

PRIMERGY RX1330 M4
Rack server

4x 3.5"



4x 2.5" (exp. to 8x2.5")



10x 2.5"



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 RX1330 M4
2		describes rack mount kits and services
3	CPU	Order code and Infos of processors
4	RAM	DDR4 System memory (RAM)
5	GFX	Graphics-cards
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	none
10	HD_SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN_FC_IB	LAN Components
12		Fibre Channel Controller
13		
14	PSU	Power supply units, power cables, country specific opt.
15	USB_devices	none
16	others	System Management, ATD, RS232 port, TPM module, FH-Riser

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, ...

S26361-F4610-E2
S26361-F4610-L3
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 some 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

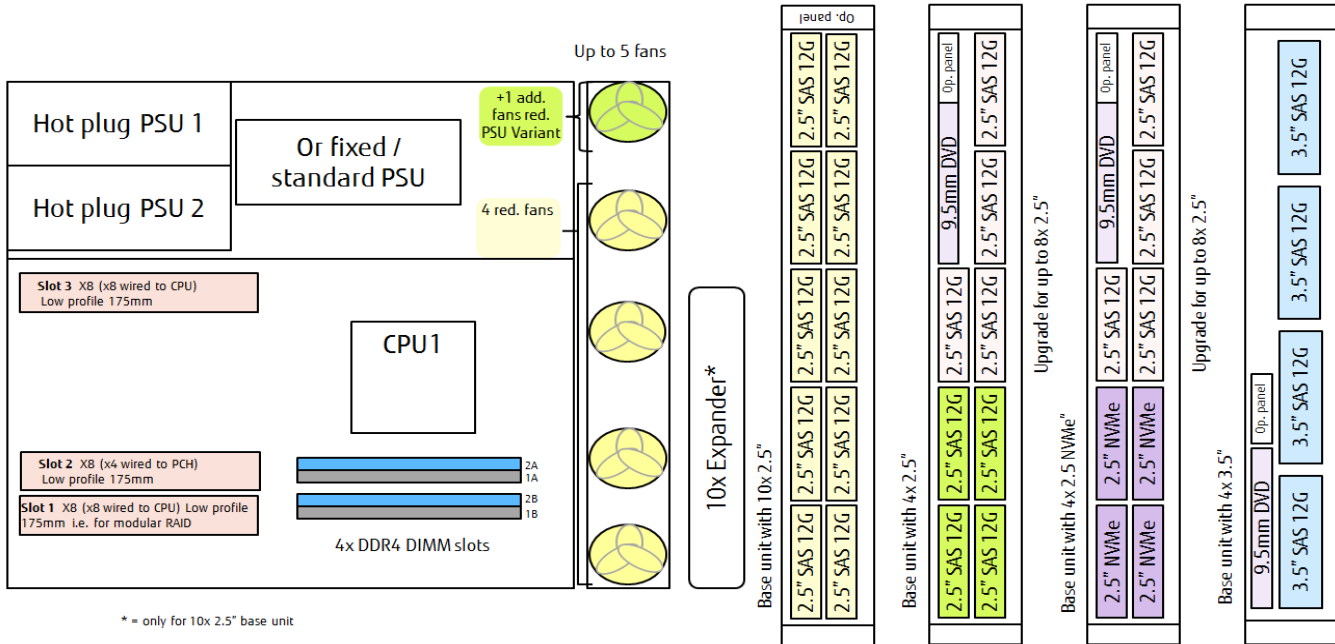
http://ts.fujitsu.com/products/standard_servers/index.html
(internet)

https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx
(extranet)

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

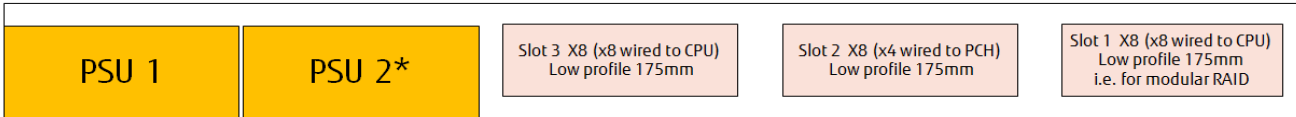
PRIMERGY RX1330 M4 schematics of the System board and fans

S26361-F1600-E/L8: L-shape Backplane to upgrade from 4x to 8x 2.5" HDD

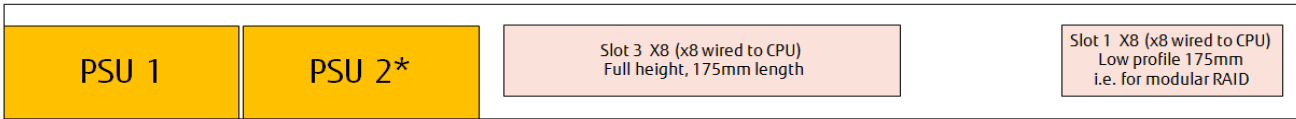


PRIMERGY RX1330 M4 rear view with PSU and PCIe slots

Standard: RX1330 - Rear view



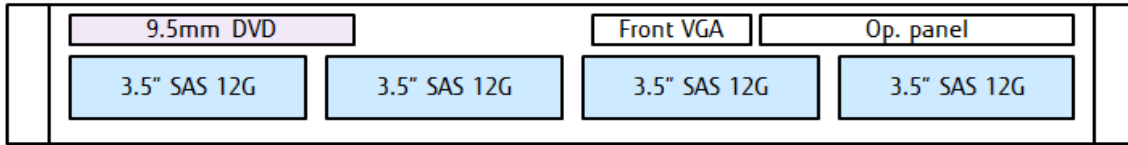
Option: Full height riser



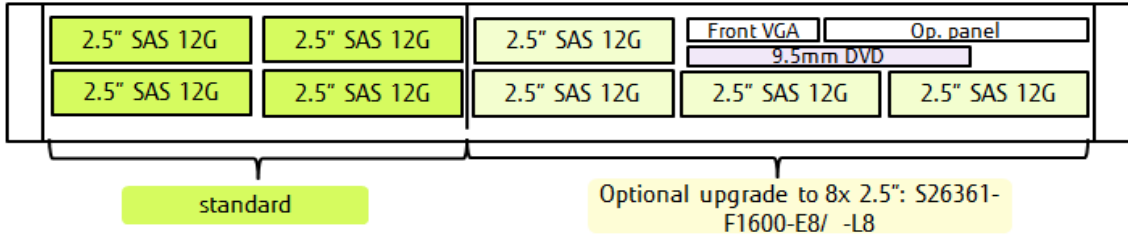
* = option

PRIMERGY RX1330 M4 front view

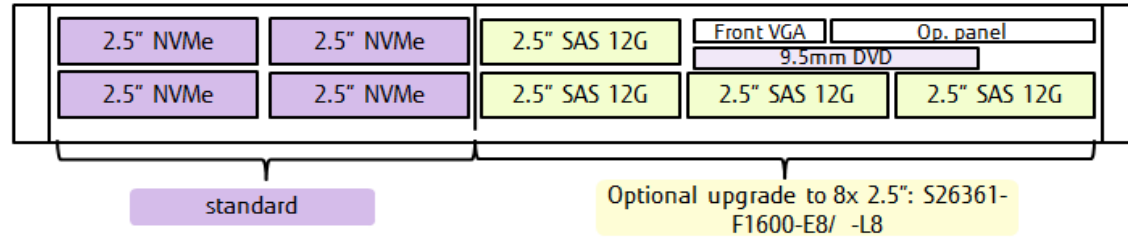
RX1330 4x3.5"- Front view



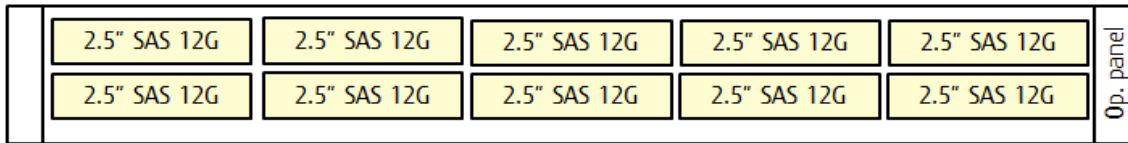
RX1330 4x2.5"- Front view



RX1330 4x2.5 NVMe"- Front view



RX1330 10x2.5"- Front view



Chapter 1 - base unit

Start

Power supply units & cooling

The PRIMERGY RX1330 M4 offer fixed standard 300W power supply with 92% efficiency or bays for 1x or 2x hot plug (opt. redundant) power supply units of 450W with up to 94% efficiency. The PRIMERGY RX1330 M4 is equipped service friendly plug fans (4+1 for redundant PSU), fans directly snap into mainboard, no cables

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 D3675 " designed and made in Germany" based on Chipset Intel® C246

> Xeon E3-21xx series CPUs

Slots: as standard 3 PCIe slots are on Board - please see schematics in "description"

> 3 PCIe slots low profile, 175 mm length, all are mechanically x8

Slot 1 PCIe-Gen3 x8 - supports modular RAID functions, routed to CPU

Slot 2 PCIe-Gen3 x4, routed to PCH

Slot 3 PCIe-Gen3 x8, routed to CPU

The required riser cards for the above configuration are part of the standard delivery.

Slot 3 can also be upgraded to PCIe Gen3 x8 full height, 175mm length (!Slot 2 and it's riser is not available in this case!)

up to 4x NVMe drives 2,5" can be configured

Onboard RAID 0/1 6Gbit/s

available for up to 4x 3.5" SATA drives

System RAM up to DDR4-2400 MHz

Interfaces at rear side

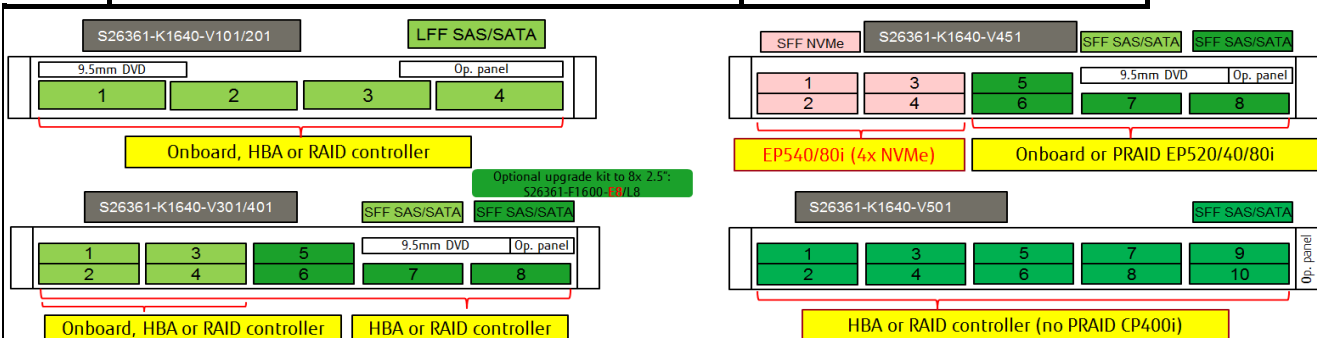
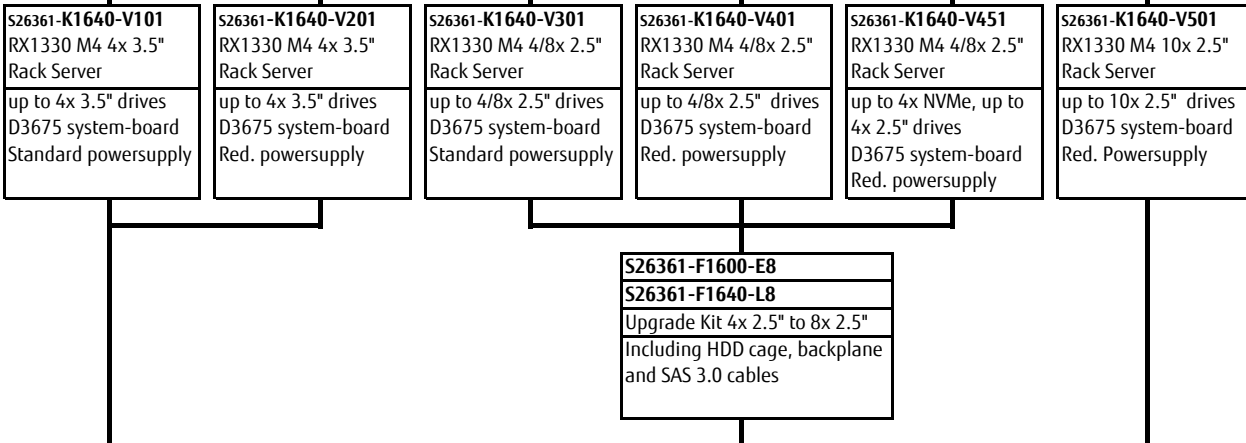
- 1 service LAN RJ45 (1 Gbit)
- 1x VGA (15 pins)
- 2x USB 3.1 Gen2 Type A, 2x USB 2.0
- 2x 1GbE LAN
- 1x serial RS-232-C optional via card slot

Interfaces at front

- for base units with up to 8x drives: 2x USB 3.1 Gen1
- for base units with 10 drives: 1x USB2.0 (on "ear")

Interfaces internal

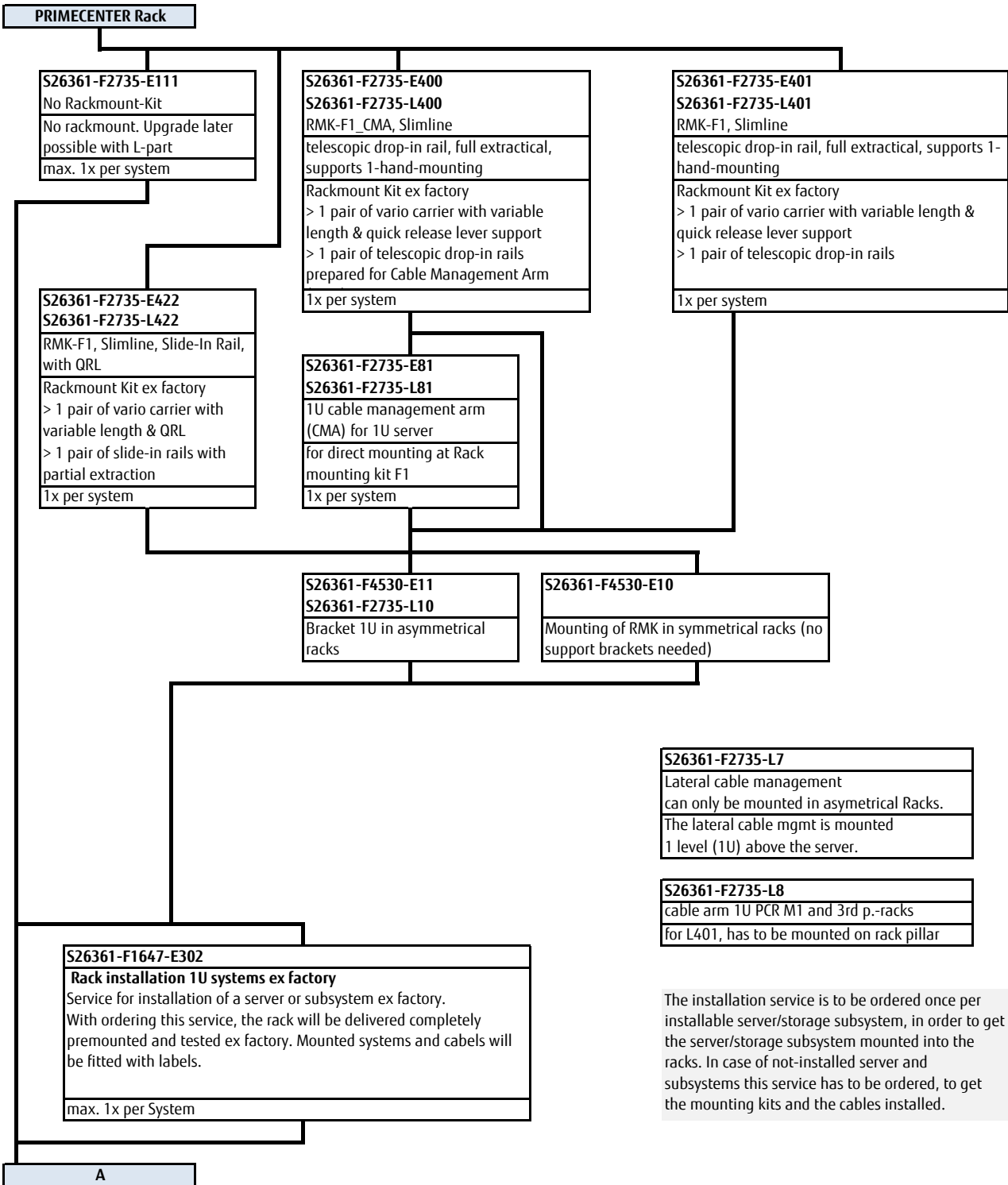
- 2x M.2 SATA 6G, one of this M.2 slots alternatively x4 PCIe
- 4x SATA 6G for HDD
- 1x SATA 6G for ODD



V501 and V511 use expander
V451: both RAID-Ctrl with FBU possible

PRIMECENTER Rack

Chapter 2 - Rack architecture



The installation service is to be ordered once per installable server/storage subsystem, in order to get the server/storage subsystem mounted into the racks. In case of not-installed server and subsystems this service has to be ordered, to get the mounting kits and the cables installed.

Chapter 3 - CPU

B

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

		MHz	Core
Celeron (Coffee Lake)			
64-bit Intel Celeron processor supporting DDR4 @ 2.400MHz			
Celeron G4900 2C/2T 3.1GHz 2MB 2400MHz 54W	S26361-F4029-E204	3.1	2
Celeron G4930 2C/2T 3.2GHz 2MB 2400MHz 54W	S26361-F4029-E304	3.2	2
Pentium Coffee Lake)			
64-bit Intel Pentium processor supporting DDR4 @ 2.400MHz			
Pentium Gold G5400 2C/4T 3.7GHz 4MB 2400MHz 54W	S26361-F4029-E205	3.7	2
Pentium Gold G5420 2C/4T 3.8GHz 4MB 2400MHz 54W	S26361-F4029-E305	3.8	2
Core i3 (Coffee Lake)			
64-bit Intel Core i3 processor supporting DDR4 @ 2.400MHz			
Core i3-8100 4C/4T 3.6GHz 6MB 2400MHz 65W	S26361-F4029-E208	3.6	4
Core i3-9100 4C/4T 3.6GHz 6MB 2400MHz Turbo 65W	S26361-F4029-E309	3.6	4
Xeon E3-12xx v6 (Kaby Lake-E)			
64-bit Intel Xeon processor supporting DDR4 @ 2.666MHz			
Xeon E-2124 4C/4T 3.3GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E224	3.3	4
Xeon E-2124G 4C/4T 3.4GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E225	3.4	4
Xeon E-2126G 6C/12T 3.3GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E226	3.3	6
Xeon E-2134 4C/8T 3.5GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E234	3.5	4
Xeon E-2136 6C/6T 3.3GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E236	3.3	6
Xeon E-2144G 4C/8T 3.6GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E244	3.6	4
Xeon E-2146G 6C/12T 3.5GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E246	3.5	6
Xeon E-2174G 4C/8T 3.8GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E274	3.8	4
Xeon E-2176G 6C/12T 3.7GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E276	3.7	6
Xeon E-2186G 6C/12T 3.8GHz 12MB 2666MHz Turbo 95W	S26361-F4029-E286	3.8	6
Xeon E3-22xx v6 (Kaby Lake-E Refresh)			
64-bit Intel Xeon processor supporting DDR4 @ 2.666MHz			
Xeon E-2224 4C/4T 3.4GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E324	3.4	4
Xeon E-2224G 4C/4T 3.5GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E325	3.5	4
Xeon E-2226G 6C/6T 3.4GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E326	3.4	6
Xeon E-2234 4C/8T 3.6GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E334	3.6	4
Xeon E-2236 6C/12T 3.4GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E336	3.4	6
Xeon E-2244G 4C/8T 3.8GHz 8MB 2666MHz Turbo 71W	S26361-F4029-E344	3.8	4
Xeon E-2246G 6C/12T 3.6GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E346	3.6	6
Xeon E-2274G 4C/8T 4.0GHz 8MB 2666MHz Turbo 83W	S26361-F4029-E374	4	4
Xeon E-2276G 6C/12T 3.8GHz 12MB 2666MHz Turbo 80W	S26361-F4029-E376	3.8	6
Xeon E-2278G 8C/16T 3.4GHz 16MB 2666MHz Turbo 80W	S26361-F4029-E378	3.4	8
Xeon E-2286G 6C/12T 4.0GHz 12MB 2666MHz Turbo 95W	S26361-F4029-E386	4	6
Xeon E-2288G 8C/16T 3.7GHz 16MB 2666MHz Turbo 95W	S26361-F4029-E388	3.7	8

On special release request only
 On special release request only

C

** not for base units with standard power supply (S26361-K1640-V101, S26361-K1640-V301)



red if MHz*Core = less then 13,2

6.2
6.4

7.4
7.6

14.4
14.4

13.2
13.6
19.8
14
19.8
14.4
21
15.2
22.2
22.8

13.6
14
20.4
14.4
20.4
15.2
21.6
16
22.8
27.2
24
29.6

Chapter 4 - DDR4 System memory

D

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

E

Chapter 5 - Graphics cards

E

S26361-F4066-E401
S26361-F4066-L401
PGRA CP NVIDIA Quadro P400
NVIDIA Quadro
2GB PCIe 3.0 x16
Connectors: 3x Mini-DP
no cable kits included
cablse 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 hight end optional NVIDIA Quadro graphic card offers triple head operation and fully 3D video support.
Remote Video direction via iRMC must be disabled.
Only one card per server is allowed.

S26361-F4066-E11
S26361-F4066-L11
MiniDP-DP ADAPTER
max. 3x per card

S26361-F4066-E12
S26361-F4066-L12
DP-VGA ADAPTER
max. 3x per card

S26361-F4066-E13
S26361-F4066-L13
DP-DVI ADAPTER
max. 3x per card

S26361-F1420-E130
S26361-F1420-L130
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
not for base unit S26361-K1600-V501
max. 1x per system

F

Chapter 7 - SAS / RAID Controller

F

See pictures in folder Base for details of combinations

onboard SATA controller with SW-RAID

onboard controller for SATA HDD or SSD drives				
4 ports 3, 6Gb/s SATA HDD/SSD	based on Intel chipset	No Cache	SW-RAID 0, 1, 10	1x onboard

internal HBA and RAID controller, no 2nd Level cache

internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP400i RAID Contr.	No Cache	RAID 0, 1, 1E, 10, 5, 50	1x	S26361-F3842-E1	S26361-F3842-L501
PSAS CP400i HBA SAS Contr.	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					

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

internal drive RAID / SAS, SATA controllers with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options					
PRAID EP400i RAID Contr.	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					
RAID Advanced SW Option CacheCade®Broadcom: 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					
TFM module for 1GB Cache	NV-RAM & FBU control logic		1x	S26361-F5243-E100	S26361-F5243-L100
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 85cm length		1x	S26361-F5243-E185	S26361-F5243-L115
PRAID EP420i RAID Contr.	2GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F5243-E12	S26361-F5243-L12
PRAID EP420i for SafeStore R. Contr.	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					
RAID Advanced SW Option CacheCade®Broadcom: SSD-cache-based HDD acceleration			1x	S26361-F5243-E670	S26361-F5243-L670
optional TFM module and Flash Backup Unit (FBU), both components required					
TFM module for 2GB Cache	NV-RAM & FBU control logic		1x	S26361-F5243-E200	S26361-F5243-L200
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 85cm length		1x	S26361-F5243-E185	S26361-F5243-L115

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

internal drive RAID / SAS controllers for NVMe and SAS, SATA HDD or SSD drives					
PRAID EP520i RAID Contr. LP	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 (NVMe support for EP520i on special release for this controller in this system) includes Fastpath and SafeStore Advanced SW-Licence requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP540i RAID Contr. LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E204	S26361-F4042-L504
PRAID EP580i RAID Contr. LP	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)					
PRAID EP540i RAID NVMe LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E224	S26361-F4042-L504
PRAID EP580i RAID NVMe LP	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E228	S26361-F4042-L508
for base unit -V451: 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					
FBU Option for PRAID EP5xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 83cm length		1x	S26361-F4042-E183	S26361-F4042-L110
FBU Option for PRAID EP5xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length (only for -V451 and 2nd. Ctrl)		1x	S26361-F4042-E155	S26361-F4042-L110

maximum number of internal RAID + HBA (See also pictures on folder base / HDD cage):
standard config: max. 1
for -V451 only: max. 2x controller: one PRAID EP540/80i NVMe for 4x NVMe; onboard or second PRAID EP540/80i or first EP520i contr. for 4x

FBU can be combined with Advanced Thermal design ATD40, but not with ATD45
-V451: for configs with up to 2 RAID controllers, 2 FBU can be selected
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 is not released for expander configurations

Advanced SW options: simultaneous operation of SafeStore + FastPath is supported

G

external SAS controller

HBA controller for ext. drives SAS, SATA HDD or SSD drives					
PSAS CP400e HBA SAS Contr. LP	No Cache	HBA, no RAID	2x	S26361-F3845-E201	S26361-F3845-L501
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 2x SFF8644 (external Mini-SAS HD) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008					

H

Chapter 8 - ODD optical disk drives

The base units with up to 8x HDD offer 1x 9.5mm optical drive bay



No ODD for 10x 2,5" HDD variant

I
Config with 1x 9.5mm bay

<p>S26361-F3778-E1 S26361-F3778-L1</p> <p>DVD-RW supermulti ultra slim all formats, DUAL/DL, DVD-RAM only W2K, W3K and Linux</p> <p>9.5mm, black bezel</p> <p>max. 1x per system</p>	<p>S26361-F3641-E6 S26361-F3641-L6</p> <p>Blu-ray Triple Writer ultra slim</p> <p>6x BD-RW, 8x DVD, 24x CD, BD DL and all CD/DVD formats</p> <p>9.5mm, black bezel</p> <p>max. 1x per system</p>	<p>S26361-F3718-E2 S26361-F3718-L2</p> <p>DVD-ROM</p> <p>16x DVD; 48x CD-ROM</p> <p>9.5mm black bezel</p> <p>max. 1x per system</p>
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J

Chapter 10 - storage drives

J

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

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung SM883 or SM863a 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		S26361-F5675-E240	S26361-F5675-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5675-E480	S26361-F5675-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5588-E960	S26361-F5588-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5588-E192	S26361-F5588-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5588-E384	S26361-F5588-L384

max. 4x, 8, or 10x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5100 PRO or 5200 ECO * 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, 8, or 10x - depending on base unit & configuration

2.5" (SFF) Hard drives

HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n			S26361-F5531-E530	S26361-F5531-L530
600GB	15 000	SAS 12Gb/s	512n			S26361-F5531-E560	S26361-F5531-L560
900GB	15 000	SAS 12Gb/s	512n			S26361-F5531-E590	S26361-F5531-L590

max. 4x, 8, or 10x - depending on base unit & configuration

HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n			S26361-F5550-E130	S26361-F5550-L130
600GB	10 000	SAS 12Gb/s	512n			S26361-F5550-E160	S26361-F5550-L160
1.2TB	10 000	SAS 12Gb/s	512n			S26361-F5550-E112	S26361-F5550-L112
300GB	10 000	SAS 12Gb/s	512n	SED		S26361-F5581-E130	S26361-F5581-L130
600GB	10 000	SAS 12Gb/s	512n	SED		S26361-F5581-E160	S26361-F5581-L160
1.2TB	10 000	SAS 12Gb/s	512n	SED		S26361-F5581-E112	S26361-F5581-L112

max. 4x, 8, or 10x - depending on base unit & configuration

HDD SAS 2.5" 10K 512e (SFF) Enterprise Mission Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
600GB	10 000	SAS 12Gb/s	512e			S26361-F5730-E160	S26361-F5730-L160
1.2TB	10 000	SAS 12Gb/s	512e			S26361-F5730-E112	S26361-F5730-L112
1.8TB	10 000	SAS 12Gb/s	512e			S26361-F5730-E118	S26361-F5730-L118
2.4TB	10 000	SAS 12Gb/s	512e			S26361-F5543-E124	S26361-F5543-L124
1.8TB	10 000	SAS 12Gb/s	512e	SED		S26361-F5582-E118	S26361-F5582-L118
2.4TB	10 000	SAS 12Gb/s	512e	SED		S26361-F5582-E124	S26361-F5582-L124

max. 4x, 8, or 10x - depending on base unit & configuration

K

K

Mixed configuration 2.5" HDD SATA 7.2K with 2.5" HDD SAS 15K/10K not allowed

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

max. 4x, 8, or 10x - depending on base unit & configuration

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

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

max. 4x, 8, or 10x - depending on base unit & configuration

3.5" (LFF) SATA SSD

SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray						
based on Samsung SM883 or SM863a drives * 3.84TB is SM883 only						
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part
240GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5673-E240
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5673-E480
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E960
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5589-E384

max. 4x - depending on base unit & configuration

SSD SATA 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray						
based on Micron 5100 PRO or 5200 ECO * 240GB is 5100, others are 5200						
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part
240GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1.4		S26361-F5700-E240
480GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E480
960GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E960
1.92TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E192
3.84TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1.0		S26361-F5700-E384
7.68TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.5		S26361-F5700-E768

max. 4x - depending on base unit & configuration

3.5" (LFF) Hard drives

HDD SAS 3.5" 15K (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n		S26361-F5532-E530	S26361-F5532-L530
600GB	15 000	SAS 12Gb/s	512n		S26361-F5532-E560	S26361-F5532-L560
900GB	15 000	SAS 12Gb/s	512n		S26361-F5532-E590	S26361-F5532-L590

max. 4x - depending on base unit & configuration

HDD SAS 3.5" 10K 512n (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n		S26361-F5568-E130	S26361-F5568-L130
600GB	10 000	SAS 12Gb/s	512n		S26361-F5568-E160	S26361-F5568-L160
1.2TB	10 000	SAS 12Gb/s	512n		S26361-F5568-E112	S26361-F5568-L112

max. 4x - depending on base unit & configuration

HDD SAS 3.5" 10K 512e (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1.8TB	10 000	SAS 12Gb/s	512e		S26361-F5731-E118	S26361-F5731-L118
2.4TB	10 000	SAS 12Gb/s	512e		S26361-F5569-E124	S26361-F5569-L124

max. 4x - depending on base unit & configuration

HDD SAS 3.5" 7.2K 512n (LFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SAS 12Gb/s	512n		S26361-F5626-E100	S26361-F5626-L100
2TB	7 200	SAS 12Gb/s	512n		S26361-F5626-E200	S26361-F5626-L200
4TB	7 200	SAS 12Gb/s	512n		S26361-F5626-E400	S26361-F5626-L400

max. 4x - depending on base unit & configuration

HDD SAS 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
6TB	7 200	SAS 12Gb/s	512e		S26361-F5635-E600	S26361-F5635-L600
8TB	7 200	SAS 12Gb/s	512e		S26361-F5635-E800	S26361-F5635-L800
12TB	7 200	SAS 12Gb/s	512e		S26361-F5571-E120	S26361-F5571-L120
14TB	7 200	SAS 12Gb/s	512e		S26361-F5571-E140	S26361-F5571-L140
6TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5584-E600	S26361-F5584-L600
8TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5584-E800	S26361-F5584-L800
12TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5624-E120	S26361-F5624-L120
14TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5624-E140	S26361-F5624-L140

max. 4x - depending on base unit & configuration

L

L

HDD SATA 3.5" 7.2K 512n (LFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		S26361-F5636-E100	S26361-F5636-L100
2TB	7 200	SATA 6Gb/s	512n		S26361-F5636-E200	S26361-F5636-L200
4TB	7 200	SATA 6Gb/s	512n		S26361-F5636-E400	S26361-F5636-L400

max. 4x - depending on base unit & configuration

HDD SATA 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
6TB	7 200	SATA 6Gb/s	512e		S26361-F5638-E600	S26361-F5638-L600
8TB	7 200	SATA 6Gb/s	512e		S26361-F5638-E800	S26361-F5638-L800
12TB	7 200	SATA 6Gb/s	512e		S26361-F3904-E120	S26361-F3904-L120
14TB	7 200	SATA 6Gb/s	512e		S26361-F3904-E140	S26361-F3904-L140

max. 4x - depending on base unit & configuration

HDD SATA 3.5" 7.2K (LFF) ECO with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
500GB	7 200	SATA 6Gb/s	512e		S26361-F5640-E500	S26361-F5640-L500
1TB	7 200	SATA 6Gb/s	512e		S26361-F3951-E100	S26361-F3951-L100

max. 4x - depending on base unit & configuration

M.2 SATA SSD

SSD SATA M.2 drive for booting, non hot-plug, for VMware ESXi						
Capacity	Formfactor	Interface		Category	order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s		Boot	S26361-F5707-E240	S26361-F5707-L240

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

SSD SATA M.2 drive for booting, non hot-plug						
Capacity	Formfactor	Interface	DWPD	Category	order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s	1.4	Boot	S26361-F5706-E240	S26361-F5706-L240
480GB	M.2	SATA 6Gb/s	1.4	Boot	S26361-F5706-E480	S26361-F5706-L480

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	S26361-F4045-E64	S26361-F4045-L64

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 core dump 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 540/580i

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	S26361-F5738-E100	S26361-F5738-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.7	S26361-F5738-E200	S26361-F5738-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.8	S26361-F5738-E400	S26361-F5738-L400

max. 4x - depending on base unit & configuration

PCIe-SSD Low Power 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray						
based on Intel DC P4501 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
500GB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.7	S26361-F5649-E50	S26361-F5649-L50
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1.0	S26361-F5649-E100	S26361-F5649-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.6	S26361-F5649-E200	S26361-F5649-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.6	S26361-F5649-E400	S26361-F5649-L400

max. 4x - depending on base unit & configuration

M

Chapter 11 - Communications / Ethernet Network Components

M

PRIMERGY RX1330 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

1Gb Ethernet adapters with RJ45 interface (1000BASE-T)				
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	2x	2 port, Intel, PCIe Gen2 x4	S26361-F4610-E202	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	2x	4 port, Intel, PCIe Gen2 x4	S26361-F4610-E204	S26361-F4610-L504
max. 2 adapters per system				

10/1Gb Ethernet network components

10GBASE-T

10/1Gb Ethernet network adapters with RJ45 interface (10GBASE-T)				
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, Cavium QL41112HLRJ	S26361-F4068-E202	S26361-F4068-L502
PLAN EP QL41134 4x10GBASE-T LP	2x	4 port NIC with Universal RDMA, Cavium QL41134HLRJ	S26361-F4068-E204	S26361-F4068-L504
PLAN EP X550-T2 2x10GBASE-T LP	2x	2 port NIC, Intel X550-T2	S26361-F3948-E202	S26361-F3948-L502
PLAN EP X710-T4 4x10GBASE-T LP	2x	4 port NIC, Intel X710-T4	S26361-F3948-E204	S26361-F3948-L504
max. 3 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, Cavium QL41132HLCU	S26361-F4069-E202	S26361-F4069-L502
PLAN EP X710-DA2 2x10Gb SFP+ LP	2x	2 port NIC, Intel X710-DA2	S26361-F3640-E202	S26361-F3640-L502
Optional, 10Gb SFP+ optical transceiver module, select one per cage or port				
SFP+ Optical Transceiver 10G Single Rate SR	1x .. 2x	LC, MMF / SR SFP+ module, up to 400m, Finisar	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	1x .. 2x	LC, SMF / LR SFP+ module, up to 10km, Finisar	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	1x .. 2x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	1x .. 2x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	1x .. 2x	Enablement for System Architect	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	1x .. 2x	Customized length. Best fitting length	S26361-F3989-E600	see table at the

SFP+ active Twinax Cable Brocade	1x .. 2x	selected at rack factory installation.	S26361-F3873-E500	bottom of this page
Max. 2x SFP+, DAC, or Twinax Cable per adapter				
max. 3 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 CNA with FCoE, iSCSI Offload, Universal RDMA, Cavium QL41262HLCU	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	1x .. 2x	LC, MMF / SR SFP+ module, up to 400m, Finisar	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	1x .. 2x	LC, SMF / LR SFP+ module, up to 10km, Finisar	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	1x .. 2x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	1x .. 2x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	1x .. 2x	Enablement for System Architect	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	1x .. 2x	Customized length. Best fitting length	S26361-F3989-E600	see table at the
SFP+ active Twinax Cable Brocade	1x .. 2x	selected at rack factory installation.	S26361-F3873-E500	bottom of this page
Max. 2x SFP+, DAC, or Twinax Cable per adapter				

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 cables	2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-25	
25G DAC - Brocade	2x	DAC are not in Fujitsu's portfolio yet.		
25G DAC - Cisco	2x	Thus, test only and purchase from switch vendors.		
25G DAC - Intel	2x			
25G AOC - Brocade	2x	AOC are not in Fujitsu's portfolio yet.		
25G AOC - Cisco	2x	Thus, test only and purchase from switch vendors.		
25G AOC - Intel	2x			
Max. 2x SFP28, 25G DAC, or 25G AOC per adapter				

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.

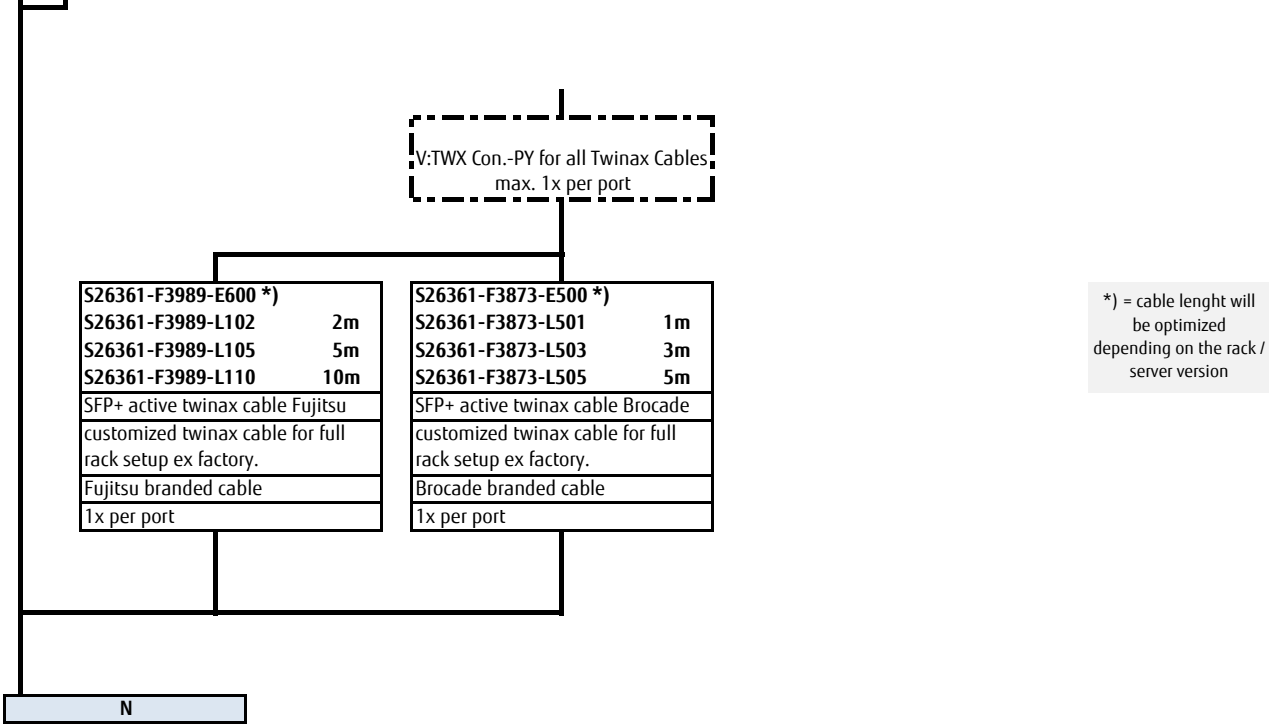
Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Mellanox adapters provide RoCE RDMA only. Intel adapters don't provide any.

PLAN EP QL41212 25Gb 2p SFP28 LP	2x	2 port NIC with Universal RDMA: iWARP & RoCE, Cavium QL41212	S26361-F4056-E202	S26361-F4056-L502
PLAN EP MCX4-LX 25Gb 2p SFP28 LP	2x	2 port NIC with RDMA: RoCE, Mellanox ConnectX4-LX	S26361-F4054-E202	S26361-F4054-L502
PLAN EP XXV710-DA2 2x25Gb LP	2x	2 Port NIC, Intel 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
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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 cables	2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-25	
25G DAC - Brocade	2x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. AOC 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			
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, Finisar	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, Finisar	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	2x	Enablement for System Architect	V:TWX CONNECTOR-PY	
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>				
<i>max. 3x adapters per system</i>				



Chapter 12 - Communications / Fibre Channel Components

N

Fibre Channel PCIe Adapters

32Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3)

These components ship with optical transceiver modules equipped for all ports. Supports 32, 16, and 8 Gb infrastructures.

PFC EP LPe32002 2x 32Gb LP	2x	2 ports, low profile, Broadcom/Emulex	S26361-F4044-E202	S26361-F4044-L502
PFC EP LPe32000 1x 32Gb LP	2x	1 port, low profile, Broadcom/Emulex	S26361-F4044-E201	S26361-F4044-L501
PFC EP QLE2742 2x 32Gb LP	2x	2 ports, low profile, Cavium/Qlogic	S26361-F4043-E202	S26361-F4043-L502
PFC EP QLE2740 1x 32Gb LP	2x	1 port, low profile, Cavium/Qlogic	S26361-F4043-E201	S26361-F4043-L501

16Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3)

These components ship with optical transceiver modules equipped for all ports. Supports 16, 8, and 4 Gb infrastructures.

PFC EP LPe31002 2x 16Gb LP	2x	2 ports, low profile, Broadcom/Emulex	S26361-F5596-E202	S26361-F5596-L502
PFC EP LPe31000 1x 16Gb LP	2x	1 port, low profile, Broadcom/Emulex	S26361-F5596-E201	S26361-F5596-L501
PFC EP QLE2692 2x 16Gb LP	2x	2 ports, low profile, Cavium/Qlogic	S26361-F5580-E202	S26361-F5580-L502
PFC EP QLE2690 1x 16Gb LP	2x	1 port, low profile, Cavium/Qlogic	S26361-F5580-E201	S26361-F5580-L501

max. 2 adapters per system (mixed configurations are supported)

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Chapter 14 - Power supply unit, power cable, certifications, region kits

M

Power supply unit

modular redundant Power Supply

2nd PSU for redundancy			
occupies hot plug PSU slot, min. 1 / max. 2x per system			
input nominal voltage (AC): 100V-240V, max: 90V-264V; input dropout 10ms/100% load, 47Hz-63Hz			
450W platinum PSU	94% eff.	S26113-F575-E13	S26113-F575-L13
FJBU: 4 min. backup time for graceful shutdown, max 1 per system			
FJBU	380W(peak), 280W(continuous) 12V battery module	S26361-F5541-E475	S26361-F5541-L475

Power cord option for Rack Server, 1x per PSU

Cable powercord rack, 1.8m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E180	T26139-Y1968-L180
Cable powercord rack, 2.5m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E250	T26139-Y1968-L250
Cable powercord rack, 4m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E100	T26139-Y1968-L10
Cable powercord (USA) 15A, 1.8m, black, NEMA 5-15 connector 498G -> C13 (plug), 15A, , rack or wall	T26139-Y1741-E90	T26139-Y1741-L90
Cable powercord (Thailand), 1.8m, rack or wall	T26139-Y1753-E10	T26139-Y1753-L10
Cable powercord (Taiwan), 1.8m, rack or wall	T26139-Y1757-E10	T26139-Y1757-L10
Cable powercord (D, A, B, F, NL, FIN, N, S, E, P, RUS, TR), 1.8m, grey		T26139-Y1740-L10
Cable powercord (UK, IR), 1.8m, grey		T26139-Y1744-L10
Cable powercord (I), 1.8m, grey		T26139-Y1745-L10
Cable powercord (DK), 1.8m, grey		T26139-Y1746-L10
Cable powercord (ISR), 2.5m, black		T26139-Y1747-L18
no power cord	T26139-Y3850-E10	

Std to Redundant Fan/PSU Upgrade Kit

includes a redundant Fan, PSU cage and power backplane	S26361-F1640-L1
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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	S26361-F1452-E100	-
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	S26361-F1452-E130	-
Region Kit Europe, Contains warranty sheet and safety instructions in German, English, French, Spanish, Italian, Polish, Russian	S26361-F1452-E140	-
Region Kit China for CCC option required systems , Contains warranty sheet and safety instructions for China,	S26361-F1452-E101	-

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

Certifications, Made in Germany Sticker, 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	S26361-F3301-E120	-
Certification for India, (BIS), Reduced component selection possible, only with no power cord option	S26361-F3301-E123	-

N

L-Part PSU and upgrade Kit do not include powercable

Chapter 15 - Accessories

N

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

USB Memory Sticks - Available until August 2020. No successor planned.
 ADATA UC350 USB3.1 Type C OTG Flash Drive 64GB **S26391-F6048-L464**

External USB Optical Disc Drive
 Ultra Slim Portable DVD Writer (Hitachi-LG) **S26341-F103-L142**

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Chapter 16 - others

P

S26361-F3301-E241
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 Fam1 certification.

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
- 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: **PRIMERGY RX1330 M4 E-Star Fam1**
 non ENERGY STAR-configurationen will be labeld: **PRIMERGY RX1330 M4**

Serial port option is not relevant for E-Star

Q

Chapter 16 - others (ErP Lot 9 restriction)

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Region Kits, 1x per System	
Region Kit APAC/EMEA/India, Contains warranty sheet and safety instructions for APAC, EMEA and India	S26361-F1452-E100
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	S26361-F1452-E130

Region Kits, 1x per System	
Region Kit Europe*, Contains warranty sheet and safety instructions in German, English, French, Spanish, Italian, Polish, Russian and Welsh language	S26361-F1452-E140

*Region kit Europe must be ordered for shipment to ship in EU and EFTA countries to apply ErP Lot9 restriction

ErP Lot9 Restriction for 4 HDD configuration, 1x per System	
ErP Lot 9 configuration for up to 4 HDD	S26361-F3776-E111

ErP Lot9 Restriction for no HDDs limitation, 1x per System	
ErP Lot 9 configuration for up to 8/10 HDD	S26361-F3776-E112

ErP Lot9 Restriction for 2 HDD configuration, 1x per System	
ErP Lot 9 configuration for up to 2 HDD	S26361-F3776-E113

Restriction for ErP Lot 9 directive,
Not allowed are :
- CPU Celeron G4900/4930
- CPU Pentium G5400/G5420

- more than 5x 2.5"/3.5" HDD/SSD/PCIe SSD (max 4 is ok)

Restriction for ErP Lot 9 directive,
Not allowed are :
- CPU Celeron G4900/G4930
- CPU Pentium G5400/G5420
- CPU Core i3 8100/9100
- CPU Xeon E-2124/E-2124G/E-2126G/
E-2144G/E-2174G/E-2186G/
F-2224/F-2224G/F-2274G/F-2286G
No need HDD/SSD qty restricted

Restriction for ErP Lot 9 directive,
Not allowed are :
- CPU Celeron G4900/G4930
- more than 3x 2.5"/3.5" HDD/SSD/PCIe SSD (max 2 is ok)

P

Chapter 16 - others

Q

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

iRMC S4 (integrated Remote Management Controller) onboard server mgmt with dedicated 10/100/1000 LAN-port and integrated graphics controller.

S26361-F1790-E311
embedded Lifecycle Management (eLCM)
 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

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.

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

S26361-F3776-E340
 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

general rules for ATD40 and ATD45:
 ATD40 and ATD45 use high performance cooling components
 No component exclusions by ATD40 or ATD45 beside **83W + 95W CPU** and **FBU: 83W+95W CPU: Xeon E-2186G, E-2274G, E-2286G, E-2288G: no ATD40 or ATD45**
FBU: S26361-F4042-E183, -E155 and S26361-F5243-E185 do not allow ATD45
 S26361-K1640-V451 (NVMe variant) does not allow ATD40 or ATD45
 S26361-K1640-V101, V301 (Standard PSU variants) do not support ATD45
 S26361-K1640-V501 (10x 2,5" variants) does not support ATD45

S26361-F3776-E345
 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

V101	V201	V301	V401	V501	V451
Std	red	std	red	red	red
LFF	LFF	SFF	SFF	10xSFF	NVMe, SFF
ATD40	ATD40	ATD40	ATD40	ATD40	
	ATD45		ATD45		



S26361-F3552-E101 TPM 1.2 module TPM 1.2 module max. 1x per system	S26361-F3552-E100 S26361-F3552-L100 TPM 2.0 Module TPM 2.0 module max. 1x per system
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S26361-F3120-E3 S26361-F3120-L3 serial port (RS232) mounted on a low profile PCIe slot, max. 1x per max. 1x per system
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S26361-F1640-E2 FH KIT S26361-F1640-L2 Full height riser card kit Offers 1x FH Gen 3 PCIe slots: 1* x8 for full height PCIe cards with max. 175mm length will be inserted instead of Slot 2 and Slot 3 will be inserted into Slot 3 PCIe 3.0 x8 max. 1x per system

Your Server is ready

Date of change	Folder / order code / description	What has been changed / comment
02.10.2017	Cover, description, base, RAID, PSU folder update	draft version
25.10.2017	RAID	note in BB58 changed
04.02.2018	CPU & RAM	New CPU & Memory portfolio added
12.02.2018	LAN & FC	LAN & FC portfolio
20.02.2018	HD_SSD	updated
22.02.2018	S26361-F5243-E1 ==> E11 ...	RAID, PRAID EP4xxi changed to large heatsink
02.03.2018	HD_SSD / S26361-F5707/F5706-*	added
08.03.2018	CPU & RAM	Order codes added
05.04.2018	HD_SSD	comment for required controller changed: EP540/80 only
19.04.2018	base	removed S26361-F2735-E200/L200
27.04.2018	HD_SSD	S26361-F5675/F5588/F5673/F5589-* removed
27.04.2018	HD_SSD	HDD SAS/SATA 3.5" 7.2K updated
03.05.2018	LAN / S26361-F3640-E204, -L504	PLAN EP X710-DA4 4x10Gb SFP+ removed
14.06.2018	base	changed numbers for base units and added V451 for NVMe changed some comments
14.06.2018	RAID	max number of RAID controller = 2 for NVMe variant -V451 changed some comments
15.06.2018	others	added TPM, Serial port bracket
21.06.2018	others	more precise comment on "others": only ATD is open, no other changes
21.06.2018	RAID	2nd RAID controller for -V451 can be PRAID EP520i, 540i or 580i
22.06.2018	GFX	Update Graphic card information.
22.06.2018	iRMC/eLCM	iRMC description changed, eLCM order number changed
22.06.2018	ATD, other	ATD part numbers and description added
22.06.2018	LAN / S26361-F3640-E204, -L504	PLAN EP X710-DA4 4x10Gb SFP+ removed
12.07.2018	HD_SSD / S26361-F5675/F5588/F5673/F5589-*	added
19.07.2018	LAN / S26361-F3948-E204, L504	PLAN EP X710-T4 4x10GBASE-T removed
19.07.2018	LAN / S26361-F3948-E204, L504	PLAN EP X710-T4 4x10GBASE-T added
19.07.2018	Cisco branded cables	deleted
22.07.2018	folder Base	add drawing for all 5 base variants incl. backplane and controllers
24.07.2018	folder USB devices	changed USB dongle to S26391-F6048-L432 and L464
24.07.2018	folder CPU	added a comment for 95W CPU (not for standard PSU baseunit)
24.07.2018	folder PSU	removed T26139-Y4024-L10
24.07.2018	folder PSU: ISR cable	changed T26139-Y1747-L10 to T26139-Y1747-L18
09.08.2018	RAM	4GB Module only on special release request
09.08.2018	RAID: S26361-F4042-E202/L502	added PRAID EP520i as SAS, SATA (not NVMe) controller
13.08.2018	S26361-F4042-E183, -E155, S26361-F5243-E170	added ATD45 restriction for all FBU
23.08.2018	LAN / S26361-F4068-E202, L502	Added: PLAN EP QL41112 2x10GBASE-T LP
23.08.2018	LAN / S26361-F4068-E204, L504	Added: PLAN EP QL41134 4x10GBASE-T LP
23.08.2018	LAN / S26361-F4069-E202, L502	Added: PLAN EP QL41132 2x10Gb SFP+ LP
23.08.2018	LAN / S26361-F4070-E202, L502	Added: PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP
23.08.2018	LAN	Cosmetic changes: 25G Ethernet section
23.08.2018	LAN	LAN / Typos corrected max 2 --> 3
18.09.2018	GFX	Modify Graphic Card - Options in "GFX" tab.
26.09.2018	HD_SSD / S26361-F5588/F5589-E384/L384	added SSD SATA MU 3.84TB
26.09.2018	HD_SSD / S26361-F5694/F5692-*	removed SSD SATA MU S4600
26.09.2018	HD_SSD / PCIe SSD Low Power Read-Int. 2.5"	added PCIe SSD RI 960GB/1.92TB/3.85TB
26.09.2018	CPU	Minor technical update on 2 CPUs
12.10.2018	HD_SSD	HD_SSD / removed the products under development
19.10.2018	Std to Redundant Fan/PSU Upgrade Kit	replaced S26361-F1420-L11 by S26361-F1640-L1
23.10.2018	changed partnumber of FH-Kit	replaced S26361-F1420-E210/L210 by S26361-F1640-E2/L2
23.10.2018	changed nr of L-part of 4x 2,5" upgrade Kit	replaced S26361-F1600-L8 by S26361-F1640-L8
2018/10/29	HD_SSD / S26361-F5635/F5638/F5584-E800/L8	added
29.10.2018	CPU	Restrictions on CPUs with standard power supply added
2018/11/28	HD_SSD / S26361-F5730-*/ replaced Order code	replaced S26361-F5543-*/160/112/118 by S26361-F5730-*/160/112/
2018/11/28	HD_SSD / S26361-F5731-*/ replaced Order code	replaced S26361-F5569-E118/L118 by S26361-F5731-E118/L118
2018/11/29	ATD restriction added due to rotation/vibration	SFF do not support ATD40/45
2018/11/29	HD_SSD / exclusions for 2.5" HDD SATA 7.2K and	added
2018/12/04	S26361-F4029-E274	Xeon E-2174G 4C/8T 3.8GHz 8MB 2666MHz Turbo 71W: This CPU is also allowed for Std PSU variants -V101 and V301
13.12.2018	S26361-F5243-E185, S26361-F5243-EL115	replace FBU S26361-F5243-E170 by S26361-F5243-E185 and replace S26361-F5243-L110 by S26361-F5243-L115 (longer cable required for PRAID EP4xx),
2019/2/4	HD_SSD	added the description about Supplier /ModelName of SSD
2019/2/4	HD_SSD	removed the description as "as soon as available" for releasing order code
2019/2/13	HD_SSD / S26361-F3907-*/ added the exclusion	added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID EP5x0i
2019/02/27	ATD restriction removed due to rotation/vibration	SFF again supports ATD40/45, see others

2019/03/19	RAID, HDD case: new partnumbers for NVMe RAID controllers: S26361-F4042-E224/228	added new numbers and changed some comments
02.07.2019	HD_SSD / S26361-F5571/F5624/F3904- E140/L140 / added	added HDD SAS/SATA 3.5" 7.2K 512e 14TB
18.07.2019	HD_SSD / S26361-F3904-E140/L140 / removed	removed HDD SATA 3.5" 7.2K 512e 14TB
21.08.2019	CPU & RAM	Added Refresh portfolio
30.08.2019	Energy Star Restrictions	restriction sheet updated
04.09.2019	CPU	Added comment on 64/128 GB support
09.09.2019	CPU	Additional comment on refresh SKUs
11.10.2019	CPU	All CPUs support 128GB memory with new BIOS released
07.11.2019	Accessories	Added comment on USB Memory Sticks. No longer 32GB.
08.11.2019	PSU / T26139-Y1748-L10 / removed	Removed Cable powercord (AUS/NZ), 1.8m, grey
18.11.2019	CPU	included CPU restriction for Std. PSU variants -V101, -V111, -V301 **
25.11.2019	CPU	added ATD40/45 restriction for 3 furter CPU (83W, 95W)
06.12.2019	HD_SSD	updated the description about Hard Disk Sector Format Information
09.12.2019	HD_SSD / S26361-F5738-* / added	added Intel P4510 as PCIe SSD RI
19.12.2019	PSU / S26113-F574-E99 / removed	Removed Dummy module instead PSU
27.02.2020	HD_SSD / S26361-F3904-E140/L140 / added	added HDD SATA 3.5" 7.2K 512e 14TB
04.03.2020	ErP Lot9 restriction	added ErP Lot9 restriction in new sheet ErP Lot9
10.03.2020	ErP Lot9 restriction	updated ErP Lot9 restriction
18.03.2020	others	M4Y removed
18.03.2020	PSU	added Region kit China