

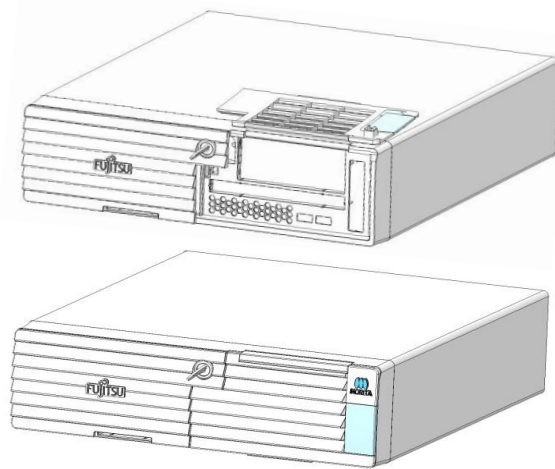
PRIMERGY TX1320 M4  
small form factor  
Tower server



black chassis version



white chassis version has door  
instead of top cover



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	describes base unit of TX1320 M4
2		describes rack mount kits and services
3	CPU	Order code and Infos of processors
4	RAM	DDR4 System memory (RAM) and memory modes
5	GFX	Graphics-, Grid-cards, GPU and Xeon Co processors
6	HD_cage	HDD cage kits
7	RAID	SAS / RAID Controller and components
8	ODD	optical disk drives (DVD, DVD-rw, Blu ray)
9	Backup	RDX drive
10	HD_SSD	Storage drives - SAS/SATA SSD & HDD
11		LAN Components
12	LAN_FC_IB	Fibre Channel Controller (n.a. for TX1320 M4)
13		Infiniband Controller (n.a. for TX1320 M4)
14	PSU	Power supply units, power cables, country specific opt.
15	USB_devices	Keyboards, Mice, USB devices
16	others	System Management, ATD, RS232 port, TPM module

# Instructions

This document contains basic product and configuration information that supports you in more complicated configurations.

In any case we recommend to use the PC-/SystemArchitect to make sure, that you configure a valid system.

This System configurator is divided into several chapters. They are identical to the current price list and PC-/SystemArchitect.

Please follow this document step by step from the top to the bottom

## Chapter xx - description of chapter

Text fields with grey color offer extra information for related topics (e.g prerequisites, technical back ground, configuration rules, limitations, ...)

<b>S26361-F4610-E2</b>
<b>S26361-F4610-L3</b>
PLAN 2x1Gb Ethern. Controller
i350-T2 chip (based on Intel Powerville) offers 2x1Gb RJ45 connectors
PCIe Gen2 x4 full height card
max. 6x per system

<-- order code E-part (bold) --

<-- order code L-part (bold)

<-- "name" of this part

<--description of this part, in same cases as well description of content

<--requires a free PCIe slot --> means total amount of PCIe slots reduced

<--indicates how often this part can be configured in the related Server

### For further information see:

Link to datasheet:

[http:// xxx](http://xxx)

[http://ts.fujitsu.com/products/standard\\_servers/index.html](http://ts.fujitsu.com/products/standard_servers/index.html)

(internet)

[https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy\\_config/Pages/default.aspx](https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx)

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Fujitsu is providing the content of this document with very high accuracy. In case you identify a mistake, we would kindly encourage you to inform us. We kindly ask for understanding, that errors still may occur and that Fujitsu may change this document without notice



The PRIMERGY TX1320 M4 Server is available in 3 versions:

**Start**

**choose base unit**

- Easy change base unit for 2x 3.5" non hot plug HDD w/std. PSU
- hot plug base base unit for 4x/8x 2.5" hot plug HDD w/std. PSU
- hot plug base base unit for 4x/8x 2.5" hot plug HDD w/red. PSU  
in case of 4x 2.5" the drives may be NVMe

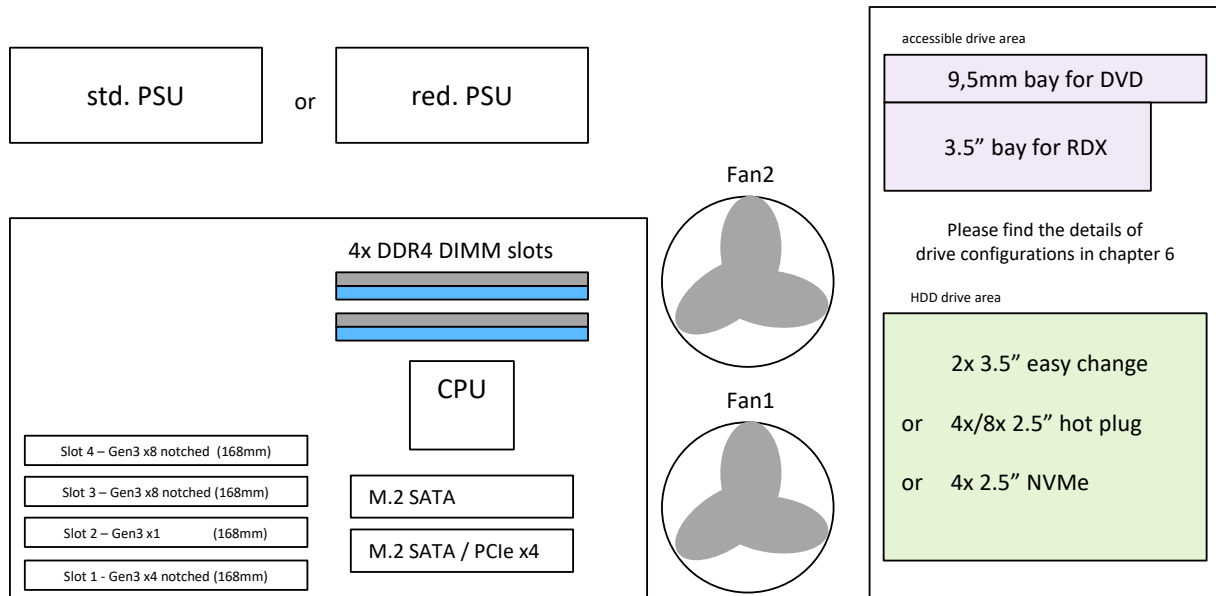
**choose backup option**

- Independent from the base unit you can configure an RDX backup drive

**choose optical drive**

- Select 9,5mm DVD or Blu Ray drive

Please find all details, possible and released configurations in the chapter 6 - "HD\_cage"



**Chapter 1 - base unit**

**Start**

**Base Unit**

For the PRIMERGY TX 1320 M4 you can choose between different base units:

- a version using a standard PSU and supporting up to 2x 3.5" easy change (non hot plug) SATA HDDs
- a version using either a standard or an hot plug PSU and supporting up to 4x/8x 2.5" hot plug SAS/SATA HDDs or 4x 2.5" hot plug SAS/SATA HDDs and 4x 2.5" hot plug NVMe HDDs

**HDD Extension Box**

The base units supporting hot plug HDDs may be extended to 8x 2.5" HDD by using the optional 2nd HDD backplane.

**Server Management**

iRMC S5 (integrated Remote Management Controller) on-board with dedicated (or shared) 10/100/1000 Service LAN-port and integrated graphics controller. With the integrated onboard indicators and controls You can highlight easily failed components via LEDs. The LEDs can be displayed during service even without mains connection by simply pressing the "indicate CSS" button.

**Platform**

Fujitsu Systemboard D3673 made in Germany based on Chipset Intel® C246

- > cables for connection to the modular or onboard controllers included
- > Celeron, Pention, Core i3 or Xeon E3-1200 v6 series CPUs

**Slots:**

- Slot 4 PCIe-Gen3 x8 (notched) - supports modular RAID functions
- Slot 3 PCIe-Gen3 x8 (notched) - preferred slot for Grafics Card option
- Slot 2 PCIe-Gen3 x4 (notched)
- Slot 1 PCIe-Gen3 x1

All PCIe slots are low profile (lp) with supporting cards w/ max 168mm length

**System RAM DDR4-2666 MHz**

4 memory slots for max. 64GB DDR4 RAM.

**LAN**

2x Intel i210 Gigabit Ethernet

**Software**

\* ServerView Suite Software incl. ServerStart, ServerBooks, Management Software and Updates

**Connectivity**

Interfaces at rear side

- 1x RS-232-C (serial, 9 pin)
- 2 LAN RJ45 (1 Gbit)
- 1 service LAN RJ45 (1 Gbit)
- 1x VGA (15 pins)
- 2x USB 3.1 Gen2 & 4x USB 2.0 no USB wakeup

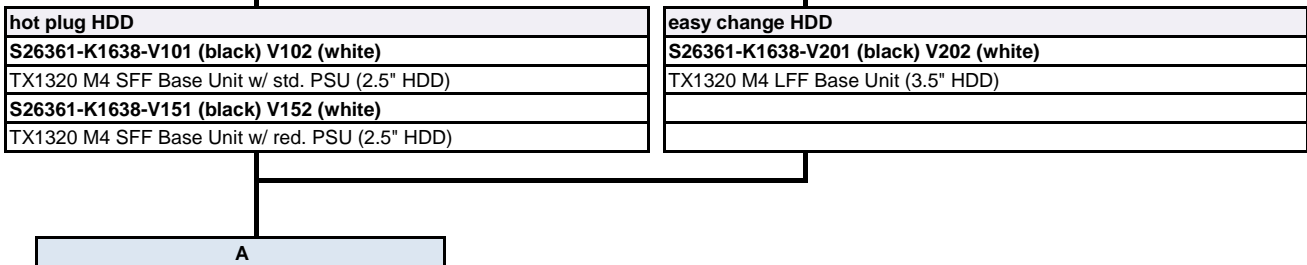
Interfaces at front

2x USB 3.1 Gen1 no USB wakeup

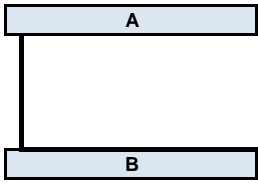
Interfaces internal

- 2x internal USB 3.1 Gen1 connectors for backup devices
- 2x M.2 (80mm and 110mm)modules: 1x SATA; 1x NVMe/SATA +PCIe x4
- 1x Mini SAS/SATA (4x SATA 6G)

For converting the base units S26361-K1591-V101 or V102 from standard PSU to redundant PSU use this conversion kit: S26361-F3699-L10



**Chapter 2 - Rack architecture**



Rackmount not supported by TX1320 M4

**Chapter 3 - CPU**

**B**

One of following CPU's has to be selected for an orderable basic unit  
CPU's with order code S26361-F4029-E3\*\* do not support RHEL 7.5 and SLES15 GA

<b>Celeron (Coffee Lake)</b>	
64-bit Intel Celeron processor supporting DDR4 @ 2.400MHz	
Celeron G4900 2C/2T 3.1GHz 2MB 2400MHz 54W	S26361-F4029-E204
Celeron G4930 2C/2T 3.2GHz 2MB 2400MHz 54W	S26361-F4029-E304

On special release request only  
On special release request only

<b>Pentium Coffee Lake</b>	
64-bit Intel Pentium processor supporting DDR4 @ 2.400MHz	
Pentium Gold G5400 2C/4T 3.7GHz 4MB 2400MHz 54W	S26361-F4029-E205
Pentium Gold G5420 2C/4T 3.8GHz 4MB 2400MHz 54W	S26361-F4029-E305

<b>Core i3 (Coffee Lake)</b>	
64-bit Intel Core i3 processor supporting DDR4 @ 2.400MHz	
Core i3-8100 4C/4T 3.6GHz 6MB 2400MHz 65W	S26361-F4029-E208
Core i3-9100 4C/4T 3.6GHz 6MB 2400MHz Turbo 65W	S26361-F4029-E309

<b>Xeon E3-12xx v6 (Kaby Lake-E)</b>	
64-bit Intel Xeon processor supporting DDR4 @ 2.666MHz	
Xeon E-2124 4C/4T 3.3GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E224
Xeon E-2124G 4C/4T 3.4GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E225
Xeon E-2126G 6C/12T 3.3GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E226
Xeon E-2134 4C/8T 3.5GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E234
Xeon E-2136 6C/6T 3.3GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E236
Xeon E-2144G 4C/8T 3.6GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E244
Xeon E-2146G 6C/12T 3.5GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E246
Xeon E-2174G 4C/8T 3.8GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E274
Xeon E-2176G 6C/12T 3.7GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E276
Xeon E-2186G 6C/12T 3.8GHz 12MB 2666MHz Turbo 95W	S26361-F4029-E286

<b>Xeon E3-22xx v6 (Kaby Lake-E Refresh)</b>	
64-bit Intel Xeon processor supporting DDR4 @ 2.666MHz	
Xeon E-2224 4C/4T 3.4GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E324
Xeon E-2224G 4C/4T 3.5GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E325
Xeon E-2226G 6C/6T 3.4GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E326
Xeon E-2234 4C/8T 3.6GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E334
Xeon E-2236 6C/12T 3.4GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E336
Xeon E-2244G 4C/8T 3.8GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E344
Xeon E-2246G 6C/12T 3.6GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E346
Xeon E-2274G 4C/8T 4.0GHz 8MB 2666MHz Turbo 83W	S26361-F4029-E374
Xeon E-2276G 6C/12T 3.8GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E376
Xeon E-2278G 8C/16T 3.4GHz 16MB 2666MHz Turbo 80W	S26361-F4029-E378
Xeon E-2286G 6C/12T 4.0GHz 12MB 2666MHz Turbo 95W	S26361-F4029-E386
Xeon E-2288G 8C/16T 3.7GHz 16MB 2666MHz Turbo 95W	S26361-F4029-E388

**C**

**Chapter 4 - DDR4 System memory**

**C**

There are 2 memory banks with 2 DIMM slots each.

**Single channel memory configuration allow maximum flexibility:**

Additional memory can be configured as single memory modules.

**Dual channel memory configurations for maximum performance:**

For optimum performance memory has to be configured in pairs of memory modules with identical size.

max. 128GB unbuffered DDR4 RAM for UDIMMs with 32GB moduls @ 2.666 MT/s

**Note\*\*:** Memory is not included in the base unit and has to be configured separately, min 1x.

Unbuffered Memory (UDIMM) with ECC support			
4GB (1x4GB) 1Rx8 DDR4-2666 U ECC	Single rank	S26361-F3909-E714	S26361-F3909-L714
8GB (1x8GB) 1Rx8 DDR4-2666 U ECC	Single rank	S26361-F3909-E715	S26361-F3909-L715
16GB (1x16GB) 2Rx8 DDR4-2666 U ECC	Dual rank	S26361-F3909-E716	S26361-F3909-L716
32GB (1x32GB) 2Rx8 DDR4-2666 U ECC	Dual rank	S26361-F3909-E717	S26361-F3909-L717

On special release request only

**D**



**Chapter 5 - Graphics cards**

D

<b>S26361-F4066-E401</b>
<b>S26361-F4066-L401</b>
PGRA CP NVIDIA Quadro P400
NVIDIA Quadro
2GB PCIe 3.0 x16
Connectors: 3x Mini-DP
no cable kits included cable must be ordered seperately
Triple head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS
Low profile bracket
max. 1x per system

The high end optional NVIDIA Quadro P400 graphic card offers triple head operation and full 3D video support.  
The cables kit is not included. It is necessary to order cable kit.  
**Remote Video direction via iRMC must be disabled.**

<b>S26361-F4066-E11</b>
<b>S26361-F4066-L11</b>
MiniDP-DP ADAPTER
max. 3x per card

<b>S26361-F4066-E12</b>
<b>S26361-F4066-L12</b>
DP-VGA ADAPTER
max. 3x per card

<b>S26361-F4066-E13</b>
<b>S26361-F4066-L13</b>
DP-DVI ADAPTER
max. 3x per card

E

**Chapter 6 - HD drive cage**

**E**

**Definition:**

TX1320 M4 is available in 3 basic versions:

1. Base unit for 2x 3.5" non hot plug SATA HDD w/ std. PSU
2. Base base unit for 4x/8x 2.5" hot plug SAS/SATA HDD w/ std. PSU
3. Base base unit for 4x/8x 2.5" hot plug SAS/SATA HDD w/ hot plug PSU

In case of 2.5" SAS/SATA base unit you can configure an 2nd HDD Backplane for a total of 8x 2,5" hot plug HDD  
The base unit using hot plug PSU may be updated with 4x 2.5" NVMe for a total of 8x 2,5" hot plug HDD (4x SAS/SATA + 4x NVMe)

1. for SFF SAS/SATA base units only
2. RAID controller required

1. for SFF SAS/SATA base unit w/ hot plug PSU only
2. RAID controller PRAID EP540i NVMe or PRAID EP580i NVMe required  
EP540i NVMe = S26361-F4042-E224, EP580i NVMe = S26361-F4042-E228

<b>S26361-F5535-E4</b>
<b>S26361-F5535-L4</b>
2nd HDD Backplae
offers 4x SFF (2,5") hot plug HDD
max. 1x per system

<b>S26361-F5535-E5</b>
<b>S26361-F5535-L5</b>
NVMe extension kit
adds 4x PCIe SSD bays to 4x SFF (2,5") hot plug HDD bays
max. 1x per system

**F**

**Chapter 7 - SAS / RAID Controller**

F

onboard SATA controller with SW-RAID

<b>onboard controller for SATA HDD or SSD drives</b>				
4 ports 3, 6Gb/s SATA HDD/	based on Intel chipset	No Cache	SW-RAID 0, 1	1x onboard

internal HBA and RAID controller, no 2nd Level cache

<b>internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives</b>				
<b>PRAID CP400i RAID Contr.</b>	No Cache	RAID 0, 1, 1E, 10, 5, 50	1x	S26361-F3842-E1 S26361-F3842-L501
<b>PSAS CP400i HBA SAS Contr.</b>	No Cache	HBA + RAID 0, 1	1x	S26361-F3842-E2 S26361-F3842-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008				
<b>internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives</b>				
<b>PRAID CP500i RAID Contr.</b>	No Cache	RAID 0, 1, 10, 5, 50	1x	S26361-F5791-E251 S26361-F5791-L551
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408				
<b>PSAS CP503i HBA SAS Contr.</b>	No Cache	HBA, no RAID	1x	S26361-F5792-E253 S26361-F5792-L553
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality				

<b>internal RAID / HBA controllers for SAS, SATA HDD or SSD drives</b>				
<b>PSAS CP 2100-8i LP</b>	No Cache	HBA + RAID 0, 1, 10, 5	1x	S26361-F5888-E202 S26361-F5888-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 3.0 x8 (int.) slot				

**PRAID CP400i / EP400i / EP420i / EP420i for SafeStore / PRAID CP500i and PRAID EP540i NVMe / EP580i NVMe cannot be mixed**

**PSAS CP 2100-8i and PRAID EP540i NVMe / EP580i NVMe cannot be mixed**

internal RAID controller with 2nd Level cache 1GB, 2GB

<b>internal drive RAID / SAS, SATA controllers with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options</b>				
<b>PRAID EP400i RAID Contr.</b>	1GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F5243-E11 S26361-F5243-L11
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3108				
optional Licence Activation Key, a free of charge test licence is available at PRIMERGY-PM, FastPath is included in Controller FW				
<b>RAID Advanced SW Option CacheCade @Broadcom:</b>	SSD-cache-based HDD acceleration		1x	S26361-F5243-E670 S26361-F5243-L670
optional Transportable Flash module (TFM) and Flash Backup Unit (FBU), both components required				
<b>TFM module for 1GB Cache</b>	NV-RAM & FBU control logic		1x	S26361-F5243-E100 S26361-F5243-L100
<b>FBU Option for PRAID EP4xx:</b>	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length		1x	S26361-F5243-E155 S26361-F5243-L110
<b>PRAID EP420i RAID Contr.</b>	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F5243-E12 S26361-F5243-L12
<b>PRAID EP420i for SafeStore R. Cog</b>	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F5243-E14* S26361-F5243-L14*
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3108				
optional Licence Activation Key, a free of charge test licence is available at PRIMERGY-PM, FastPath is included in Controller FW				
<b>RAID Advanced SW Option CacheCade @Broadcom:</b>	SSD-cache-based HDD acceleration		1x	S26361-F5243-E670 S26361-F5243-L670
optional TFM module and Flash Backup Unit (FBU), both components required				
<b>TFM module for 2GB Cache</b>	NV-RAM & FBU control logic		1x	S26361-F5243-E200 S26361-F5243-L200
<b>FBU Option for PRAID EP4xx:</b>	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length		1x	S26361-F5243-E155 S26361-F5243-L110

internal NVMe, SAS, SATA RAID controller with 2nd Level cache 2GB, 4GB, 8GB

<b>internal drive RAID / SAS controllers for E91 and SAS, SATA HDD or SSD drives</b>				
<b>PRAID EP520i RAID Contr. LP</b>	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F4042-E202 S26361-F4042-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander <b>(NVMe support for EP520i on special release for this controller in this system)</b> includes FastPath and SafeStore Advanced SW-Licence requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516				
<b>PRAID EP540i RAID Contr. LP</b>	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F4042-E204 S26361-F4042-L504
<b>PRAID EP580i RAID Contr. LP</b>	8GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F4042-E208 S26361-F4042-L508
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, based on LSI SAS3516, without expander, up to 16 SAS/SATA devices are supported. (the configuration for 4 x 4 NVMe drives require a different order number, please see below) includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 (FYI: S26361-F4042-E204 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)				
<b>PRAID EP540i RAID NVMe LP</b>	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F4042-E224 S26361-F4042-L504
<b>PRAID EP580i RAID NVMe LP</b>	8GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	S26361-F4042-E228 S26361-F4042-L508
16 ports for NVMe PCIe SSD, based on LSI SAS3516 up to 4 x 4 NVMe devices are supported. (the configuration for SAS/SATA only require a different order number, please see above) includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 (FYI: S26361-F4042-E214 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)				
optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included				
<b>FBU Option for PRAID EP5xx:</b>	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length		1x	S26361-F4042-E155 S26361-F4042-L110

**maximum number of internal RAID + HBA (See also pictures on folder base / HD cage):**  
standard config: max. 1  
for NVMe support only: max. 2x controller: one PRAID EP540/80i NVMe for 4x NVMe, onboard or second RAID, HBA controller for SAS/SATA

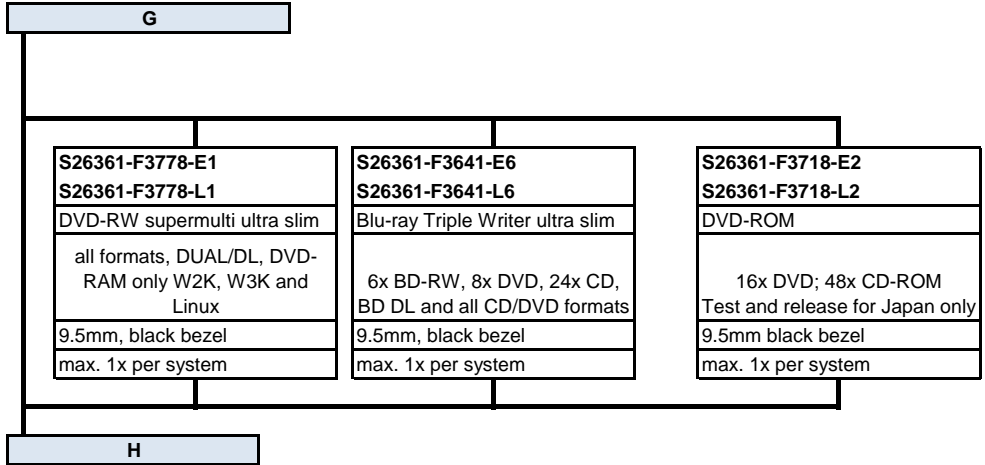
up to 1x FBU can be integrated per System,  
for PRAID EP540i / 80i and NVMe drives, no FBU is allowed (performance)  
for PRAID EP540i / 80i and NVMe drives, RHEL 7.5 is not supported

**Expander configurations:** Use PRAID EPxxx for optimal performance,  
PRAID CP400i / CP500i is not released for expander configurations

**Advanced SW options:** simultaneous operation of SafeStore + FastPath is supported  
\* It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality

G

**Chapter 8 - ODD optical disk drives**



**Chapter 9 - backup drives**

TX1320 M3 is available in three basic versions:  
 1. Base unit for 2x 3.5" non hot plug HDD w/ std. PSU  
 2. Base base unit for 4x/8x 2.5" hot plug HDD w/ std. PSU  
 3. Base base unit for 4x/8x 2.5" hot plug HDD w/ hot plug PSU  
 In any case an RDX backup drive may be configured.

**H**

<b>RDX drive</b>			
RDX drive is not including Cartridge.			
RDX Drive cage (w/o cartridges)	USB 3.0, 3.5 inch / Half Height	1x	S26361-F3750-E5 S26361-F3750-L5

<b>RDX</b>			
RDX Cartridge			
RDX Cartridge 500GB		-	S26361-F3857-L500
RDX Cartridge 1TB		-	S26361-F3857-L600
RDX Cartridge 2TB		-	S26361-F3857-L700
RDX Cartridge 4TB		-	S26361-F3857-L900

**I**

**Chapter 10 - storage drives**

**I**

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.  
SAS drives require a dedicated SAS / RAID Controller  
Hard Disk Sector Format Information:  
512n HDD: 512 byte sectors on the drive media.  
512e (e=emulation) HDD: 4K physical sectors on the drive media with 512 byte logical configuration.  
512e HDD Disk Drives: VMware 6.0 or earlier is not supported.

When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.  
<https://kb.vmware.com/kb/2145210>  
DWPD: Drive Writes Per Day over 5 years.  
SED (=Self Encrypting Drives) require either a RAID controller with ®SafeStore (SED) support or an HBA and in addition a software instance, supporting SED Key Management.  
It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality.

HDD Classes:  
Economic (ECO) SATA: Entry Class Drives.  
Business-Critical (BC) -SATA=Nearline SATA Enterprise Drives / 7.2Krpm, SATA 6G.  
Business-Critical (BC) -SAS=Nearline SAS Enterprise Drives / 7.2Krpm, SAS 12G .  
Mission-Critical (MC)=SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.

Warranty:  
SSD and SATA DOM have a built-in Wear-Out indicator. In this case the warranty for such a component, as an exception to the system warranty, is restricted to the time period until the indicator reaches the exhaust level.

**2.5" (SFF) SATA SSD**

<b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Micron 5300 MAX</b> drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		<b>S26361-F5776-E240</b>	<b>S26361-F5776-L240</b>
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		<b>S26361-F5776-E480</b>	<b>S26361-F5776-L480</b>
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		<b>S26361-F5776-E960</b>	<b>S26361-F5776-L960</b>
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		<b>S26361-F5776-E192</b>	<b>S26361-F5776-L192</b>
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,5		<b>S26361-F5776-E384</b>	<b>S26361-F5776-L384</b>

max. 4x/8x - depending on base unit & configuration

<b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Samsung PM897</b> drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	as soon as available	<b>S26361-F5938-E480</b>	<b>S26361-F5938-L480</b>
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	as soon as available	<b>S26361-F5938-E960</b>	<b>S26361-F5938-L960</b>
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	as soon as available	<b>S26361-F5938-E192</b>	<b>S26361-F5938-L192</b>
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	as soon as available	<b>S26361-F5938-E384</b>	<b>S26361-F5938-L384</b>

max. 4x/8x - depending on base unit & configuration

<b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Samsung SM883 or SM863a</b> drives * 3.84TB is SM883 only							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,6		<b>S26361-F5675-E240</b>	<b>S26361-F5675-L240</b>
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,6		<b>S26361-F5675-E480</b>	<b>S26361-F5675-L480</b>
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		<b>S26361-F5588-E960</b>	<b>S26361-F5588-L960</b>
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		<b>S26361-F5588-E192</b>	<b>S26361-F5588-L192</b>
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,6		<b>S26361-F5588-E384</b>	<b>S26361-F5588-L384</b>

max. 4x/8x - depending on base unit & configuration

<b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Micron 5300 PRO</b> drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5783-E240	S26361-F5783-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5783-E480	S26361-F5783-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5783-E960	S26361-F5783-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5783-E192	S26361-F5783-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,2		S26361-F5783-E384	S26361-F5783-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,6		S26361-F5783-E768	S26361-F5783-L768
max. 4x/8x - depending on base unit & configuration							

<b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Samsung PM893</b> drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E240	S26361-F5946-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E480	S26361-F5946-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E960	S26361-F5946-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E192	S26361-F5946-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E384	S26361-F5946-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	as soon as available	S26361-F5946-E768	S26361-F5946-L768
max. 4x/8x - depending on base unit & configuration							

EMEIA only

<b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Samsung PM883</b> drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E240	S26361-F5802-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E480	S26361-F5802-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E960	S26361-F5802-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E192	S26361-F5802-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E384	S26361-F5802-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E768	S26361-F5802-L768
max. 4x/8x - depending on base unit & configuration							

as long as stock available

<b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b>							
based on <b>Micron 5100 PRO</b> or <b>5200 ECO</b> * 240GB is 5100, others are 5200							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,4		S26361-F5701-E240	S26361-F5701-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,9		S26361-F5701-E480	S26361-F5701-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,9		S26361-F5701-E960	S26361-F5701-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,9		S26361-F5701-E192	S26361-F5701-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		S26361-F5701-E384	S26361-F5701-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,5		S26361-F5701-E768	S26361-F5701-L768
max. 4x/8x - depending on base unit & configuration							

2.5" (SFF) Hard drives

<b>HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n		<b>S26361-F5531-E530</b>	<b>S26361-F5531-L530</b>
600GB	15 000	SAS 12Gb/s	512n		<b>S26361-F5531-E560</b>	<b>S26361-F5531-L560</b>
900GB	15 000	SAS 12Gb/s	512n		<b>S26361-F5531-E590</b>	<b>S26361-F5531-L590</b>
max. 4x/8x - depending on base unit & configuration						

<b>HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n		<b>S26361-F5550-E130</b>	<b>S26361-F5550-L130</b>
600GB	10 000	SAS 12Gb/s	512n		<b>S26361-F5550-E160</b>	<b>S26361-F5550-L160</b>
1.2TB	10 000	SAS 12Gb/s	512n		<b>S26361-F5550-E112</b>	<b>S26361-F5550-L112</b>
300GB	10 000	SAS 12Gb/s	512n	SED	<b>S26361-F5581-E130</b>	<b>S26361-F5581-L130</b>
600GB	10 000	SAS 12Gb/s	512n	SED	<b>S26361-F5581-E160</b>	<b>S26361-F5581-L160</b>
1.2TB	10 000	SAS 12Gb/s	512n	SED	<b>S26361-F5581-E112</b>	<b>S26361-F5581-L112</b>
max. 4x/8x - depending on base unit & configuration						

<b>HDD SAS 2.5" 10K 512e (SFF) Enterprise Mission Critical with hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
600GB	10 000	SAS 12Gb/s	512e		<b>S26361-F5543-E160</b>	<b>S26361-F5543-L160</b>
1.2TB	10 000	SAS 12Gb/s	512e		<b>S26361-F5543-E112</b>	<b>S26361-F5543-L112</b>
1.8TB	10 000	SAS 12Gb/s	512e		<b>S26361-F5543-E118</b>	<b>S26361-F5543-L118</b>
2.4TB	10 000	SAS 12Gb/s	512e		<b>S26361-F5543-E124</b>	<b>S26361-F5543-L124</b>
1.8TB	10 000	SAS 12Gb/s	512e	SED	<b>S26361-F5582-E118</b>	<b>S26361-F5582-L118</b>
2.4TB	10 000	SAS 12Gb/s	512e	SED	<b>S26361-F5582-E124</b>	<b>S26361-F5582-L124</b>
max. 4x/8x - depending on base unit & configuration						

J



J

<b>HDD SATA 2.5" 7.2K 512n (SFF) Enterprise Business Critical with hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		<b>S26361-F3956-E100</b>	<b>S26361-F3956-L100</b>
2TB	7 200	SATA 6Gb/s	512n		<b>S26361-F3956-E200</b>	<b>S26361-F3956-L200</b>

max. 4x/8x - depending on base unit & configuration

The HDDs not released with PRAID EP5x0i (S26361-F4042-E202/E204/E208)

<b>HDD SATA 2.5" 7.2K 512e (SFF) Enterprise Business Critical with hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512e		<b>S26361-F3907-E100</b>	<b>S26361-F3907-L100</b>
2TB	7 200	SATA 6Gb/s	512e		<b>S26361-F3907-E200</b>	<b>S26361-F3907-L200</b>

max. 4x/8x - depending on base unit & configuration

**3.5" NON hot plug Drives for internal bays**

<b>HDD SATA 3.5" 7.2K 512n (LFF) Enterprise Business Critical with NON hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		<b>S26361-F5637-E100</b>	<b>S26361-F5637-L100</b>
2TB	7 200	SATA 6Gb/s	512n		<b>S26361-F5637-E200</b>	<b>S26361-F5637-L200</b>
4TB	7 200	SATA 6Gb/s	512n		<b>S26361-F5637-E400</b>	<b>S26361-F5637-L400</b>

max. 2x - depending on base unit & configuration

<b>HDD SATA 3.5" 7.2K 512e (LFF) Enterprise Business Critical with NON hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
6TB	7 200	SATA 6Gb/s	512e		<b>S26361-F5639-E600</b>	<b>S26361-F5639-L600</b>
8TB	7 200	SATA 6Gb/s	512e		<b>S26361-F5639-E800</b>	<b>S26361-F5639-L800</b>

max. 2x - depending on base unit & configuration

ECO SATA drives cannot be mixed with SAS HDD drives in same RAID Controller

<b>HDD SATA 3.5" 7.2K (LFF) ECO with NON hot plug/hot replace tray</b>						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512e		<b>S26361-F3952-E100</b>	<b>S26361-F3952-L100</b>

max. 2x - depending on base unit & configuration

**M.2 SATA SSD**

<b>SSD SATA M.2 drive for booting, non hot-plug, for VMware ESXi</b>						
Capacity	Formfactor	Interface		Category	order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s		Boot	<b>S26361-F5816-E240</b>	<b>S26361-F5816-L240</b>

M.2 drive is designed for use as a VMware ESXi boot drive.  
2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.  
max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware ESXi is only supported.

M.2 drive for VMware ESXi and for other OSs cannot be mixed

<b>SSD SATA M.2 drive for booting, non hot-plug</b>						
Capacity	Formfactor	Interface	DWPD	Category	order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s	1,5	Boot	<b>S26361-F5787-E240</b>	<b>S26361-F5787-L240</b>
480GB	M.2	SATA 6Gb/s	1,5	Boot	<b>S26361-F5787-E480</b>	<b>S26361-F5787-L480</b>

M.2 drive is designed for use as a boot drive with the Endurance Spec. above.  
2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.  
max. 2x per Server; connector located on Motherboard (please see folder "description"). VMware is not supported.

Dual microSD

Dual microSD and M.2 drive cannot be mixed

**Dual microSD Enterprise for booting, non hot-plug, for VMware ESXi**

Capacity	Formfactor	Interface	Category	order code E-part	order code L-part
64GB	microSD	USB	Boot	<b>S26361-F4045-E64</b>	<b>S26361-F4045-L64</b>

Dual microSD is designed for use as a VMware ESXi boot drive. Only the standardly equipped microSD are supported.  
Dual microSD offers Hardware-mirrored (RAID1) flash boot device for VMware ESXi, which cannot be supported by M.2.  
vSAN can be booted in case ESXi host has 512 GB of memory or less. Even in case 512 GB or more, if vSAN is 6.5 or later, it can be booted by resizing the coredump partition on ESXi hosts. For more information, see the VMware knowledge base article at <http://kb.vmware.com/kb/2147881>.  
max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware ESXi is only supported.

2.5" (SFF) PCIe-SSD

2.5" PCIe-SSDs require a RAID Controller  
RAID Controller : PRAID EP540i/580i

**PCIe-SSD 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray**

based on Intel DC P4510 drives

Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1,0	<b>S26361-F5738-E100</b>	<b>S26361-F5738-L100</b>
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,7	<b>S26361-F5738-E200</b>	<b>S26361-F5738-L200</b>
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,8	<b>S26361-F5738-E400</b>	<b>S26361-F5738-L400</b>

max. 4x - depending on base unit & configuration

K

**Chapter 11 - Communications / Ethernet Network Components**

**L**

PRIMERGY TX1320 M4 provides default Intel LAN on Motherboard:

- 2x Controller Intel I210 1000BASE-T, provides
- 2x RJ45 ports, 10M/100M/1G autonegotiate for 10M/100M/1G capable Ethernet network infrastructure
- Wake-On LAN supported on both ports
- PXE and iSCSI boot support
- Maximum one port can be configured as a **shared** Management LAN port

**Network PCIe Adapters**

**1Gb/100Mb Ethernet network components**

<b>1Gb Ethernet adapters with RJ45 interface (1000BASE-T)</b>				
PLAN AP 1x1Gbit Cu Intel I210-T1 (Retail)	2x	1 port, 1Gbit Intel	<b>S26361-F5959-E201</b>	<b>S26361-F5959-L501</b>
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	2x	2 port, Intel, PCIe Gen2 x4	<b>S26361-F4610-E202</b>	<b>S26361-F4610-L502</b>
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	2x	4 port, Intel, PCIe Gen2 x4	<b>S26361-F4610-E204</b>	<b>S26361-F4610-L504</b>
max. 2 adapters per system				

**10/1Gb Ethernet network components**

**10GBASE-T**

<b>10/1Gb Ethernet network adapters with RJ45 interface (10GBASE-T)</b>				
Dual speed support, auto-sense: supports 10Gbps and 1Gbps line rate per-port. Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Intel adapters don't provide any.				
PLAN EP QL41112 2x10GBASE-T LP	2x	2 port NIC with Universal RDMA, <b>Cavium QL41112HLRJ</b> <b>*cannot be selected with Intel X710 series.</b>	<b>S26361-F4068-E202</b>	<b>S26361-F4068-L502</b>
PLAN EP QL41134 4x10GBASE-T LP	2x	4 port NIC with Universal RDMA, <b>Cavium QL41134HLRJ</b> <b>*cannot be selected with Intel X710 series.</b>	<b>S26361-F4068-E204</b>	<b>S26361-F4068-L504</b>
PLAN EP X550-T2 2x10GBASE-T LP	2x	2 port NIC, <b>Intel X550-T2</b>	<b>S26361-F3948-E202</b>	<b>S26361-F3948-L502</b>
PLAN EP X710-T2L 2X 10GBASE-T PCIe (Retail)	2x	2 port 10 Gbit Intel <b>*cannot be selected with Marvell QL411xx series.</b>	<b>S26361-F5960-E202</b>	<b>S26361-F5960-L502</b>
PLAN EP X710-T4 4x10GBASE-T LP	2x	4 port NIC, <b>Intel X710-T4</b> <b>*cannot be selected with Marvell QL411xx series.</b>	<b>S26361-F3948-E204</b>	<b>S26361-F3948-L504</b>
max. 4 adapters per server system				

**10G SFP+**

**10/1Gb Ethernet network adapters with SFP+ cage. Adapter ships with empty cages.**

Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port. Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules. Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Intel adapters don't provide any.

For Converged Network Adapter features such as iSCSI, iSCSI Offload, FCoE please select the PCNA EP QL41262 from the Converged Ethernet network adapters section

PLAN EP QL41132 2x10Gb SFP+ LP	2x	2 port NIC with Universal RDMA, <b>Cavium</b> QL41132HLCU <b>*cannot be selected with Intel X710 series.</b>	S26361-F4069-E202	S26361-F4069-L502
PLAN EP X710-DA2 2x10Gb SFP+ LP	2x	2 port NIC, <b>Intel</b> X710-DA2 <b>*cannot be selected with Marvell QL411xx series.</b>	S26361-F3640-E202	S26361-F3640-L502

**Optional, 10Gb SFP+ optical transceiver module, select one per cage**

SFP+ Optical Transceiver 10G Single Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Finisar</b>	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Finisar</b>	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Intel</b>	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Intel</b>	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	2x	Enablement for System Architect	<b>V:TWX CONNECTOR-PY</b>	
SFP+ active Twinax Cable Fujitsu	2x	Customized length. Best fitting length selected at rack factory installation.	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x		S26361-F3873-E500	

Max. 2x SFP+, DAC, or Twinax Cable per adapter

max. 4 adapters per server system

**10Gb Converged Ethernet network components**

**25Gb Converged Ethernet network components**

**10G SFP+**

**25G SFP28**

**10/25Gb Converged Ethernet network adapters with SFP+/SFP28 cages. Adapter ships with empty cages.**

10G: Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port. Dual rate 10G/1G transceivers will work at 10G line rate only.  
25G: Each cage consumes 1x optical SFP28 transceiver per port, or 1x 25G DAC cable per port. 25G transceivers will work at 25G line rate only.

For Converged Network Adapter features such as iSCSI, iSCSI Offload, FCoE please select the PCNA EP QL41262. Other adapters do not support CNA features. iSCSI and iSCSI Offload support will not be included in the initial hardware release. If you wish to get support for FCoE please submit a Release Request with the desired PRIMERGY server system configuration SAR/XLSX file attachment as described in the process.

PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP	2x	2 port <b>CNA</b> with FCoE, iSCSI Offload, Universal RDMA, <b>Cavium</b>	S26361-F4070-E202	S26361-F4070-L502
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Optional, 10Gb SFP+ optical transceiver module, one per cage or port				
SFP+ Optical Transceiver 10G Single Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Finisar</b>	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Finisar</b>	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Intel</b>	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Intel</b>	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	2x	Enablement for System Architect	<b>V:TWX CONNECTOR-PY</b>	
SFP+ active Twinax Cable Fujitsu	2x	Customized length. Best fitting length selected at rack factory installation.	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x		S26361-F3873-E500	
<i>Max. 2x SFP+, DAC, or Twinax Cable per adapter</i>				
Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.				
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	MMF / SR SFP28 module, Mellanox. Max reach supported 100m	S26361-F4054-E701	S26361-F4054-L701
SFP28 Optical Transceiver 25G SR E25GSFP28SR LC	2x	MMF / SR SFP28 module, Intel. Max reach supported 30m	S26361-F4055-E701	S26361-F4055-L701
"Virtual Connector" for DAC/AOC cable	2x	Enablement for System Architect	<b>V:DAC/AOC-CONNECTOR-25</b>	
25G DAC - Brocade	2x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors.		
25G DAC - Cisco	2x			
25G DAC - Intel	2x			
25G AOC - Brocade	2x	AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors.		
25G AOC - Cisco	2x			
25G AOC - Intel	2x			
<i>Max. 2x SFP28, 25G DAC, or 25G AOC per adapter</i>				
max. 2x adapters per system				

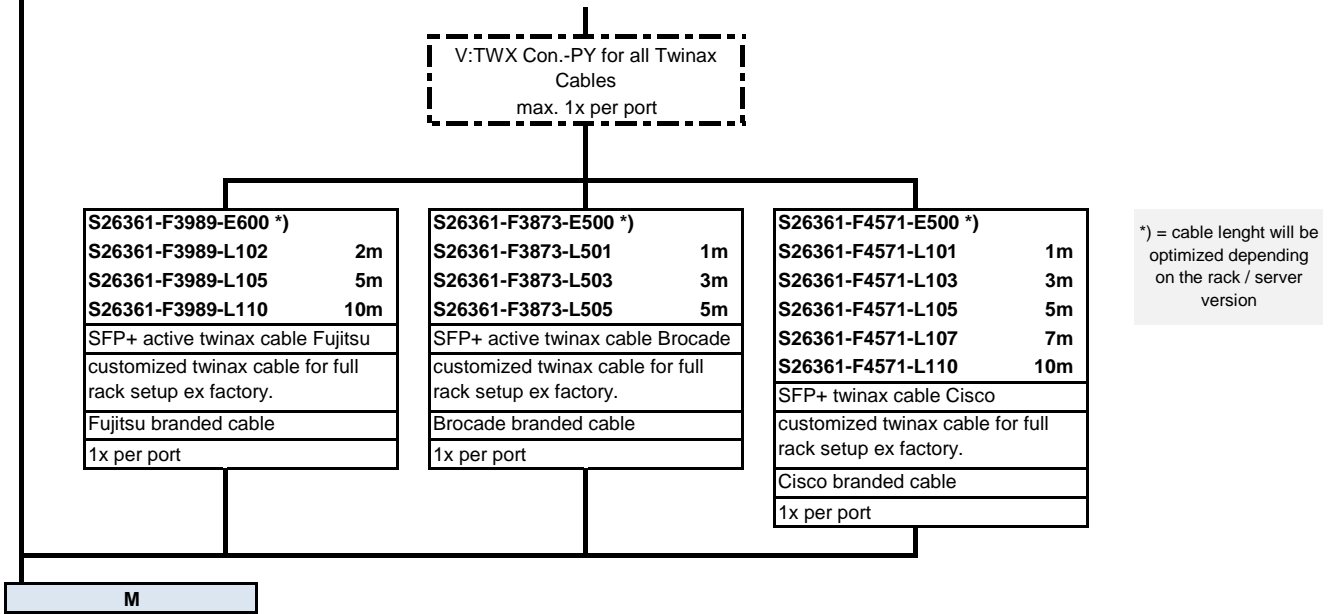
25/10Gb Ethernet network components

10G SFP+

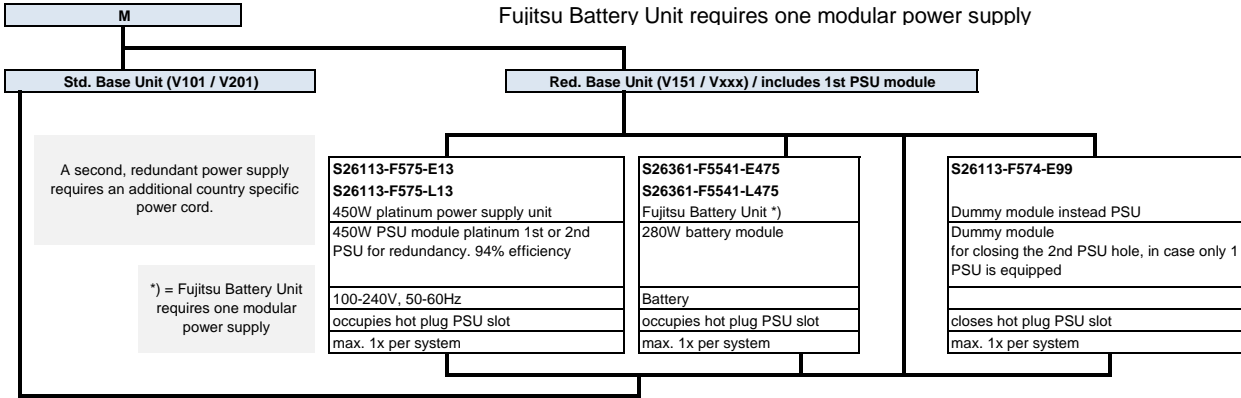
25G SFP28

25/10Gb Ethernet network adapter with 2x SFP28 cages (requires twinax cables or optical transceiver SFP28 or SFP+ modules)				
Dual speed support, auto-sense - supports 25Gbps and 10Gbps line rate per-port. Your choice of optical transceiver decides about the actual line rate.				
Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Mellanox adapters provide RoCE RDMA only. Intel adapters don't provide any.				
PLAN EP QL41212 25Gb 2p SFP28 LP	2x	2 port NIC with Universal RDMA: iWARP & RoCE, <b>Cavium</b> QL41212	S26361-F4056-E202	S26361-F4056-L502
PLAN EP MCX4-LX 25Gb 2p SFP28 LP	2x	2 port NIC with RDMA: RoCE, <b>Mellanox</b> ConnectX4-LX	S26361-F4054-E202	S26361-F4054-L502
PLAN EP XXV710-DA2 2x25Gb LP	2x	2 Port NIC, <b>Intel</b> XXV710-DA2	S26361-F4055-E202	S26361-F4055-L502
Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.				
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	MMF / SR SFP28 module, Mellanox. Max reach supported 100m	S26361-F4054-E701	S26361-F4054-L701
SFP28 Optical Transceiver 25G SR E25GSFP28SR LC	2x	MMF / SR SFP28 module, Intel. Max reach supported 30m	S26361-F4055-E701	S26361-F4055-L701
"Virtual Connector" for DAC/AOC cable	2x	Enablement for System Architect	<b>V:DAC/AOC-CONNECTOR-25</b>	
25G DAC - Brocade	2x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors.		
25G DAC - Cisco	2x			
25G DAC - Intel	2x			
25G AOC - Brocade	2x	AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors.		
25G AOC - Cisco	2x			
25G AOC - Intel	2x			
<i>Max. 2x SFP28, 25G DAC, or 25G AOC per adapter</i>				

Optional, 10Gb SFP+ optical transceiver module, each cage consumes one.				
SFP+ Optical Transceiver 10G Single Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Finisar</b>	<b>S26361-F3986-E3</b>	<b>S26361-F3986-L3</b>
SFP+ Optical Transceiver 10G Single Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Finisar</b>	<b>S26361-F3986-E4</b>	<b>S26361-F3986-L4</b>
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, <b>Intel</b>	<b>S26361-F3986-E5</b>	<b>S26361-F3986-L5</b>
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, <b>Intel</b>	<b>S26361-F3986-E6</b>	<b>S26361-F3986-L6</b>
"Virtual Connector" for Twinax cables	2x	Enablement for System Architect	<b>V:TWX CONNECTOR-PY</b>	
SFP+ active Twinax Cable Fujitsu	2x	Customized length. Best fitting length selected at rack factory installation.	<b>S26361-F3989-E600</b>	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x		<b>S26361-F3873-E500</b>	
<i>Max. 2x SFP+, DAC, or Twinax Cable per adapter</i>				
max. 4x adapters per system				



**Chapter 14 - Power supply unit, power cable, country specific options**



Power cord option for Tower Server, 1.8m, black (1x per PSU)	
T26139-Y1740-E10	D, A, B, F, NL, FIN, N, S, E, P, RUS, TR
T26139-Y1742-E10	USA, Canada
T26139-Y1743-E10	Switzerland
T26139-Y1744-E10	UK, IR
T26139-Y1745-E10	Italy
T26139-Y1746-E10	Denmark
Power cord option for Tower Server, 2.5m, black (1x per PSU)	
T26139-Y1747-E18	Israel
T26139-Y3850-E10	no powercord

For converting the base unit S26361-K1591-V101 from standard PSU to redundant PSU use this conversion kit: S26361-F3699-L10

Region Kits, required to order one of them, 1x per System	build-in order code	loose delivery order code
Region Kit APAC/EMEA/India, Contains warranty sheet and safety instructions for APAC, EMEA and India	<b>S26361-F1452-E100</b>	-
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	<b>S26361-F1452-E130</b>	-
Region Kit Europe, Contains warranty sheet and safety instructions in German, English, French, Spanish,	<b>S26361-F1452-E140</b>	-
Region Kit China for CCC option required systems, Contains warranty sheet and safety instructions for	<b>S26361-F1452-E101</b>	-

(Sales region for EMEA only)  
(Sales region for APAC only)

Certifications, optional 1x per system	build-in order code	loose delivery order code
Certification for China, (CCC), Reduced component selection possible, only with no power cord option	<b>S26361-F3301-E120</b>	-
Certification for India, (BIS), Reduced component selection possible, only with no power cord option	<b>S26361-F3301-E123</b>	-

**N**

**Chapter 15 - Accessories**

**N**

<http://www.fujitsu.com/fts/products/computing/peripheral/accessories/index-facts.html>

**USB Mouse:**

Mouse M520 Black	S26381-K467-E100	S26381-K467-L100
Mouse M520 Grey	S26381-K467-E101	S26381-K467-L101
Mouse M530 Black	n/a	S26381-K468-L100
Mouse M530 Grey	n/a	S26381-K468-L101

**USB Memory Sticks - Available until August 2020. No successor planned.**

ADATA UC350 USB3.1 Type C OTG Flash Drive 64GB		S26391-F6048-L464
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**USB Keyboards for Tower Servers for following countries:**

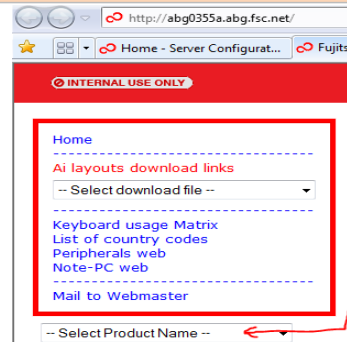
USB professional Keyboard KBPC PX ECO	Country version	FUJITSU Keyboard KB521 USB (grey)
	US/ int 105 keys (UK keyboard + US int. Layout)	S26381-K521-E102
S26381-K341-E104	Czech/Slovak	S26381-K521-E104
S26381-K341-E110	US 104 keys (US keyboard + US layout)	S26381-K521-E110
S26381-K341-E120	Germany	S26381-K521-E120
S26381-K341-E122	Germany / Int	S26381-K521-E122
S26381-K341-E140	France	S26381-K521-E140
S26381-K341-E154	Sweden / Finland	S26381-K521-E154
S26381-K341-E165	United Kingdom	S26381-K521-E165
S26381-K341-E170	Switzerland	S26381-K521-E170
S26381-K341-E180	Spain	S26381-K521-E180
S26381-K341-E185	Italy	S26381-K521-E185

**USB Optical Disc Drive**

External Ultra Slim Portable DVD Writer (Hitachi-LG)	S26341-F103-L142
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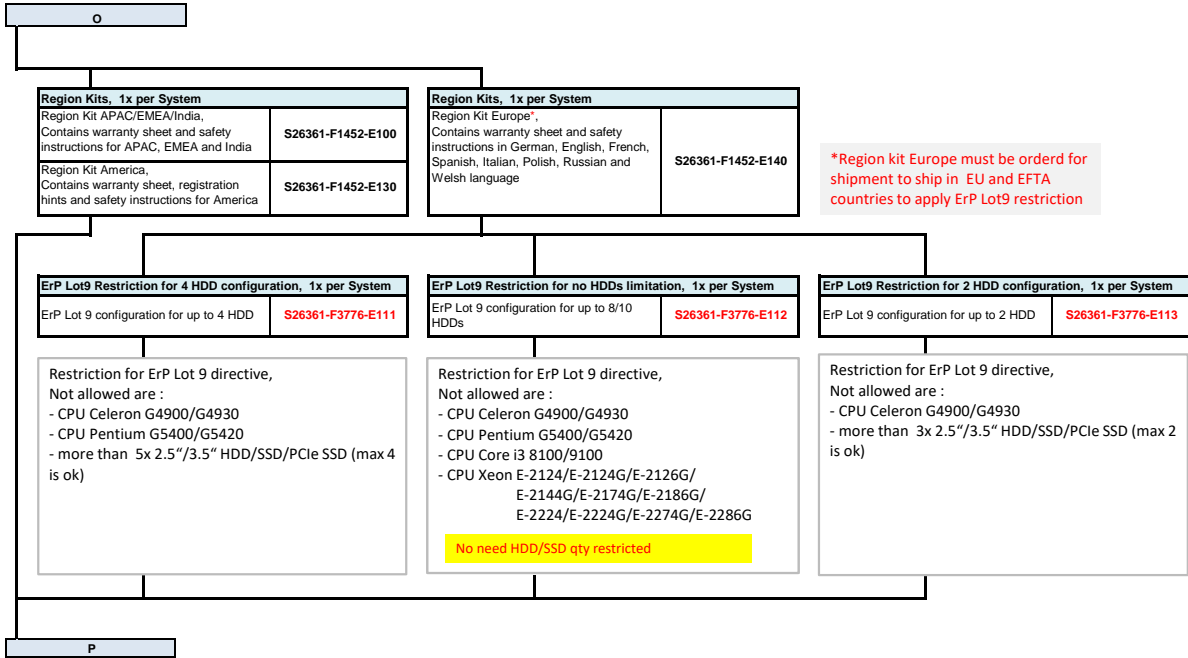
**O**

Please find the layout of all Fujitsu keyboards here:  
<http://abg0355a.abg.fsc.net/>





Chapter 16 - Others (ErP Lot 9 restriction)



Chapter 16 - others

P

<b>S26361-F3301-E241</b>
E-Star Fam1 Certification
RX/TX13x0 Mx E-Star Fam1
Limits configuration in accordance with Energy Star requirements
max. 1x per system

limitations for E-Star Fam1certification.

**please make sure to follow the guidelines below in order meet ENERGY STAR V3.0 Fam1 requirements:**

use redundant PSU

do not use one of the following CPUs : Pentium Gold G5400 / G5420; Celeron G4900 / G4930  
Xeon E-2278G / E-2286G / E-2288G

use even number of RAM modules (2 or 4)

use at least 16GB of RAM

do not use 3.5" (LFF) drives

do not use M.2 Modules

do not use more than 4x 2.5" (SFF) HDD, SSD

do not use PCIe SSD

do not use more than one PCIe card (RAID, LAN, ...)

do not use an Expander card

do not use a graphics card

ENERGY STAR-configurationen will be labeld:  
non ENERGY STAR-configurationen will be labeld:

**PRIMERGY TX1320 M4 E-Star Fam1**  
**PRIMERGY TX1320 M4**

Q

**Chapter 16 - others**

O

<b>S26361-F1790-E243</b>
<b>S26361-F1790-L244</b>
iRMC S4 advanced pack / <i>S5 alternatively</i>
integrated remote Management controller activation key for graphical console redirection and remote media redirection
max. 1x per system

update required

Executing system updates, controlling the hardware setup or running diagnostic tests on components are frequent tasks of IT administrators to ensure a continuous 24x7 server operation. ServerView embedded Lifecycle Management (eLCM) for Fujitsu PRIMERGY servers greatly supports such routine tasks by consolidating and enhancing management functions directly available ("embedded") within the server.

<b>S26361-F1790-E311</b>
<b>embedded Lifecycle Management (eLCM)</b>
Server Online Update
OS driver Update
Hardware firmware update
Server Offline Update
Hardware update via Update Manager Express
PrimeCollect
Autonomous creation of Primecollect archives
Creation and use of PrimeCollect archives over AIS connect
Custom Image (Jukebox function)
Automatic and manual download of CD and DVD Images
Automatic and manual start of CD and DVD Images
max. 1x per system

Loose delivery
eLCM Activation Pack (Node Locked License)
<b>BDL:ELCM-PACK</b>
<b>options contains:</b>
- 16GB SD card
- Paper with TAN for Licensekey

<b>S26361-F3776-E340</b>
Cool-safe @ Advanced Thermal design see right side
enables the PRIMERGY Server to cope with temperatures from 5-40° in operating mode due to extended Fan settings
this setting can be activated ex factory only
max. 1x per system

<b>general rules for ATD40 and ATD45:</b>
ATD40 and ATD45 use high performance cooling components
No component exclusions by ATD40 or ATD45 beside 95W CPU
95W CPU, Xeon E-2186G, S26361-F4029-E286 does not allow ATD40 or ATD45

<b>S26361-F3776-E345</b>
Cool-safe @ Advanced Thermal design see right side
enables the PRIMERGY Server to cope with temperatures from 5-45° in operating mode due to extended Fan settings
this setting can be activated ex factory only
max. 1x per system

TPM 2.0 Module supported with Windows Server 2012 and successor. Currently not confirmed for SLES12 SP2 / RHEL 7.2 / ESXi 2016 / XenServer 7.

<b>S26361-F3552-E100</b>
<b>S26361-F3552-L100</b>
TPM 2.0 Module
TPM 2.0 module
max. 1x per system

Your Server is ready

Date of change	Configurator rev	Folder / order code / d	What has been changed / comment	Name
28.07.2022	1,14	RAID	restored PSAS/PRAID CP4xx (F3842), PRAID EP4xx (F5243)	Tatsuya Sudou
16.06.2022	1,13	change_history	Introduce this history table with a new style	
14.04.2022		HD_SSD	added new order codes for SSD SATA "PM893/PM897"	Yuichi Sugiyama
10.02.2022		RAID	removed PSAS/PRAID CP4xx(F3842), PRAID EP4xx(F5243) due	Tatsuya Sudou
14.12.2021		LAN	Released I210-T1(Retail) and X710-T2L(Retail) Added the restriction for Intel/Marvell LAN	Yuya Ikuta
19.11.2021		HD_SSD	added the restriction for ECO-SATA drive (recovered missing infor	Yuichi Sugiyama
08.11.2021		RAID / S26361-	added PSAS CP 2100-8i	Tatsuya Sudou
26.10.2021		HD_SSD	removed "as soon as available" due to releasing	Yuichi Sugiyama
14.10.2021		LAN	Added I210-T1(Retail) and X710-T2L(Retail)	Yuya Ikuta
30.09.2021		RAID	added Notes for PRAID CP500i	Tatsuya Sudou
15.09.2021		RAID / S26361-	added PRAID CP500i and PSAS CP503i	Tatsuya Sudou
06.05.2021		others / S26361-	removed TPM 1.2 Module	Tatsuya Sudou
01.03.2021		HD_SSD	added the P4510 as PCIe-SSD Read-Int.	Yuichi Sugiyama
25.09.2020		backup	added RDX Cartridge 4TB, removed RDX Cartridge 3TB	Kazuo Tanaka
07.08.2020		HD_SSD	add the new SSD for SATA 2.5(Micron5300 and PM883) and M.2(	Yuichi Sugiyama
22.07.2020		Energy Star	add CPU restriction (Xeon E-2278G/E-2286G/E-2288G)	Atsushi Iwata
29.05.2020		PSU	removed Made in Germany sticker	Yuri Okubo
18.03.2020		PSU	add Region kit China	Atsushi Iwata
18.03.2020		others	M4Y removed	Yuri Okubo
10.03.2020		ErP Lot9	updated Lot9 restriction	Atsushi Iwata
04.03.2020		ErP Lot9	added Lot9 restriction in new sheet ErP Lot9	Atsushi Iwata
06.12.2019		HD_SSD	updated the description about Hard Disk Sector Format Information	Yuichi Sugiyama
06.11.2019		S26391-F6048-L464	New USB memory stick accessory device 64GB. No longer 32GB.	Y. Narita
11.10.2019		CPU	All CPUs support 128GB memory with new BIOS released	Klaus-Dieter Ruf
09.09.2019		CPU	Additional comment on refresh SKUs	Klaus-Dieter Ruf
04.09.2019		CPU	Added comment on 64/128 GB support	Klaus-Dieter Ruf
30.08.2019		Energy Star	sheet added	Mario Bez
21.08.2019		CPU & RAM	added refresh portfolio	Klaus-Dieter Ruf
19.03.2019		RAID, HDD case: new partnumbers for	added new numbers and changed some comments	Johannes Linne
13.02.2019		HD_SSD / S26361-	added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID EP	Yuichi Sugiyama
04.02.2019		HD_SSD	added the description about Supplier/ModelName of SSD	Yuichi Sugiyama
04.02.2019		HD_SSD / S26361-	removed the description as "as soon as available"	Yuichi Sugiyama
23.01.2019		S26361-K1638-Vxx2	White base units added	Mario Bez
29.10.2018		HD_SSD / S26361-	added	Yuichi Sugiyama
12.10.2018		HD_SSD	removed the products under development	Yuichi Sugiyama
02.10.2018		HD_cage	description of NVMe updated	Mario Bez
26.09.2018		CPU	Minor technical update on 2 CPUs	Klaus-Dieter Ruf
26.09.2018		HD_SSD / S26361-	added SSD SATA MU 3.84TB	Yuichi Sugiyama
26.09.2018		HD_SSD / S26361-	removed SSD SATA MU S4600	Yuichi Sugiyama
26.09.2018		HD_SSD / PCIe SSD	added PCIe SSD RI 960GB/1.92TB/3.85TB	Yuichi Sugiyama
18.09.2018		GFX	Modify Graphic Card - Options in "GFX" tab. - add "DP- DVI/D" adapter	Takayuki Sasaki
30.08.2018		LAN / Typos	Max 2 --> 4	Ulrich Lösch
23.08.2018		LAN / S26361-F4068-	Added: PLAN EP QL41112 2x10GBASE-T LP	Ulrich Lösch
23.08.2018		LAN / S26361-F4068-	Added: PLAN EP QL41134 4x10GBASE-T LP	Ulrich Lösch
23.08.2018		LAN / S26361-F4069-	Added: PLAN EP QL41132 2x10Gb SFP+ LP	Ulrich Lösch
23.08.2018		LAN / S26361-F4070-	Added: PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP	Ulrich Lösch
23.08.2018		LAN	Cosmetic changes: 25G Ethernet section	Ulrich Lösch
10.08.2018		LAN	PLAN CP I350-T4 added	Ulrich Lösch
31.07.2018		S26361-F5535-E5/L5	New Text for NVMe Backplane extension	Mario Bez
20.07.2018		GFX	add NVIDIA Quadro P400 support.	Takayuki Sasaki
17.07.2018		S26361-F5243-E125 c	changed length of FBU for PRAID EP4xx cable to 55cm from 25cm	Johannes Linne
17.07.2018		S26361-F4042-E125 c	changed length of FBU345 cable to 55cm from 25cm	Johannes Linne
13.07.2018		HD_SSD / S26361-F5	added	Yuichi Sugiyama
12.07.2018		others	Remarks for ATD edited	Mario Bez
12.07.2018		HD_cage	Remarks edited	Mario Bez
26.06.2018		LAN	PLAN EP X710-DA4 removed due to mech. problems	Mario Bez
26.06.2018		others	new ATD Codes added	Mario Bez
22.06.2018		iRMC/eLCM	iRMC description changed, eLCM order number changed	Eduard Binder

15.06.2018		RAID	max 2 PRAID EP5x0i, added PRAID EP520i for SAS, SATA only some changes on wording, numbering for PRAID EP5xxi	Johannes Linne
09.05.2018		LAN	PLAN EP X710-T4 removed; failed.	Ulrich Lösch
27.04.2018		HD_SSD / S26361-F5	removed	Sudou, Tatsuya
24.04.2018		base	typo in description text corrected	Mario Bez
04.04.2018		NVMe part updated	conversion kit added	Mario Bez
22.03.2018		TPM	new order codes	Mario Bez
22.03.2018		2 <sup>nd</sup> draft	description of product structure updated	Mario Bez
14.03.2018		2nd HDD Bpl F5535-E	delete F5535-E3/L3	H. Posselt
08.03.2018		CPU & RAM	Order codes added	Klaus-Dieter Ruf
02.03.2018		HD_SSD / S26361-F5	added	Sudou, Tatsuya
21.02.2018		S26361-F5243-E1 ==>	RAID, PRAID EP4xxi changed to large heatsink	Johannes Linne
20.02.2018		HD_SSD	updated	Sudou, Tatsuya
12.02.2018		LAN	LAN portfolio	Ulrich Lösch
04.02.2018		CPU & RAM	New CPU & Memory portfolio added	Klaus-Dieter Ruf
<b>12.01.2018</b>		<b>First Draft</b>		