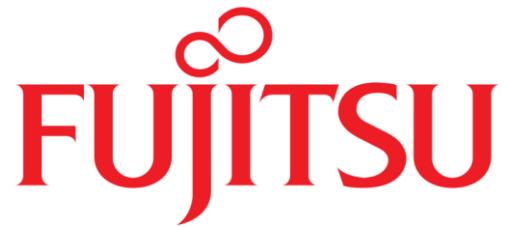


PRIMERGY RX2530 M4 1U Rack Server



4x 3.5"



4x 2.5" /
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 RX2530 M4
2		describes rack mount kits and services
3	CPU	Order code and Infos of E5-26xxv5 series processors
4	RAM	DDR4 System memory (RAM) and memory modes
5	GFX	Graphics-, Grid-cards, GPU and Xeon Co processors and other graphics options
6	HD cage	n.a. - not required for PRIMERGY RX2530
7	RAID	SAS / RAID Controller and components
8	ODD	optical disk drives (DVD, DVD-rw, Blu ray)
9	Backup	LTO drives & RDX drive
10	HD SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN_FC_IB	LAN Components
12		Fibre Channel Controller
13		Infiniband Controller
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
	LLC	Long life cycle components

Instructions

This document contains basic product and configuration information supporting 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 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

(internet)

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

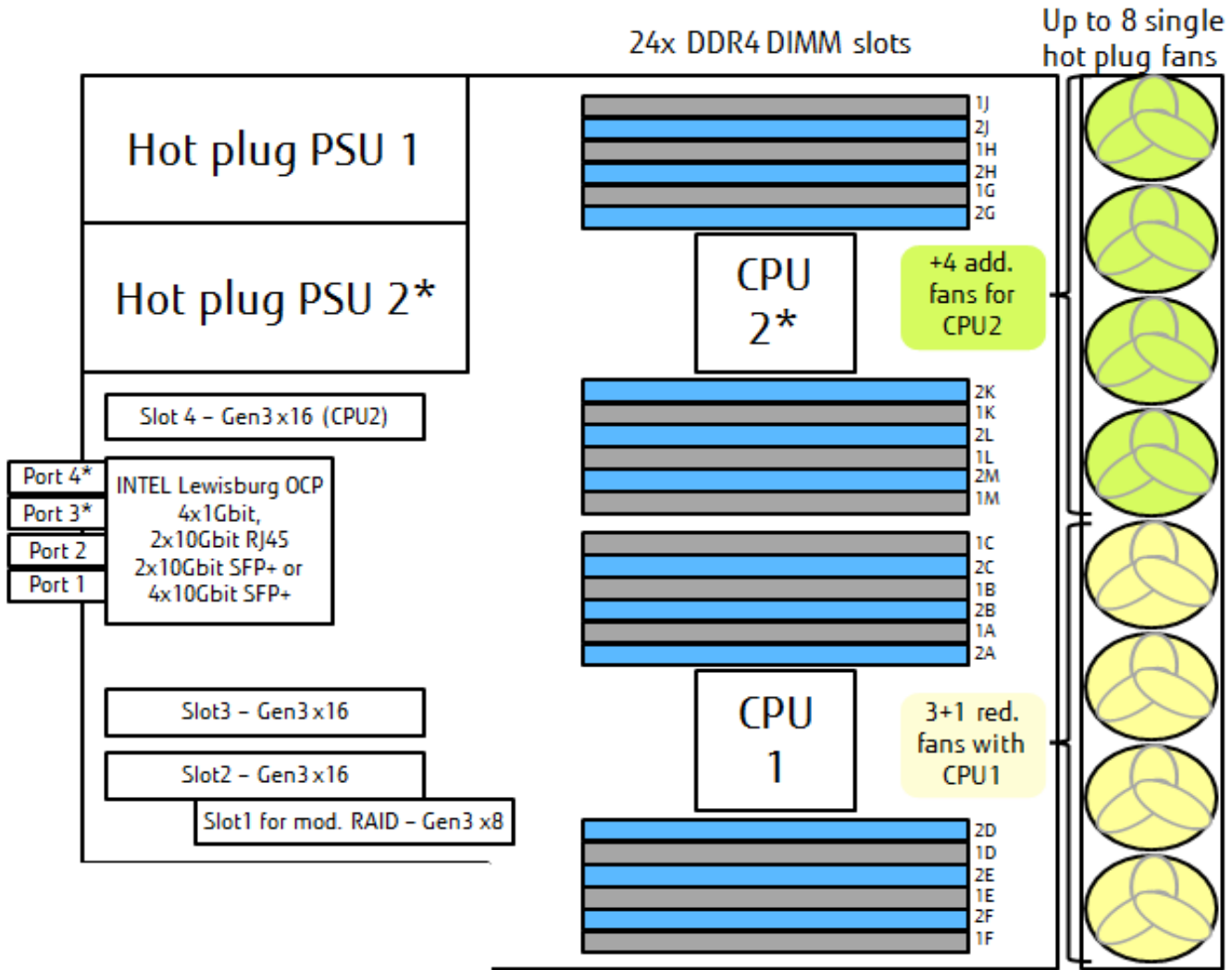
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Fujitsu is providing the content of this document with very high accuracy. In case you identify a mistake, we would kindly encourage you to inform us. We kindly ask for understanding, that errors still may occur and that Fujitsu may change this document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

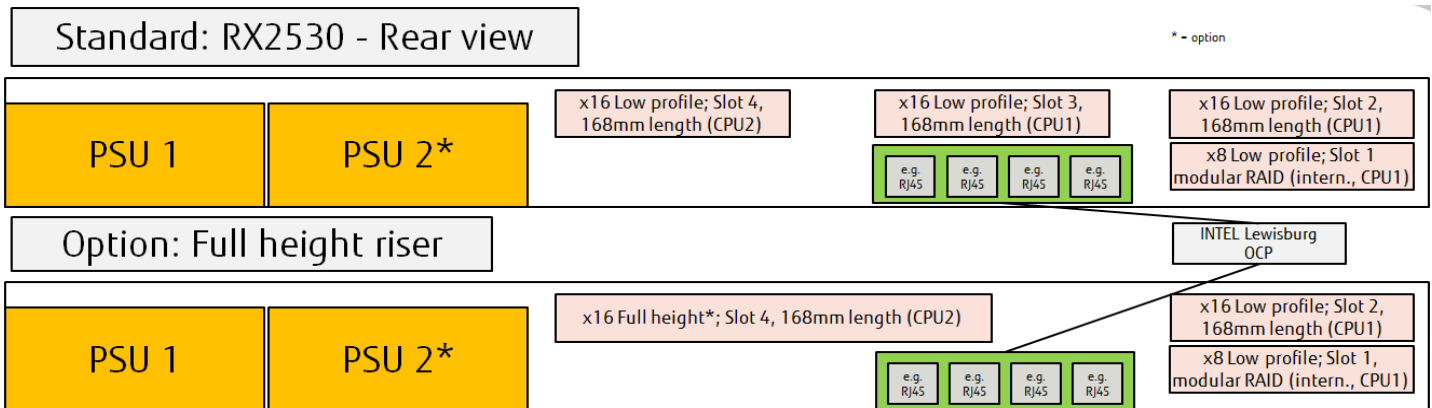
Abbreviations

SAS	Drives, RAID	Serial attached SCSI Device (HDD, SSD, LTO drives); SAS2.0 = 6Gbit/s; SAS3.0 = 12Gbit/s
SATA	Drives, RAID	Serial ATA (HDD, SSD) current SATA speed = 6Gbit/s
HDD	Drives	Hard disk drive (Non volatile storage device), 2.5" (SFF) or 3.5" (LFF)
SSD	Drives	Solid state disk (Non volatile storage device), 2.5" (SFF)
SFF	Drives	small form factor (=2.5")
LFF	Drives	large form factor (=3.5")
CPU	Processor	central processing unit ("processor")
RAID	Drives, RAID	RAID 0 = max speed, RAID 1 = mirroring, RAID 5 = 1 out of x drives is spare
Spaces	OS	Microsoft spaces, optimized in Win2012 R2 offers software RAID and storage tiering
vSAN	OS	
storage tiering	RAID	offers optimized storage allocation (fast area for "hot data"; slower area for "cold data")
hot data	Drives	Data which are currently being processed
cold data	Drives	Data which are currently not processed (only stored)
ODD	Drives	optical disk drive (i.e. DVD-player, DVD-burner, Blu ray player, blu ray burner)
OS	operating system	OS=operating system - required for running, organize and administrating the server
E-Part	"Einbau-Part"	"e.g. S26361-F1234-E240" ordercode with "E" means it is either integrated into to Server (CPU, Mem, ..) or integrated in the shipping box (Keyboard, Mouse, ..)
L-Part	"Lose Lieferung-Part"	"e.g. S26361-F1234-L240" ordercode with "L" means, the part will be shipped with extra package, may be as well with extra shipment

PRIMERGY RX2530 M4 schematics of the System board and fans

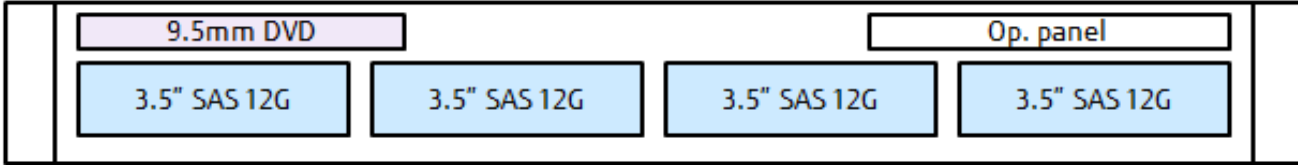


PRIMERGY RX2530 M4 rear view with PSU, PCIe slots and dynamic LOM

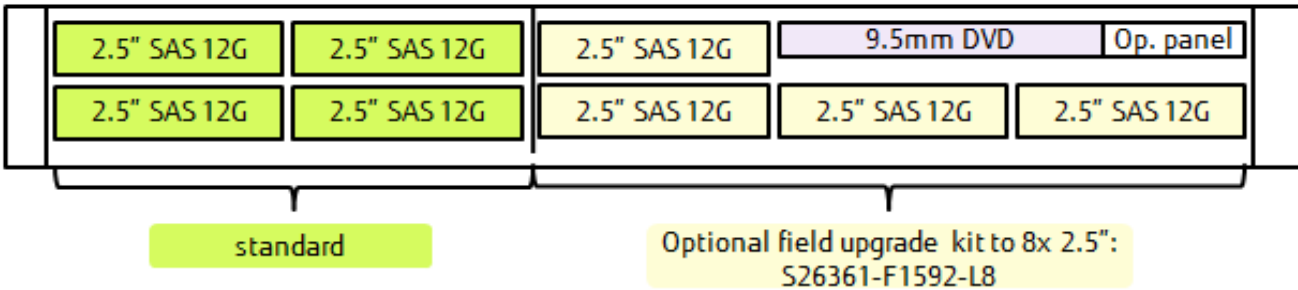


PRIMERGY RX2530 M4 front view with drives and operation panel

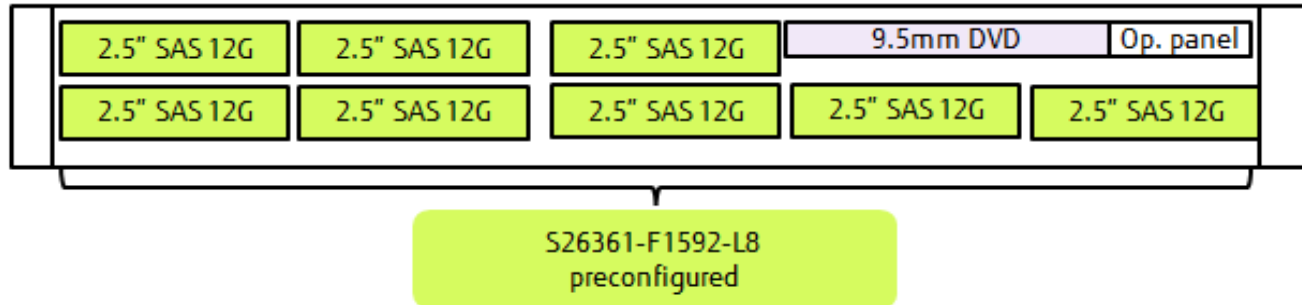
RX2530 4x3.5"- Front view



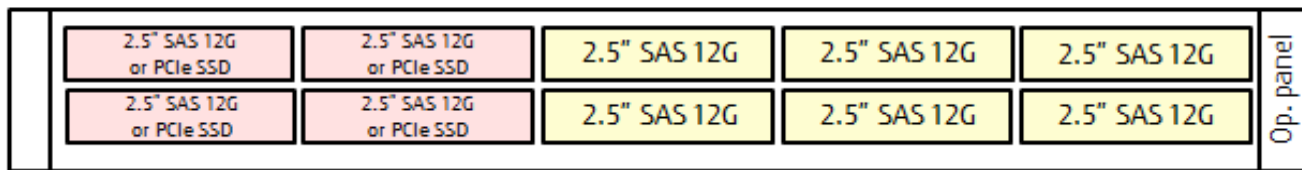
RX2530 4x2.5"- Front view



RX2530 8x2.5"- Front view



RX2530 10x2.5"- Front view



recommended components for RX2530 M4	#
Independant Mode installation	1x
PLAN EM 4x1Gb T interface card	1x
Region kit APAC/EMEA/India	1x
iRMC S5 advanced pack	1x
Modular PSU 450W platinum hot plug	2x

Chapter 1 - base unit

Start

Power supply units & cooling

The PRIMERGY RX2530 M4 offers bays for 1x or 2x direct attached hot plug (opt. redundant) power supply units of 450W, 800W and 1200W with up to 96% efficiency. The PRIMERGY RX2530 M4 comes equipped with ultimate performance processor heat pipes and 3+1 (1CPU) or 7+1 (2 CPU) high performance single hot plug fans (3+1 or 7+1 redundant).

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 easily highlight 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 D3383 "made in Germany" based on Chipset Intel® C624 (Lewisburg)

> 2 serial QPI links (Quick Path Interconnect)

> Up to two Intel® Xeon® Processor Scalable Family CPUs

Slots: per default, 4 PCIe slots are on Board - please see schematics in "description"

> 3 PCIe slots low profile, 167mm length @ first CPU:

Slot 1 **PCIe-Gen3 x8 (internal)** - only for modular RAID/SAS controller

Slot 2 **PCIe-Gen3 x16**

Slot 3 **PCIe-Gen3 x16**

> 1 PCIe slot low profile, 167mm length @ second CPU:

Slot 4 **PCIe-Gen3 x16**

PCIe controller population has to be according to internal or external connectivity requirements.

The system offers 1x internal PCIe slot for SAS / RAID controllers only 3x freely configurable PCIe slots for other PCIe controllers.

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

Slot 4 can also be upgraded to PCIe Gen3 x16 full height, 167mm length (!Slot 3 and it's riser is not available in this case!)

Onboard RAID 0/1 6Gbit/s

available for up to 10x 2.5" SATA drives

System RAM up to DDR4-2666 MHz

3.072 GB memory with 24x DDR4 LRDIMMs (12 per CPU).

Memory speed depends on CPU and configuration, please see folder "CPU" and "RAM" for further details.

LAN

LAN on Motherboard based on the high performance Chip Emulex XE104 with flexible LAN connections - options for 2x1Gbit/s (RJ45), 4x1Gbit/s (RJ45), 2x10Gbit/s (RJ45), 2x10Gbit/s (SFP+) available.

Software

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

Connectivity

Interfaces at rear side

- 1 service LAN RJ45 (1 Gbit)
- 2x RJ45 with integrated LEDs for fixed onboard 1Gb LAN
- 1x VGA (15 pins)
- 2x USB 3.0 UHCI
- 1x serial 16550 interface
- Slot for interface cards from INTEL (OCP FF) /w up to 4 LAN ports driven by Lewisburg chip

Interfaces at front

- for base units with up to 8 HDD: 2x USB 3.0 and front VGA option
- for base units with 10HDD: 1x USB2.0 (on "ear"), no front VGA option

Interfaces internal

- 1x USB 3.0,
- 2x M.2
- 2x 4* SATA 6G

S26361-K1592-V101
S26361-K1592-V111 (bulk)
 RX2530 M4 4x 3.5" Rack Server
 base unit for up to 4x 3.5" drives. D3383 systemboard

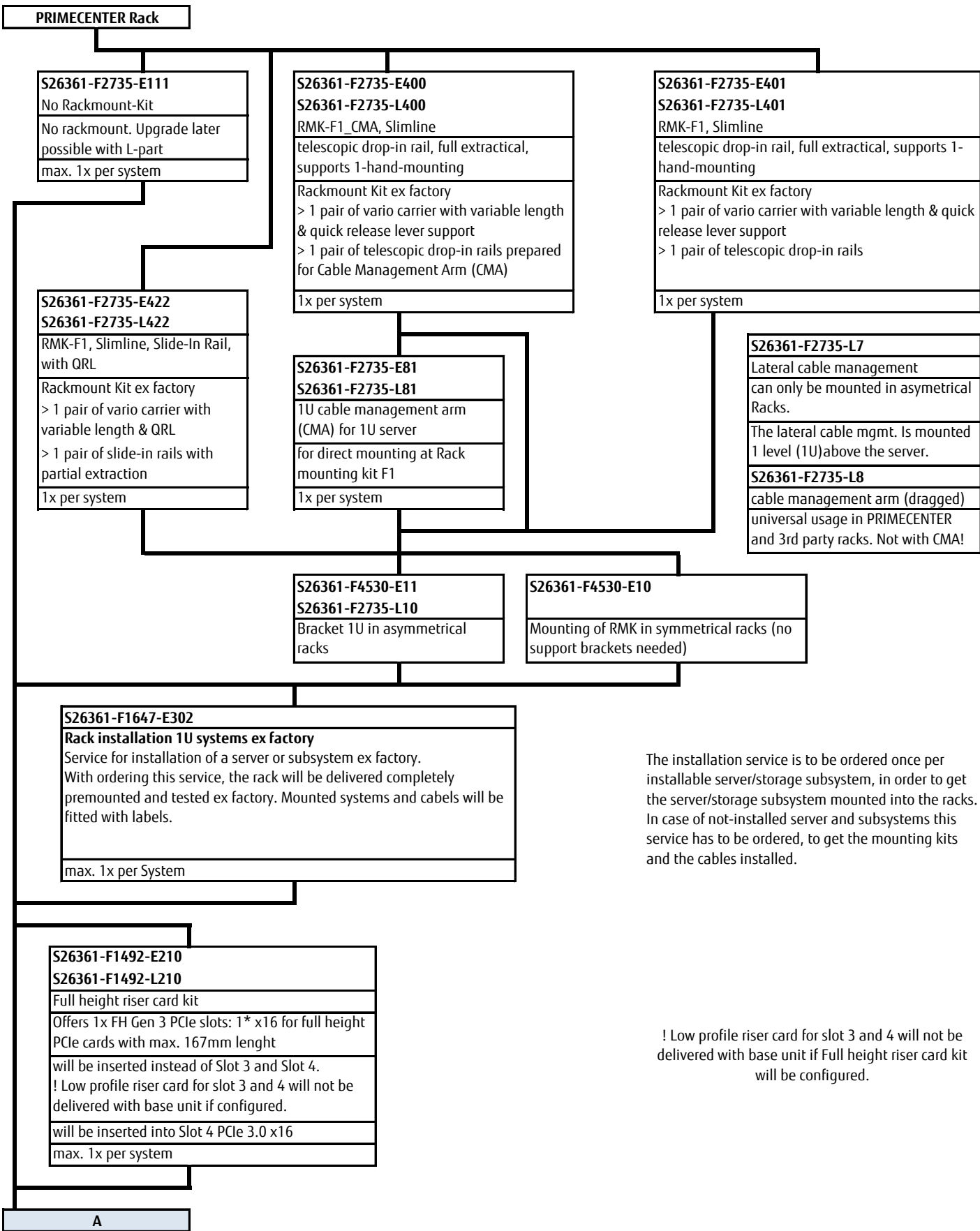
S26361-K1592-V301
S26361-K1592-V311 (bulk)
 RX2530 M4 4x 2.5" Rack Server
 base unit for 4x 2.5" drives; optional upgrade kit to 8x2,5"; D3383 systemboard;

S26361-K1592-V401
S26361-K1592-V411 (bulk)
 RX2530 M4 8x2.5Rack Ser.
 equals V301 base unit, but has the 'optional upgrade kit to 8x2,5' pre-configured

S26361-K1592-V501
 RX2530 M4 10x2.5" Rack Server
 base unit for up to 10x 2.5" drives; D3383 systemboard

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.

! Low profile riser card for slot 3 and 4 will not be delivered with base unit if Full height riser card kit will be configured.

Chapter 3 - CPU

B

There are 2 processor sockets available. Please configure 1 or 2 Processors.

>> All processors have to be the same type.

>> With **one** processor LOM, iRMC, 2x PCIe 2.5" device, 2x PCIe card slots and 12x DIMM slots are available

>> With **two** processors all 24x DIMM slots, 4x PCIe card slots and 6x PCIe 2.5" device slots are available.

>> To configure 2nd CPU an additional cooler kit is required.

>> Empty CPU slot have to be filled up with a CPU Dummy!

* HT = Hyper Threading

Xeon Bronze 3100 - Basic (Shelf 1)

64-bit Intel Xeon processor supporting DDR4 @ 2133MHz & QPI Bus @ 9.6 GT/s

Xeon Bronze 3104 6C nHT 1.7GHz 85W	S26361-F4051-E104	S26361-F4051-L104
Xeon Bronze 3106 8C nHT 1.7GHz 85W	S26361-F4051-E106	S26361-F4051-L106

Xeon Silver 4100 - Standard (Shelf 2)

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus 9.6 GT/s

Xeon Silver 4108 8C 1.8GHz 85W	S26361-F4051-E108	S26361-F4051-L108
Xeon Silver 4110 8C 2.1GHz 85W	S26361-F4051-E110	S26361-F4051-L110
Xeon Silver 4114 10C 2.2GHz 85W	S26361-F4051-E114	S26361-F4051-L114
Xeon Silver 4116 12C 2.1GHz 85W	S26361-F4051-E116	S26361-F4051-L116

Xeon Silver 4100 - Frequency Optimized (Shelf 2)

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 9.6 GT/s

Xeon Silver 4112 4C 2.6GHz 85W	S26361-F4051-E212	S26361-F4051-L212
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Xeon Gold 5100 - Advanced (Shelf 3)

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 10.4 GT/s

Xeon Gold 5115 10C 2.4GHz 85W	S26361-F4051-E115	S26361-F4051-L115
Xeon Gold 5118 12C 2.3GHz 105W	S26361-F4051-E118	S26361-F4051-L118
Xeon Gold 5120 14C 2.2GHz 105W	S26361-F4051-E120	S26361-F4051-L120

Xeon Gold 5100 - Frequency Optimized (Shelf 3)

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s

Xeon Gold 5122 4C 3.6GHz 105W	S26361-F4051-E222	S26361-F4051-L222
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Xeon Gold 6100 - Advanced (Shelf 4)

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s

Xeon Gold 6130 16C 2.1GHz 125W	S26361-F4051-E130	S26361-F4051-L130
Xeon Gold 6140 18C 2.3GHz 140W	S26361-F4051-E140	S26361-F4051-L140
Xeon Gold 6138 20C 2.0GHz 125W	S26361-F4051-E138	S26361-F4051-L138
Xeon Gold 6148 20C 2.4GHz 150W	S26361-F4051-E148	S26361-F4051-L148
Xeon Gold 6152 22C 2.1GHz 140W	S26361-F4051-E152	S26361-F4051-L152

Xeon Gold 6100 - Frequency Optimized (Shelf 4)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s		
Xeon Gold 6128 6C 3.4GHz 115W	S26361-F4051-E228	S26361-F4051-L228
Xeon Gold 6134 8C 3.2GHz 130W	S26361-F4051-E234	S26361-F4051-L234
Xeon Gold 6126 12C 2.6GHz 125W	S26361-F4051-E226	S26361-F4051-L226
Xeon Gold 6136 12C 3.0GHz 150W	S26361-F4051-E236	S26361-F4051-L236
Xeon Gold 6132 14C 2.6GHz 140W	S26361-F4051-E232	S26361-F4051-L232
Xeon Gold 6142 16C 2.6GHz 150W	S26361-F4051-E242	S26361-F4051-L242
Xeon Gold 6144 8C 3.5GHz 150W	S26361-F4051-E244	S26361-F4051-L244
Xeon Gold 6146 12C 3.2GHz 165W	S26361-F4051-E246	S26361-F4051-L246
Xeon Gold 6150 18C 2.7GHz 165W	S26361-F4051-E250	S26361-F4051-L250
Xeon Gold 6154 18C 3.0GHz 200W	S26361-F4051-E254	S26361-F4051-L254
Xeon Platinum 8100 Advanced (Shelf 4)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s		
Xeon Platinum 8153 16C 2.0GHz 125W	S26361-F4051-E153	S26361-F4051-L153
Xeon Platinum 8160 24C 2.1GHz 150W	S26361-F4051-E160	S26361-F4051-L160
Xeon Platinum 8164 26C 2.0GHz 150W	S26361-F4051-E164	S26361-F4051-L164
Xeon Platinum 8170 26C 2.1GHz 165W	S26361-F4051-E170	S26361-F4051-L170
Xeon Platinum 8176 28C 2.1GHz 165W	S26361-F4051-E176	S26361-F4051-L176
Xeon Platinum 8180 28C 2.5GHz 205W	S26361-F4051-E180	S26361-F4051-L180
Xeon Platinum 8100 - Frequency optimized		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s		
Xeon Platinum 8168 24C 2.7GHz 205W	S26361-F4051-E268	S26361-F4051-L268
Xeon Gold 6100M - Advanced (Shelf 4; 1.5TB p. Socket)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s		
Xeon Gold 6134M 8C 3.2GHz 130W	S26361-F4051-E334	S26361-F4051-L334
Xeon Gold 6140M 18C 2.3GHz 140W	S26361-F4051-E340	S26361-F4051-L340
Xeon Gold 6142M 16C 2.6GHz 150W	S26361-F4051-E342	S26361-F4051-L342
Xeon Platinum 8100M - Advanced (1.5TB p. Socket)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s		
Xeon Platinum 8160M 24C 2.1GHz 150W	S26361-F4051-E360	S26361-F4051-L360
Xeon Platinum 8170M 26C 2.1GHz 165W	S26361-F4051-E370	S26361-F4051-L370
Xeon Platinum 8176M 28C 2.1GHz 165W	S26361-F4051-E376	S26361-F4051-L376
Xeon Platinum 8180M 28C 2.5GHz 205W	S26361-F4051-E380	S26361-F4051-L380

B1

B1

Xeon Silver 4100 - Embedded (Shelf 2)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 9.6 GT/s		
Xeon Silver 4114T 10C 2.2GHz 85W	S26361-F4051-E414	S26361-F4051-L414
Xeon Gold 5100 - Embedded (Shelf 3)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 10.4 GT/s		
Xeon Gold 5119T 14C 1.9GHz 85W	S26361-F4051-E419	S26361-F4051-L419
Cooler Kit (see comment above; for upgrade please use according kit to the selected CPU)		
Cooling Kit 2nd CPU	S26361-F3849-E100	
Cooling kit up to 130W TDP; no ATD, 4x Single Rotor Fan		S26361-F4051-L830
Cooling kit up to 160W TDP; no ATD, 4x Dual Rotor Fan		S26361-F4051-L831
Cooling kit up to 205W TDP; ATD supported, 4x Dual Rotor Fan		S26361-F4051-L832

C

For configuring a 2nd CPU please order the required cooling kit with this order code

Chapter 4 - DDR4 System memory

C

Each CPU offers 12 Slots for DDR4 Memory Modules organised in 2 Banks and 6 Channels with 2 Memory Controllers (3 Channels each). If you need more than 12 Slots you have to configure the 2nd CPU. Depending on the amount of memory configured you can decide between 4 basic modes of operation (see explanation below).

There are 2 different kinds of DDR4 Memory Modules available: RDIMM and RDIMM 3DS (also known as TSV). Mix of RDIMM and RDIMM 3DS is under investigation (currently not allowed).

Supported memory capacities per CPU:
 384 GB DDR4 RDIMM (12x 32GB 2Rx4)
 1.536 GB DDR4 RDIMM 3DS (12x 128GB 8Rx4)
 Supported memory capacities per System:
 768GB using RDIMM
 3.072GB using RDIMM 3DS technology with 128GB per module

The memory speed is independent from the configuration (1DPC or 2DPC) but restricted by the CPU SKU (max. 2.666 MT/s). DDR4 memory is operated at 1.2V

Preview on NVDIMM support in 2018 (not POR for release in 2017)
 Up to 12 NVDIMMs are supported per System (6 per CPU)

This leads to the following maximum memory capacity per System:
 7.680 GB DDR4 with 12x 512GB NVDIMM (6.144GB) + 12x 128GB RDIMM 3DS (1.536GB)

S26361-F3694-E10	Independent Mode Installation
Independent Channel Mode allows all channels to be populated in any order. No specific Memory RAS features are defined	
Requires minimum 1 memory Module per CPU	
S26361-F3694-E1	Rank Sparing Mode Installation
BIOS Setup factory preinstalled to this mode. One Rank is spare of other ranks on the same channel. Spare Rank is not shown in System Memory. For effective capacity within a channel, please have a look below.	
Requires minimum 2x 1R/2R or 1x 4R/8R modules per CPU	
S26361-F3694-E2	Performance Mode Installation
BIOS Setup factory preinstalled for maximum Performance, six identical memory modules will be equipped in one memory bank to achieve highest memory performance. All six modules are active and full capacity can be used.	
Multiple of 6 identical modules to be configured per CPU	
S26361-F3694-E3	Mirrored Channel Mode Installation
BIOS Setup factory preinstalled to this mode. Six identical memory modules are always equipped in one memory bank to use the Mirrored channel Mode. Only three modules contain active data, the remain three modules contain mirrored data.	
Multiple of 6 identical modules to be configured per CPU	



Resulting memory capacity / Rank Sparing Mode, 1 Channel populated										
	RDIMM				RDIMM 3DS					
	16GB	1R	16GB	2R	32GB	2R	64GB	4R	128GB	8R
1DPC			8GB		16GB		48GB		112GB	
2DPC	16GB		24GB		48GB		112GB		240GB	

DDR4 rg x8 2666		
8GB (1x8GB) 2Rx8 DDR4-2666 R ECC	S26361-F4026-E118	S26361-F4026-L118
16GB (1x16GB) 2Rx8 DDR4-2666 R ECC	S26361-F4026-E116	S26361-F4026-L116
DDR4 rg x4 2666		
8GB (1x8GB) 1Rx4 DDR4-2666 R ECC	S26361-F4026-E208	S26361-F4026-L208
16GB (1x16GB) 2Rx4 DDR4-2666 R ECC	S26361-F4026-E226	S26361-F4026-L226
16GB (1x16GB) 1Rx4 DDR4-2666 R ECC	S26361-F4026-E216	S26361-F4026-L216
32GB (1x32GB) 2Rx4 DDR4-2666 R ECC	S26361-F4026-E232	S26361-F4026-L232
DDR4 rg 2666 3DS		
64GB (1x64GB) 4Rx4 DDR4-2666 3DS ECC	S26361-F4026-E364	S26361-F4026-L364
128GB (1x128GB) 8Rx4 DDR4-2666 3DS ECC**	S26361-F4026-E328	S26361-F4026-L328
DDR4 lr 2666		
64GB (1x64GB) 4Rx4 DDR4-2666 LR ECC	S26361-F4026-E464	S26361-F4026-L464
NVDIMM 2666 (will be launched in 2018; not POR for first release)		
128GB (1x128GB) DDR4-2666 NV ECC	TBD	TBD
256GB (1x256GB) DDR4-2666 NV ECC	TBD	TBD
512GB (1x512GB) DDR4-2666 NV ECC	TBD	TBD

only special release
 only special release

only special release

**as soon as available

D

Detailed information

Mode	Configuration	RDIMM	RDIMM		Use case, advantage
			LRDIMM		
SDDC (chipkill) support	any	no	yes		supports detecting multi-bit errors
Independant channel mode	1 or 2 Modules per Bank	yes	yes		offers max. flexibility, upgradeability, capacity
Mirrored channel mode *)	6 identical Modules / Bank	no	yes		offers maximum security
Performance mode	6 identical Modules / Bank	yes	yes		offers maximum performance and capacity
Rank sparing mode *)	min. 2 Ranks / Channel	no	yes		balances performance and capacity

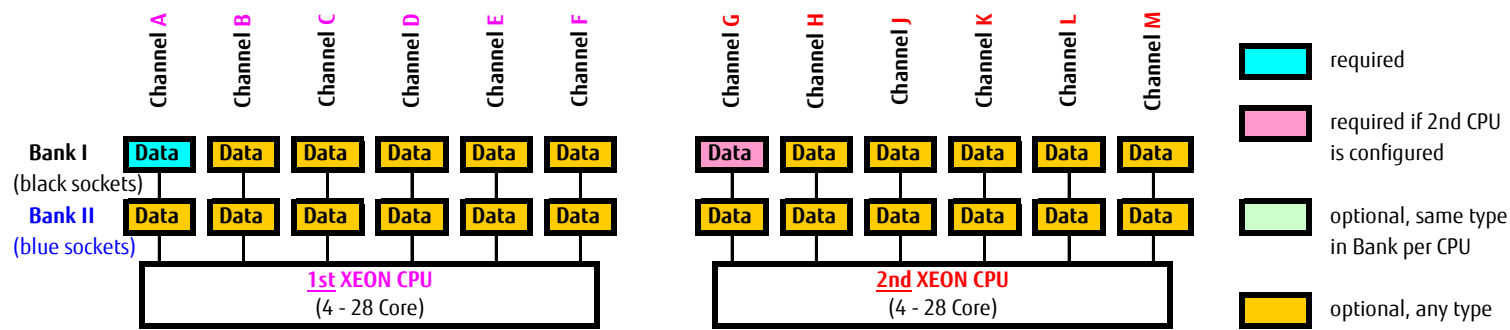
*) For the delivery ex factory the system will be prepared with dedicated BIOS setting.

Capacity	Configuration	RDIMM	RDIMM 3DS	Notes
Min. Memory per CPU	1 Module / CPU	1x16GB	1x64GB	with one CPU
Max. Memory per CPU	12 Modules / CPU	12x32GB	12x128GB	with one CPU
Max. Memory per System	24 Modules / System	768GB	3.072GB	if second CPU is configured

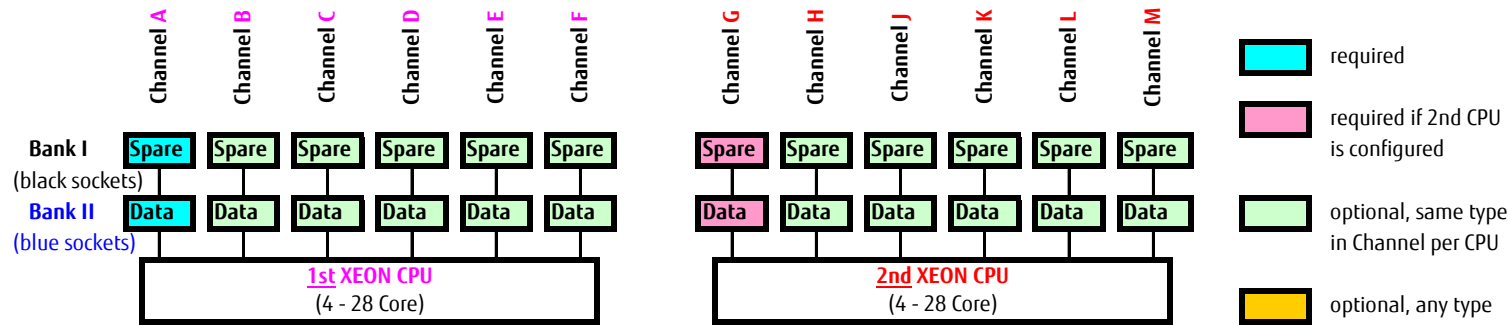
The memory sockets on the Systemboards are color coded

Bank I	black sockets	Bank II	blue sockets
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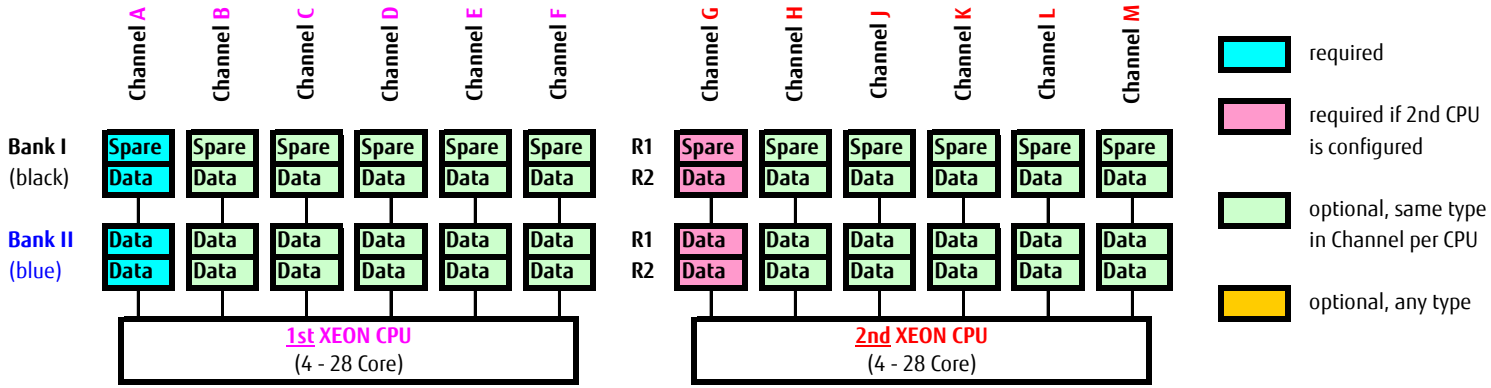
Independant channel mode



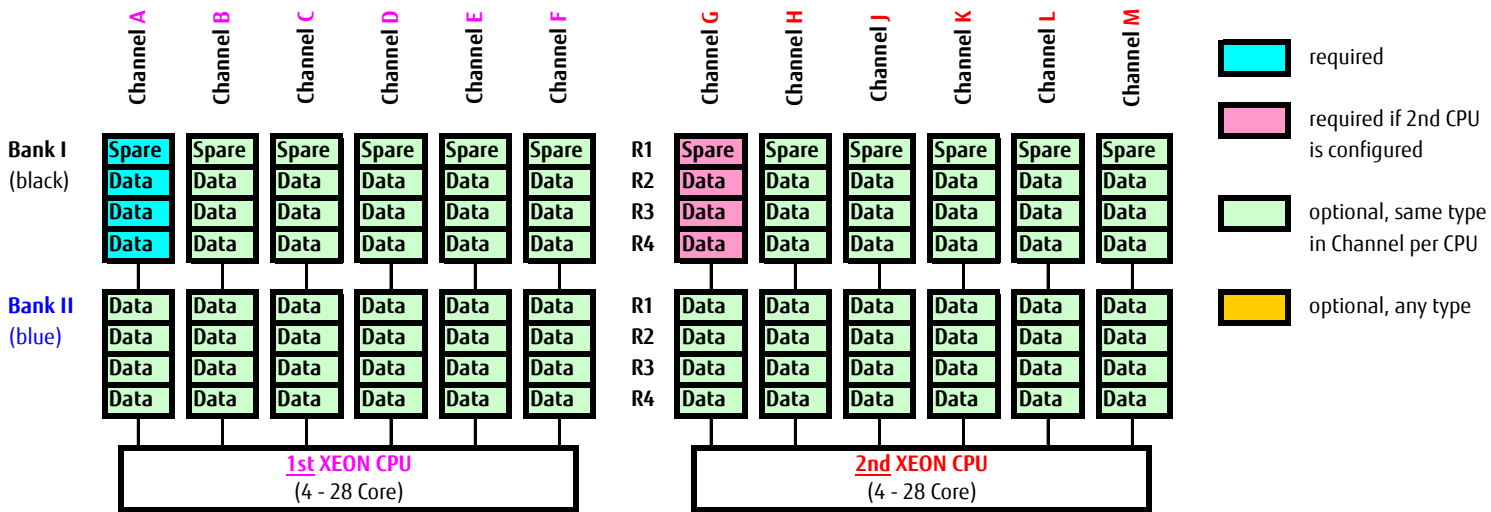
Rank sparing mode --- 1-Rank Memory modules (RDIMM)



Rank sparing mode --- 2-Rank Memory modules (RDIMM)

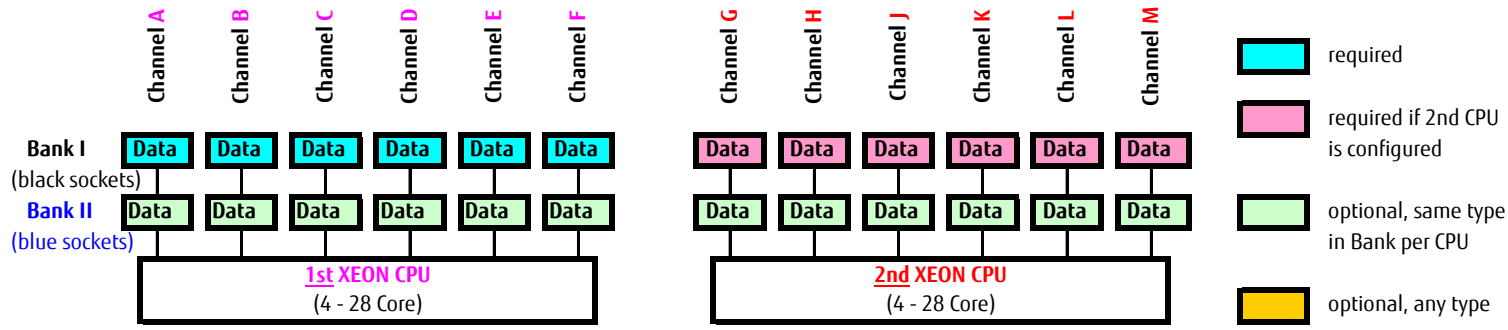


Rank sparing mode --- 4-Rank Memory modules (RDIMM 3DS)

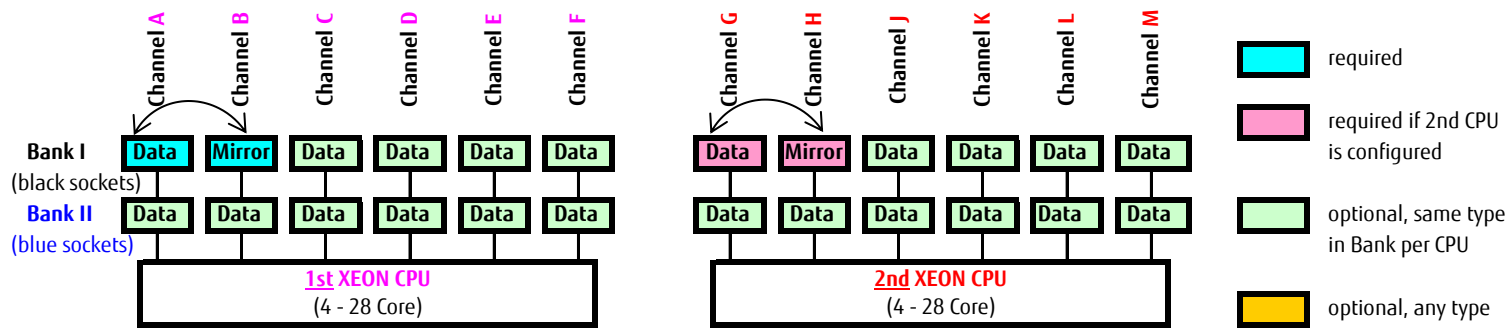


Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel. The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing mode is to achieve max. available memory, e.g. 4 DIMMs will be spread across two channels, each with 2DPC

Performance Channel Mode

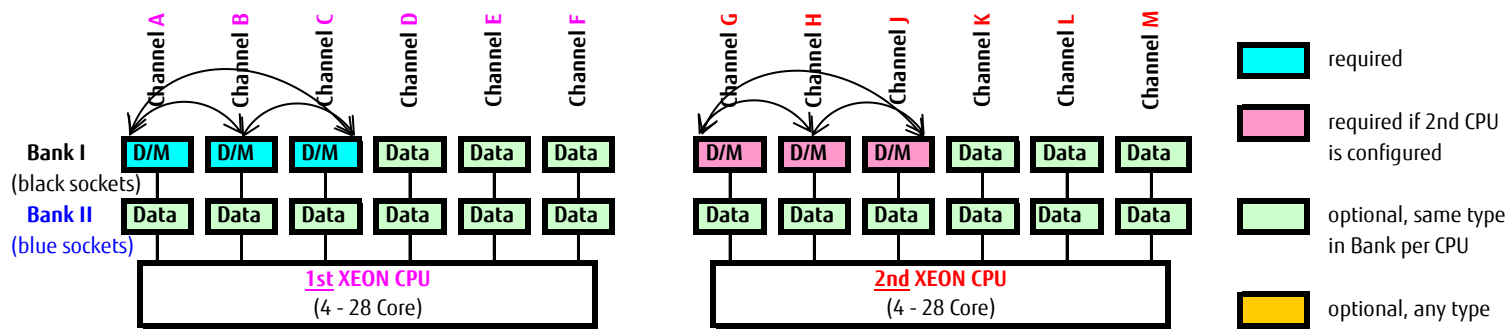


Mirror Channel Mode (2 DIMMS per CPU)



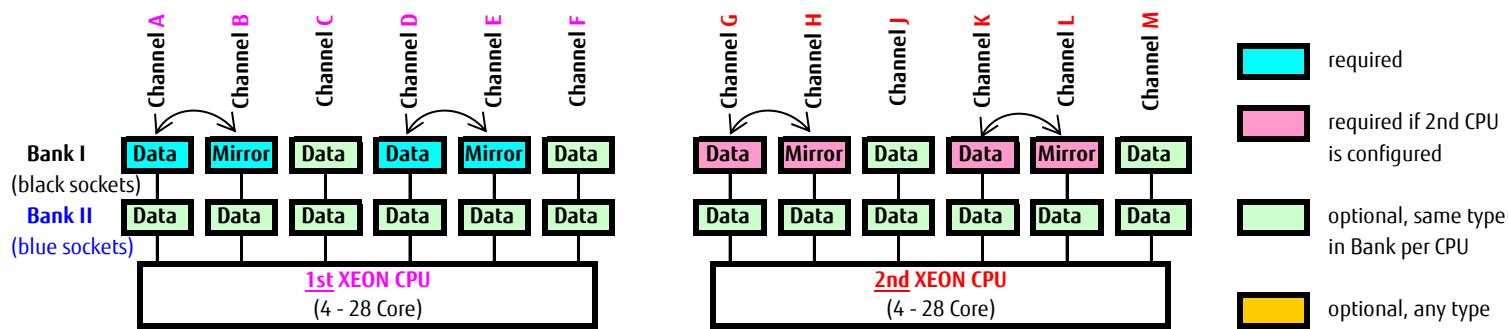
Mirrored Channel Mode (2 DIMMS per CPU) requires identical modules on channel A & B (1st CPU) or channel G & H (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 2 identical modules has to be ordered.

Mirror Channel Mode (3 DIMMS per CPU)



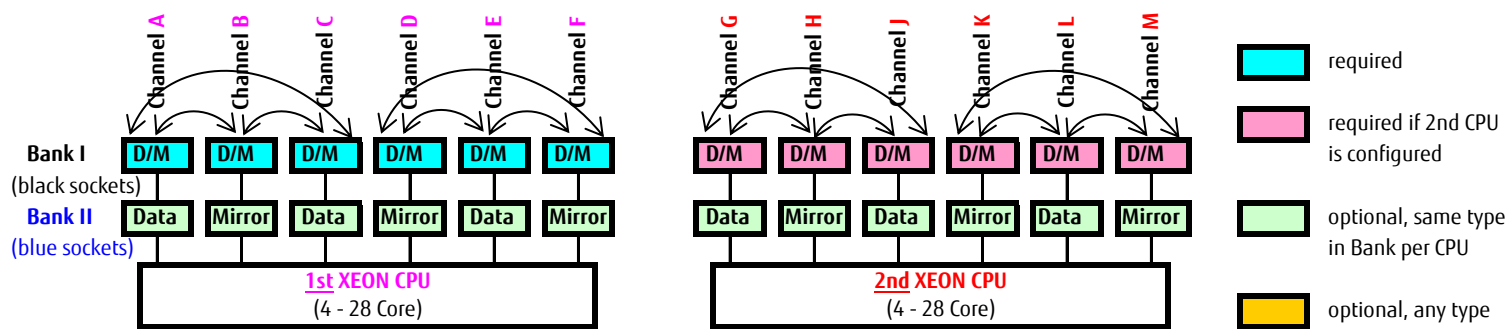
Mirrored Channel Mode (3 DIMMS per CPU) requires identical modules on channel A, B & C (1st CPU) or channel G, H & J (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 3 identical modules has to be ordered.

Mirror Channel Mode (4 DIMMS per CPU)



Mirrored Channel Mode (4 DIMMS per CPU) requires identical modules on channel A, B, D & E (1st CPU) or channel G, H, K & L (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 4 identical modules has to be ordered.

Mirror Channel Mode (6 DIMMS per CPU)



Mirrored Channel Mode requires identical modules on channel A, B, C, D, E, F (1st CPU) or channel G, H, J, K, L and M (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 6 identical modules has to be ordered.

Chapter 5 - Graphics options

D

S26361-F1420-E131
S26361-F1420-L131
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
not for 10x 2,5" base unit (S26361-K1592-V501)
max. 1x per system



Optional Front VGA
only possible for
onboard graphics

S26361-F2748-E638*
S26361-F2748-L638*
PGRA CP NVS 1GB VGA LP PCIe x16
NVIDIA NVS315
1024 MB PCIe-x16
Connectors: 1x LFH 59 cable kit for 2x DVI or 2x VGA cable kits included
Dual head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS
low profile bracket
max. 1x per system

*as soon as
available

E

Chapter 7 - SAS / RAID Controller

template for M3 Mono and M4 Duals

for combination and max number of controllers please see folder base / chassis

F

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	1x	onboard, included
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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
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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
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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 for base V1xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 55cm length		1x	S26361-F5243-E155	S26361-F5243-L115
FBU Option for PRAID EP4xx for base V3xx, V4xx, V5xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 75cm length		1x	S26361-F5243-E175	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
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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 for base V1xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 55cm length		1x	S26361-F5243-E155	S26361-F5243-L115
FBU Option for PRAID EP4xx for base V3xx, V4xx, V5xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 75cm length.		1x	S26361-F5243-E175	S26361-F5243-L115

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

NVMe support for all EP5xxi tbd

internal drive RAID / SAS controllers for E91 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
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8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander or
8 ports 8Gb/s NVMe PCIe, supports up to 2 x4 NVMe devices without expander
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, supports up to 16 devices without expander or
16 ports 8Gb/s NVMe PCIe, supports up to 4 x4 NVMe devices without expander
includes Fastpath and SafeStore Advanced SW-Licence
requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516

optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included

FBU Option für PRAID EP5xx for base V1xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 55cm length.	1x	S26361-F4042-E155	S26361-F4042-L110
FBU Option für PRAID EP5xx for base V3xx, V4xx, V5xx: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 83cm length.	1x	S26361-F4042-E183	S26361-F4042-L110

Please be aware that PRAID EP5xxi series consumes a standard PCI slot instead of the internal slot - other than existing I/O controllers

For Expander configurations PRAID EPxxi are optimal for performance, PRAID CP400i is not released for expander configurations, max. 8 drives supported.

Check: the FBU can / cannot be combined with Advanced Thermal design.
max 1 FBU can be integrated per System, 2FBU on Special release

SafeStore + FastPath is supported

G

**It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality

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					

external SAS, RAID controller with 2nd Level cache 2GB

RAID / SAS, SATA controllers for external drives with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options					
PRAID EP420e RAID Contr. LP	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	2x	S26361-F3847-E202	S26361-F3847-L502
PRAID EP420e for SafeStore LP	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	2x	S26361-F3847-E204	S26361-F3847-L504
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 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			2x	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		2x	S26361-F5243-E200	S26361-F5243-L200
FBU Option for PRAID EP4xx for base V102: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 55cm lenght			2x	S26361-F5243-E155	S26361-F5243-L115
FBU Option for PRAID EP4xx for base V105: Supercap securing the power supply of the RAID contr. in case of power failure including cable with 75cm lenght			2x	S26361-F5243-E175	S26361-F5243-L115

internal controllers for PCIe SSD SFF (2,5" NVMe PCIe) drives, no HW-RAID

retimer controller for internal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)**					
PPCI CP x16 retimer	No Cache	No HW-RAID	2x	S26361-F4048-E201	S26361-F4048-L501
No HW RAID, No Cache, simple route-through incl. Signal enhancement; device management by INTEL VMD** divides PCIe3.0 x16 lanes into 4x x4 lanes , supports up to 4x 2.5" PCIe-SSD SFF requires 1x LP PCIe 3.0 x16 (int.) slot					

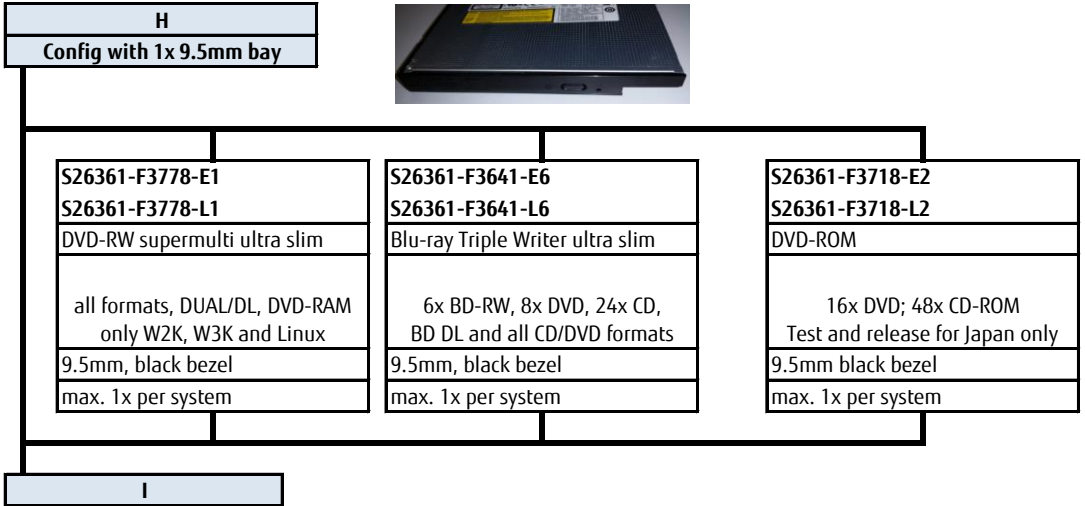
**as soon as available

onboard Ocu Link Connector, from CPU to Backplane for internal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)					
XY ports 8Gb/s PCIe x2, x4	Intel CPU	No Cache		2x	onboard

H

Chapter 8 - ODD optical disk drives

The 10x 2,5" base unit (S26361-K1592-V501) does NOT feature ODD



Chapter 10 - storage drives

I

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.
 SATA drives can be connected to the onboard Controller (max. 8x),
 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:
 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) SAS and SATA SSD

SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5608-E400	S26361-F5608-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5608-E800	S26361-F5608-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5608-E160	S26361-F5608-L160
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5611-E400	S26361-F5611-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5611-E800	S26361-F5611-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5611-E160	S26361-F5611-L160

max. 10x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5666-E400	S26361-F5666-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5666-E800	S26361-F5666-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5666-E160	S26361-F5666-L160
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	2,3		S26361-F5666-E320	S26361-F5666-L320

max. 10x - depending on base unit & configuration

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5670-E480	S26361-F5670-L480
960GB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5670-E960	S26361-F5670-L960
1.92TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5670-E192	S26361-F5670-L192
3.84TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5670-E384	S26361-F5670-L384
7.68TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	0,9		S26361-F5670-E768	S26361-F5670-L768

max. 10x - depending on base unit & configuration

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5588-E240	S26361-F5588-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5588-E480	S26361-F5588-L480
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,6	as soon as available	S26361-F5675-E240	S26361-F5675-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,6	as soon as available	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

max. 10x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E240	S26361-F5632-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E480	S26361-F5632-L480
800GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E800	S26361-F5632-L800
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E960	S26361-F5632-L960
1.2TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E120	S26361-F5632-L120
1.6TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5632-E160	S26361-F5632-L160

max. 10x - depending on base unit & configuration

J

J

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
450GB	15.000	SAS 12Gb/s	512n		S26361-F5531-E545	S26361-F5531-L545
600GB	15.000	SAS 12Gb/s	512n		S26361-F5531-E560	S26361-F5531-L560
900GB	15.000	SAS 12Gb/s	512n	as soon as available	S26361-F5531-E590	S26361-F5531-L590

max. 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
900GB	10.000	SAS 12Gb/s	512n		S26361-F5550-E190	S26361-F5550-L190
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. 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-F5543-E160	S26361-F5543-L160
900GB	10.000	SAS 12Gb/s	512e		S26361-F5543-E190	S26361-F5543-L190
1.2TB	10.000	SAS 12Gb/s	512e		S26361-F5543-E112	S26361-F5543-L112
1.8TB	10.000	SAS 12Gb/s	512e		S26361-F5543-E118	S26361-F5543-L118
1.8TB	10.000	SAS 12Gb/s	512e	SED	S26361-F5582-E118	S26361-F5582-L118

max. 10x - depending on base unit & configuration

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

HDD SAS 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	SAS 12Gb/s	512n		S26361-F5600-E100	S26361-F5600-L100
2TB	7.200	SAS 12Gb/s	512n		S26361-F5600-E200	S26361-F5600-L200

max. 10x - depending on base unit & configuration

HDD SAS 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	SAS 12Gb/s	512e		S26361-F5573-E100	S26361-F5573-L100
2TB	7.200	SAS 12Gb/s	512e		S26361-F5573-E200	S26361-F5573-L200

max. 10x - depending on base unit & configuration

Mixed configuration 2.5" HDD SATA 7.2K with 2.5" HDD SAS 15K 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. 10x - depending on base unit & configuration

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. ?10x - depending on base unit & configuration

K

K

3.5" (LFF) SAS and SATA SSD

SSD SAS 3.5" Write Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5607-E400	S26361-F5607-L400
800GB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5607-E800	S26361-F5607-L800
1.6TB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5607-E160	S26361-F5607-L160

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

SSD SAS 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5662-E400	S26361-F5662-L400
800GB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5662-E800	S26361-F5662-L800
1.6TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5662-E160	S26361-F5662-L160
3.2TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	2,3		S26361-F5662-E320	S26361-F5662-L320

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

SSD SAS 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5668-E480	S26361-F5668-L480
960GB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5668-E960	S26361-F5668-L960
1.92TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5668-E192	S26361-F5668-L192
3.84TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5668-E384	S26361-F5668-L384
7.68TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	0,9		S26361-F5668-E768	S26361-F5668-L768

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E240	S26361-F5589-L240
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E480	S26361-F5589-L480
240GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3,6	as soon as available	S26361-F5673-E240	S26361-F5673-L240
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3,6	as soon as available	S26361-F5673-E480	S26361-F5673-L480
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E960	S26361-F5589-L960
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		S26361-F5589-E192	S26361-F5589-L192

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

SSD SATA 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E240	S26361-F5630-L240
480GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E480	S26361-F5630-L480
800GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E800	S26361-F5630-L800
960GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E960	S26361-F5630-L960
1.2TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E120	S26361-F5630-L120
1.6TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1		S26361-F5630-E160	S26361-F5630-L160

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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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
450GB	15.000	SAS 12Gb/s	512n	S26361-F5532-E545	S26361-F5532-L545
600GB	15.000	SAS 12Gb/s	512n	S26361-F5532-E560	S26361-F5532-L560
900GB	15.000	SAS 12Gb/s	512n	as soon as available	S26361-F5532-E590

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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-F5569-E118	S26361-F5569-L118

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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
2TB	7.200	SAS 12Gb/s	512e	S26361-F5635-E200	S26361-F5635-L200
4TB	7.200	SAS 12Gb/s	512e	S26361-F5635-E400	S26361-F5635-L400
6TB	7.200	SAS 12Gb/s	512e	S26361-F5635-E600	S26361-F5635-L600
8TB	7.200	SAS 12Gb/s	512e	S26361-F5571-E800	S26361-F5571-L800
10TB	7.200	SAS 12Gb/s	512e	S26361-F5571-E100	S26361-F5571-L100
6TB	7.200	SAS 12Gb/s	512e	SED	S26361-F5584-E600
10TB	7.200	SAS 12Gb/s	512e	SED	S26361-F5624-E100

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

8/10TB HDDs not released with PSAS CP400i (S26361-F3842-E2) or PRAID EP5x0i S26361-F4042-E204

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-F3904-E800	S26361-F3904-L800
10TB	7.200	SATA 6Gb/s	512e	S26361-F3904-E100	S26361-F3904-L100

only possible in RX2530 M4 base unit with up to 4x3.5" HDD max. 4x HDD

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
150GB	M.2	SATA 6Gb/s	Boot	S26361-F5655-E150	S26361-F5655-L150

M.2 drive is designed for use as a VMware ESXi boot drive.

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

<i>Capacity</i>	<i>Formfactor</i>	<i>Interface</i>	<i>DWPD</i>	<i>Category</i>	<i>order code E-part</i>	<i>order code L-part</i>
150GB	M.2	SATA 6Gb/s	1,5	Boot	S26361-F5656-E150	S26361-F5656-L150
M.2 drive is designed for use as a boot drive with the Endurance Spec. above.						
max. 2x per Server; connector located on Motherboard (please see folder "description"). VMware is not supported.						

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2.5" (SFF) PCIe-SSD

2.5" PCIe-SSDs require a RAID Controller or PCIe retimer card.
 RAID Controller : PRAID EP520i/540i/580i
 PCIe retimer : PPCI CP x16 retimer

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

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	2,9	as soon as available	S26361-F5648-E160	S26361-F5648-L160
3.2TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	2,9	as soon as available	S26361-F5648-E320	S26361-F5648-L320
6.4TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	2,8	as soon as available	S26361-F5648-E640	S26361-F5648-L640

only possible in RX2530 M4 with "up to 10x HDD/SSD", S26361-K1592-V501; max. 4x PCIe-SSD per system.

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

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
500GB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,7	as soon as available	S26361-F5649-E50	S26361-F5649-L50
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1	as soon as available	S26361-F5649-E100	S26361-F5649-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,6	as soon as available	S26361-F5649-E200	S26361-F5649-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,6	as soon as available	S26361-F5649-E400	S26361-F5649-L400

only possible in RX2530 M4 with "up to 10x HDD/SSD", S26361-K1592-V501; max. 4x PCIe-SSD per system.

**as soon as available

AIC PCIe-SSD

PCIe-SSD (occupies one PCIe slot)

S26361-F5650-L200 S26361-F5650-E200	S26361-F5650-L400 S26361-F5650-E400	S26361-F5650-L640 S26361-F5650-E640
PACC EP P4600 AIC 2TB**	PACC EP P4600 AIC 4TB**	PACC EP P4600 AIC 6.4TB**
P4600 series, NVMe 2.8 DWPD	P4600 series, NVMe 2.9 DWPD	P4600 series, NVMe 2.8 DWPD
as soon as available	as soon as available	as soon as available
PCIe3.0 x4, Low Profile	PCIe3.0 x4, Low Profile	PCIe3.0 x4, Low Profile
max. 1x per system	max. 1x per system	max. 1x per system

**as soon as available

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Chapter 9 - LAN Components

Default: 2x RJ45 1GbE ports on systemboard

Dynamic LoM OCP PHY interface cards

Interface card to provide the external connectors for on-board LAN

PLAN EM 4x 1Gb T OCP interface Intel	4x RJ45 plug for 1000BASE-T	S26361-F3953-E401	S26361-F3953-L401
PLAN EM 2x 10Gb T OCP interface Intel	2x RJ45 plug for 10GBASE-T	S26361-F3953-E210	S26361-F3953-L210
PLAN EM 2x 10Gb SFP+ OCP interface Intel	2x SFP+ plugs for twinax or modules for SFP modules and cables see below	S26361-F3953-E211	S26361-F3953-L211
PLAN EM 4x 10Gb SFP+ OCP interface Intel	4x SFP+ plugs for twinax or modules for SFP modules and cables see below	S26361-F3953-E411	S26361-F3953-L411

max. 1x per system

1Gb Ethernet network components

1Gb Ethernet controller with RJ45 interface (1000BASE-T)

PLAN CP 2x1Gbit Cu Intel I350-T2 LP	3x	2 port, Intel	S26361-F4610-E202	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	3x	4 port, Intel	S26361-F4610-E204	S26361-F4610-L504

max. 3 Controller per system

10Gb Ethernet network components

10Gb Ethernet controller with RJ45 interface (10GBASE-T)

PLAN EP X550-T2 2x10GBASE-T LP	3x	2 port 10 Gbit Intel X550-T2 (Sageville)	S26361-F3948-E202	S26361-F3948-L502
PLAN EP OCe14102 2x10GBase-T LP	2x	2 port NIC with RDMA, Emulex	S26361-F5557-E201	S26361-F5557-L501

10/1Gb Ethernet controller with SFP+ cage requires SFP+ modules or twinax cables, Fujitsu / Intel based)

PLAN EP X710-DA2 2x10Gb SFP+ LP	3x	2 port NIC, Intel X710-DA2 (Fortville)	S26361-F3640-E202	S26361-F3640-L502
PLAN EP X710-DA4 4x10Gb SFP+ LP	3x	4 port NIC, Intel X710-DA4 (Fortville)	S26361-F3640-E204	S26361-F3640-L504

optional 10Gb SFP+ module with LC connector for Intel Ethernet

SFP+ Optical Transceiver 10G/1G Dual Rate	2x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate	2x .. 4x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
SFP+ Optical Transceiver 10G Single Rate	2x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Fujitsu	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate	2x .. 4x	LC, SMF / LR SFP+ module, up to 10km, Fujitsu	S26361-F3986-E4	S26361-F3986-L4
Twinax Anschlussplatz Primergy	2x .. 4x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	2x .. 4x	customized cable length	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x .. 4x	(best fitting cable length is defined during rack installation at the factory)	S26361-F3873-E500	

max. 4x (Dynamic LoM, X710-DA4), or 2x (Dynamic LoM, X710-DA2) SFP+ or Twinax Cable per controller

10Gb Ethernet controller with SFP+ interface for SFP+ modules or twinax cables, Emulex				
PLAN EP OCe14102 2x10Gb LP	2x	2 port NIC with RDMA, Emulex	S26361-F5536-E202	S26361-F5536-L502
PCNA EP OCe14102 2x10Gb LP	2x	2 port CNA with FCoE & RDMA, Emulex	S26361-F5250-E201	S26361-F5250-L501
optional 10Gb SFP+ module with LC connector for Emulex controller				
PCNA SFP+ MMF Modul OCe14102	4x	MMF / SR SFP+ module, up to 400m	S26361-F5250-E110	S26361-F5250-E110
Twinax Anschlussplatz Primergy	4x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	4x	customized cable length	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	4x	(best fitting cable length is defined during rack installation at the factory)	S26361-F3873-E500	
<i>max. 2x SFP+ or Twinax Cable per controller</i>				
max. 3 Controller per system				

25/10Gb Ethernet network components

25/10Gb Ethernet controller with 2x SFP28 cages (requires twinax cables or optical transceiver SFP+ modules), Cavium/Qlogic				
Supports 25Gb/s and 10Gb/s line rate per-port				
PLAN EP QL45212 2x25Gb LP**	2x	Dual Port NIC, RoCE RDMA, WS2016, Cavium	S26361-F5622-E202	S26361-F5622-L502
optional 25Gb SFP28 module with LC connector for Cavium/Qlogic controller				
Twinax Anschlussplatz Primergy	4x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP28 Twinax Cable Fujitsu	4x	customized cable length	future	future
SFP28 Twinax Cable Brocade	4x	(best fitting cable length is defined during rack installation at the factory)	future	
<i>max. 2x SFP28 Twinax Cable per controller</i>				
optional 10Gb SFP+ module with LC connector for Fujitsu / Intel / Qlogic based controller				
SFP+ Transceiver Module MMF 10GbE LC	4x	MMF / SR SFP+ module, up to 400m	S26361-F3986-E3	S26361-F3986-L3
SFP+ Transceiver Module SMF 10GbE LC	4x	SMF / LR SFP+ module, up to 10km	S26361-F3986-E4	S26361-F3986-L4
Twinax Anschlussplatz Primergy	4x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	4x	customized cable length	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	4x	(best fitting cable length is defined during rack installation at the factory)	S26361-F3873-E500	
<i>max. 2x SFP+ or Twinax Cable per controller</i>				
max. 2 Controller per system				

**as soon as available

25/10Gb Ethernet controller 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				
PLAN EP MCX4-LX 25Gb 2p SFP28 FH	2x	Dual Port NIC, RoCE RDMA, Mellanox	S26361-F4054-E2	S26361-F4054-L502
PLAN EP MCX4-LX 25Gb 2p SFP28 LP	2x	Dual Port NIC, RoCE RDMA, Mellanox	S26361-F4054-E202	S26361-F4054-L502
Optional, 25Gb SFP28 Optical Transceiver module with LC connector for PLAN EP MCX4-LX 25Gb 2p SFP28				
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	MMF / SR SFP28 module, Mellanox. Max reach supported 100m	S26361-F4054-E701	S26361-F4054-L701
"Virtual Connector" for DAC/AOC cables	2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-25	
25G DAC - Cisco	2x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors		
25G DAC - Mellanox	2x			
25G AOC - Cisco	2x	AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors		
25G AOC - Mellanox	2x			
<i>Max. 2x SFP28 or DAC/AOC Cable per PLAN EP MCX4-LX 25Gb 2p SFP28</i>				
max. 2x PLAN EP MCX4-LX 25Gb 2p SFP28				

40/10Gb Ethernet network components

40Gb Ethernet controller with QSFP cage (requires DAC, AOC cables or optical transceiver QSFP modules)				
Supports 40Gbps line rate per-port				
PLAN EP MCX4-EN 40Gb 2p QSFP FH	2x	Dual Port NIC, RoCE RDMA, Mellanox	S26361-F4053-E2	S26361-F4053-L502
PLAN EP MCX4-EN 40Gb 2p QSFP LP	2x	Dual Port NIC, RoCE RDMA, Mellanox	S26361-F4053-E202	S26361-F4053-L502
Optional, 40Gb QSFP Optical Transceiver module with MPO connector for PLAN EP MCX4-EN 40Gb 2p QSFP				
QSFP 40G SR4L MPO 850nm 30m MC2210411-SR4L	2x	MMF / SR4L QSFP module, Mellanox. Max reach supported 30m	S26361-F4053-E701	S26361-F4053-L701
QSFP 40G SR4 MPO 850nm 150m MC2210411-SR4	2x	MMF / SR4 QSFP module, Mellanox. Max reach supported 150m	S26361-F4053-E702	S26361-F4053-L702
"Virtual Connector" for DAC/AOC cables	2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-40	
40G DAC - Cisco	2x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors		
40G DAC - Mellanox	2x			
40G AOC - Cisco	2x	AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors		
40G AOC - Mellanox	2x			
<i>max. 2x QSFP or DAC, AOC per PLAN EP MCX4-EN 40Gb 2p QSFP</i>				

max. 2x PLAN EP MCX4-EN 40Gb 2p QSFP

100Gb Ethernet network components

100Gb Ethernet controller with 1x QSFP28 cage (requires twinax cables or optical transceiver QSFP28 modules)					
Supports 100Gbps line rate					
PLAN EP MCX4-EN 100Gb 1p QSFP28 FH	2x	Single Port NIC, RoCE RDMA, Mellanox	S26361-F4052-E1	S26361-F4052-L501	
PLAN EP MCX4-EN 100Gb 1p QSFP28 LP	2x	Single Port NIC, RoCE RDMA, Mellanox	S26361-F4052-E201	S26361-F4052-L501	
Optional, 100Gb QSFP28 Optical Transceiver module with MPO connector for PLAN EP MCX4-EN 100Gb 1p QSFP28					
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	1x	MMF / SR4 QSFP28 module, Mellanox. Max reach supported 100m	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G PSM4 1310nm 500m MMS1C10-CM	1x	MMF / SR QSFP28 module, Mellanox. Max reach supported 500m	S26361-F4052-E801	S26361-F4052-L801	
"Virtual Connector" for DAC/AOC cables	1x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-100		
100G DAC - Cisco	1x	DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors			
100G DAC - Mellanox	1x				
100G AOC - Cisco	1x	AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors			
100G AOC - Mellanox	1x				
<i>Max. 1x QSFP28 or DAC/AOC Cable per PLAN EP MCX4-EN 100Gb 1p QSFP28</i>					
max. 2x PLAN EP MCX4-EN 100Gb 1p QSFP28					

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System configurator and order-information guide
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Network cables for later upgrade

Fujitsu active SFP+ Twinax 10Gb cable	
SFP+ active Twinax Cable Fujitsu 2m	S26361-F3989-L102
SFP+ active Twinax Cable Fujitsu 5m	S26361-F3989-L105
SFP+ active Twinax Cable Fujitsu 10m	S26361-F3989-L110
Brocade active SFP+ Twinax 10Gb cable	
SFP+ active Twinax Cable Brocade 1m	S26361-F3873-L501
SFP+ active Twinax Cable Brocade 3m	S26361-F3873-L503
SFP+ active Twinax Cable Brocade 5m	S26361-F3873-L505

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Chapter 11 - Fibre Channel Controller

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32Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)					
Supports 32Gb, 16Gb, and 8Gb					
PFC EP LPe32000 1x 32Gb LP	2x	1 port, low profile, Broadcom/Emulex	S26361-F4044-E201	S26361-F4044-L501	
PFC EP LPe32002 2x 32Gb LP	2x	2 port, low profile, Broadcom/Emulex	S26361-F4044-E202	S26361-F4044-L502	
PFC EP QLE2740 1x 32Gb LP	2x	1 port, low profile, Cavium/Qlogic	S26361-F4043-E201	S26361-F4043-L501	
PFC EP QLE2742 2x 32Gb LP	2x	2 port, low profile, Cavium/Qlogic	S26361-F4043-E202	S26361-F4043-L502	
16Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)					
Supports 16Gb, 8Gb, and 4Gb					
PFC EP LPe31000 1x 16Gb LP	3x	1 port, low profile, Broadcom/Emulex	S26361-F5596-E201	S26361-F5596-L501	
PFC EP LPe31002 2x 16Gb LP	3x	2 port, low profile, Broadcom/Emulex	S26361-F5596-E202	S26361-F5596-L502	
PFC EP QLE2690 1x 16Gb LP	3x	1 port, low profile, Cavium/Qlogic	S26361-F5580-E201	S26361-F5580-L501	
PFC EP QLE2692 2x 16Gb LP	3x	2 port, low profile, Cavium/Qlogic	S26361-F5580-E202	S26361-F5580-L502	
max. 3 Controller per system (mixed configurations are supported)					

Chapter 13 - Infiniband Controllers

S26361-F4533-E102
IB HCA 56Gb 1channel FDR
56Gbit 1channel Infiniband Controller with FDR technology
Q-SFP+ connector
PCIe x8 full height Card, 170mm
max. 2x per system

S26361-F4533-E202
IB HCA 56Gb 2channel FDR
56Gbit 2channel Infiniband Controller with FDR technology
Q-SFP+ connector
PCIe x8 full height Card, 170mm
max. 2x per system

Max. 2x Omni Path Card per System (configuration of different Controllers NOT supported)

Max. 2x IB Controller per System (configuration of different Controllers NOT supported)

S26361-F3996-E556
IB Cu Cable 56Gb
QSFP, 1 or 3m
max. 1/ 2x per Controller

S26361-F5540-E102/E202
IB HCA 100Gb 1 / 2channel EDR
100Gbit 1 / 2channel Infiniband Controller EDR technology (8.0GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen3 x16 low profile Card, 170mm
max. 2x per system

S26361-F5562-E10
POP EP 100Gb 1 Channel
100Gbit 1 channel Omni Path HFI Card (8.0GT/s)
1x Q-SFP+ connector
PCIe Gen3 x16 low profile Card, 170mm
max. 2x per system

S26361-F5549-E561/-E563
IB Cu Cable 100Gb
QSFP, 1 or 3m
max. 1/ 2x per Controller

S26361-F5563-E150/-E200/-E300
Omni Passive Cable 100Gb
QSFP, 1.5m or 2m or 3m
max. 1 per Controller

Network Components, Controller and cables for later upgrade

56Gbit/s 1ch Infiniband Controller	S26361-F4533-L102
56Gbit/s 2ch Infiniband Controller	S26361-F4533-L202
100Gbit/s 1ch Infiniband Controller	S26361-F5540-L102
100Gbit/s 2ch Infiniband Controller	S26361-F5540-L202
QSFP, IB 56Gb, 1m	S26361-F3996-L561
QSFP, IB 56Gb, 3m	S26361-F3996-L563
QSFP, IB 100Gb, 1m	S26361-F5549-L561
QSFP, IB 100Gb, 3m	S26361-F5549-L563

Omni Path**

100Gbit/s 1ch Omni Path HFI Card	S26361-F5562-L10
QSFP, Omni 100Gb, 1.5m	S26361-F5563-L150

QSFP, Omni 100Gb, 2m	S26361-F5563-L200
QSFP, Omni 100Gb, 3m	S26361-F5563-L300

**as soon as available

L

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
800W platinum PSU	94% eff.		S26113-F574-E13	S26113-F574-L13
800W titanium PSU	96% eff.	nom. 220-240V, max. 180-264V	S26113-F615-E10	S26113-F615-L10
1200W platinum PSU	94% eff.	100V: 1000W, 90V: 900W	S26113-F616-E10	S26113-F616-L10
DC PSU				
800W PSU DC	94% eff.	48V DC, powercord see below	S26113-F624-E10	S26113-F624-L10
1300W PSU HVDC	94% eff.	380V DC as soon as available , powercord: PRIMERGY-PM	S26113-F626-E10	S26113-F626-L10
Dummy module instead PSU				
Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped, max. 1x per system			S26113-F574-E99	

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 (Taiwan), 1.8m, rack or wall			T26139-Y1757-E10	T26139-Y1757-L10
Cable powercord -48V DC, 4m, black			T26139-Y4024-E10	T26139-Y4024-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-L10
Cable powercord (AUS/NZ), 1.8m, grey				T26139-Y1748-L10
no power cord			T26139-Y3850-E10	

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 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	

Certifications, Made in Germany Sticker, optional 1x per system				
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	
Made in Germany sticker			S26361-F3301-E100	

N

Chapter 15 - Accessories

Q

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

USB sticks (FOR PROJECTS ONLY) - no standard release		
ADATA USB 3.0 Flash Stick UE700 – 32GB		S26391-F6048-L332
ADATA USB 3.0 Flash Stick UE700 – 64GB		S26391-F6048-L364



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



R

Chapter 16 - others

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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

Advanced Thermal design cannot be combined with the Flash backup unit of the RAID controllers

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

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

S26361-F3776-E440
Cool-safe [®] Advanced Thermal design 40°C
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

S26361-F3776-E445
Cool-safe [®] Advanced Thermal design 45°C
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

S26361-F3552-E100
S26361-F3552-L100
TPM 2.0 Module SPI
max. 1x per system

S26361-F3552-E101
TPM 1.2 Module SPI
max. 1x per system

S26361-F3120-E3
S26361-F3120-L3
serial port (RS232)
serial port (RS232) mounted on a low profile PCIe slot
max. 1x per system

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Your Server is ready

Date of change [dd.mm.yyyy]	Folder / order code / description	Name	What has been changed / comment
22.03.2016		Sven Pilz	First Draft
22.07.2016		Sven Pilz / U. Lösch	Ethernet section update
22.07.2016		K.D.Ruf	RAM section update
12.08.2016		S. Pilz	RAID section update; base update; "description" updated, scheme pictures updated
23.08.2016		Klaus-D. Ruf	TPM Module update
25.08.2016		johannes Linne	update RAID
02.09.2016		Klaus-D. Ruf	Minor description change on RAM page
19.09.2016	T26139-Y4024-E/L10	Johannes Linne	add power cable for 48DC PCU
11.10.2016		Fabian Seil	added memory order codes
19.10.2016		johannes Linne	RAID folder was updated, visual improvement
20.10.2016		Fabian Seil	RAID page was updated
21.10.2016	HDD_SSD	Tatsuya Sudo	updated
31.10.2016	LAN_FC	U. Lösch	Added: LAN 25GbE, FC 32Gb. Deleted: LAN 40GbE, QSFP+
03.11.2016	S26341-F103-L140	Fabian Seil	changed to new USB Optical Disc Drive
08.11.2016	RAID	johannes Linne	Added Cougar5 with 2GB Cache, 8 Ports
08.11.2016	LAN_FC	U. Lösch	Cosmetic: "Link" removed to SFP
09.11.2016	IB	Shinho H	edit IB, add Omni Path
18.11.2016	RAM	Klaus-D. Ruf	Mirrored Channel Mode text modified
19.11.2016	RAM	Fabian Seil	Order codes corrected
05.12.2016	HDD_SSD / S26361-F5630/F5632-*	Tatsuya Sudou	added
26.12.2016	HDD_SSD / S26361-F5635/F5636/F5638-*	Tatsuya Sudou	added
26.12.2016	HDD_SSD / SED	Tatsuya Sudou	added
06.01.2017	HDD_SSD / S26361-F5592/F5593-*	Tatsuya Sudou	removed
06.01.2017	HDD_SSD / S26361-F5588/F5589-	Tatsuya Sudou	removed
17.01.2017	LAN	U. Lösch	Ethernet: final section update
17.01.2017	FC	U. Lösch	Fibre Channel: final section update
17.01.2017	GPU	Takayuki Sasaki	added S26361-F2748-E638
17.01.2017	LAN	U. Lösch	Typo and Drawing Dynamic LOM
20.01.2017	HDD_SSD / S26361-F5648/F5649/F5650-*	Tatsuya Sudou	added
24.01.2017	USB devices	Michail Maridakis	Picture typo corrected
26.01.2017	CPU section updated	Sven Pilz	Adjusted to most current INTEL RM status
27.01.2017	Description	Sven Pilz	4x2,5" / 8x2,5" pictures (upgrade kit code)
27.01.2017	base	Sven Pilz	bulk codes added
30.01.2017	general	Sven Pilz	file header updated
30.01.2017	Description	Sven Pilz	schmeatics updated
30.01.2017	others	Sven Pilz	added eLCM
31.01.2017	Rack installation	M. Matsubara	Replaced Rack installation ex works from old one
03.02.2017	USB devices	M. Maridakis	Updated
07.02.2017	HDD_SSD / SED / S26361-F5632-L240	Tatsuya Sudou	note for SED updated / order code corrected
14.02.2017	RAID folder changed	Johannes Linne	used new template
07.03.2017	correct: S26361-F3847-E202, -E204	Johannes Linne	Update, changed from E502 / E504 (wrong)
08.03.2017	CPU page Update	Fabian Seil	specifications and order codes added
16.03.2017	RAM	Fabian Seil	Mirrored Channel Mode updated
23.03.2017	HDD_SSD / Note / F5583-*/ F5648-*	Tatsuya Sudou	updated / removed / Capacity changed
28.03.2017	PRAID EP520i, 540i, 580i	Fabian Seil	CacheCade deleted
29.03.2017	S26361-F5243-E4/L4	Fabian Seil	comment added
30.03.2017	S26361-F3849-E100	Fabian Seil	cooling kit added
31.03.2017	RAM	Fabian Seil	Mirrored Channel Mode text modified
06.04.2017	PCNA EP OCec14102 2x10Gb DMF LP	U. Lösch	Deleted - No Drivers
07.04.2017	S26361-F5243-E124/L14 added	Johannes Linne	new larger heatsink for Cougar4 for Purley
11.04.2017	S26361-F1790-E311	R. Brunnbauer	eLCM corrected
27.04.2017	T26139-Y1757-E10/L10	Fabian Seil	powercord for Taiwan added
27.04.2017	USB Devices	M.Maridakis	New ext. ODD added
27.04.2017	PLAN EP QL45212	U.Lösch	Updated
09.05.2017	S26361-F3552-E101	Fabian Seil	added
09.05.2017	RAM	Fabian Seil	new order codes added
11.05.2017	PLAN EP X710-DA2 2x10Gb SFP+ LP	U. Lösch	2x --> 3x
18.05.2017	RAID	Fabian Seil	info-text added
06.06.2017	HDD_SSD / F5666/F5670/F5662/F5668-*	Tatsuya Sudou	Note updated / added
08.06.2017	CPU	Fabian Seil	order codes of loose components added
09.06.2017	CPU	Ladislav Meszaros	order codes of loose cooling kits added
13.06.2017	RAID	Fabian Seil	descriptions of FBU options changed
16.06.2017	HDD_SSD / F5614/F5617/F5612/F5615-*	Tatsuya Sudou	removed

16.06.2017	slot consumption PRAID EP5xx	Sven Pilz	added comment in yellow bottom box of EP5xx series
26.06.2017	S26361-F4042-E155, -E183	Johannes Linne	changed FBU cable length for int. RAID EP5xxi
26.06.2017	S26361-F5243-E155, -E175, -L115	Johannes Linne	changed FBU cable length for int. RAID EP4xxi
26.06.2017	GFX	Sven Pilz	Remark added to NVS315
29.06.2017	RAID	Fabian Seil	FBU options changed
04.07.2017	LAN	U. Lösch	PLAN EM blind panel - Deleted. Bypass instead.
05.07.2017	LAN	U. Lösch	OCe14102: Max 2 --> Max 3 Controller per system
07.07.2017	RAID; FBU	Johannes Linne	corrected comments for FBU, RAID in general
10.07.2017	others	Sven Pilz	Adjusted ATD codes
10.07.2017	several	Sven Pilz	adjustments due to "QA dropped" list
10.07.2017	Description	Sven Pilz	Picture adjusted
11.07.2017	PSU	johannes Linne	Chapter updated
11.07.2017	HDD: S26361-F4042-E204	johannes Linne	exclude 8/10TB SATA HDD from PRAID EP540i
12.07.2017	RAID	Fabian Seil	info-text changed
19.07.2017	LAN	U. Lösch	Added: 25/40/100GbE Ethernet Adapters, Mellanox
20.07.2017	HDD_SSD / S26361-F5648-* / PCIe SSD	Tatsuya Sudou	codes modified / DWPD corrected
20.07.2017	LAN	U. Lösch	Added: 10GbE Ethernet Adapter X710-DA4 4-Port, Intel
24.07.2017	HDD_SSD / F5673/F5675-* / F5531/F5532-E590	Tatsuya Sudou	added