</td>
</tr>
<tr>
<td></td>
<td>9x5, 4h Onsite Response Time (depending on country)</td>
</tr>
<tr>
<td></td>
<td>24x7, 4h Onsite Response Time (depending on country)</td>
</tr>
<tr>
<td>Recommended Service</td>
<td>24x7, Onsite Response Time: 4h</td>
</tr>
<tr>
<td>Service Lifecycle</td>
<td>5 years after end of product life</td>
</tr>
<tr>
<td>Service Weblink</td>
<td><a href="http://www.fujitsu.com/services/product-services">www.fujitsu.com/services/product-services</a></td>
</tr>
</tbody>
</table>
Fujitsu OPTIMIZATION Services

In addition to FUJITSU JX60 S2 DAS Subsystem, 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/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu JX60 S2 DAS Subsystem, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
www.fujitsu.com/products

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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