

PRIMERGY TX2560 M2
PRIMERGY RX2560 M2
Tower or 4U Rack server



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 TX2560 M2 and RX2560 M2
2		describes rack mount kits and services
3	CPU	Order code and Infos of E5-2600v4 series processors
4	RAM	DDR4 System memory (RAM) and memory modes
5	GFX	Graphics-, Grid-cards, GPU and Xeon Co processors
6	HD cage	HDD cage kits
7	RAID	SAS / RAID Controller and components
8	ODD	optical disk drives (DVD, DVD-rw, Blu ray)
9	Backup	LTO drives & RDX drive
10	HD SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN	LAN Components
12	FC_IB	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

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 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

(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

Abbreviations

[illegible]

The PRIMERGY TX / RX2560 M2 Server offers 3 drive mounting areas:

Start

accessible drive area (purple color code) with

- standardwise 3x 1.6" bay for optical drives or LTO/RDX drives
- or optional up to 3rd 4x 3.5" SAS 3.0 LFF HDD (then only a 9.5mm ODD can be configured)
- or optional for up to 3rd 8x 2.5" SAS 3.0 SFF HDD or SSD or 4x 2.5" PCIe SSD (then 1x 1.6" ODD/backup drive can be configured)

mid drive area (yellow color code) - optional with

- space for up to 2nd 4x 3.5" SAS 3.0 LFF HDD
- or space for up to 2nd 8x 2.5" SAS 3.0 SFF HDD or SSD

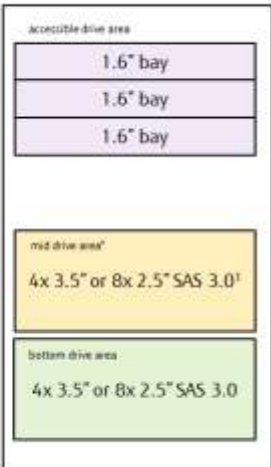
bottom drive area (green color code) - mandatory with

- space for up to 4x 3.5" SAS 3.0 LFF HDD
- or space for up to 8x 2.5" SAS 3.0 SFF HDD or SSD

2nd upgrade

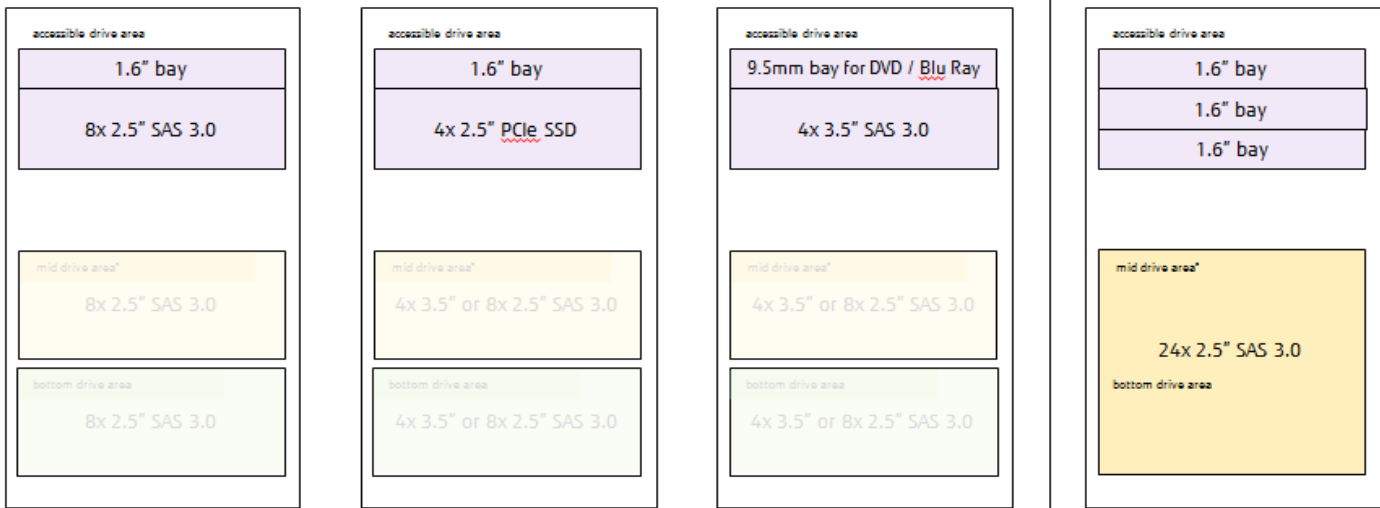
1st upgrade

Start

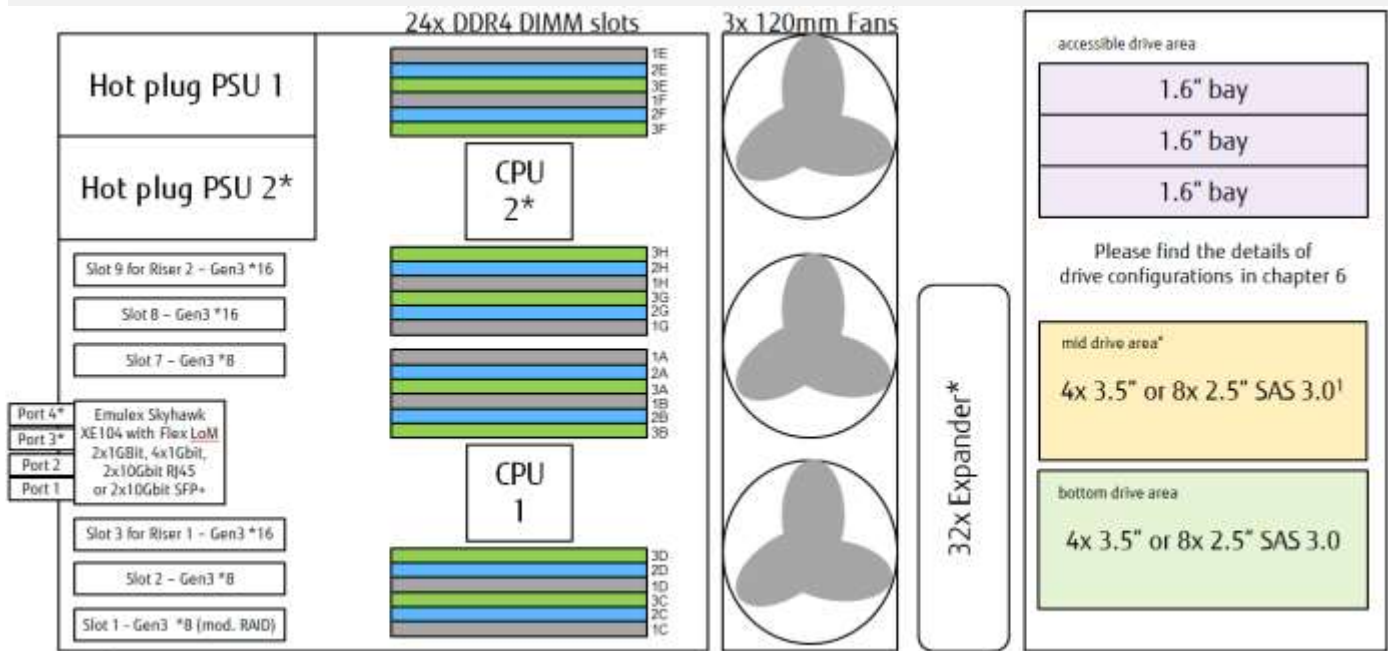


Please find all details, possible and released configurations in the chapter 6 - "HD_cage"

Options in the accessible area



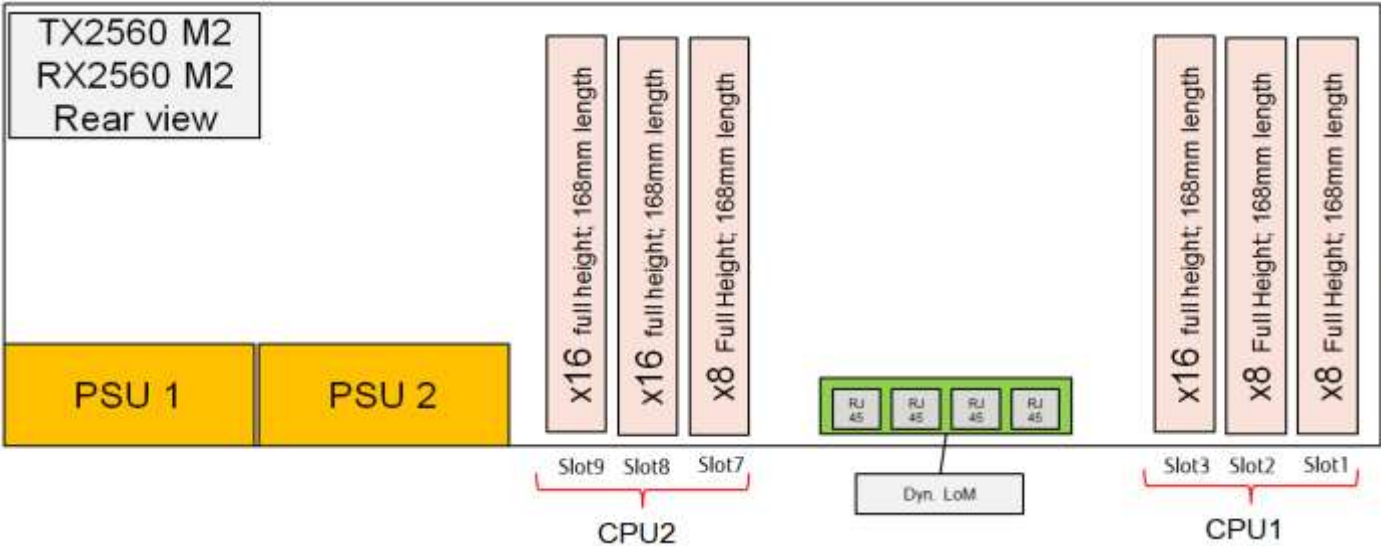
"many HDD" option in the bottom and mid drive area



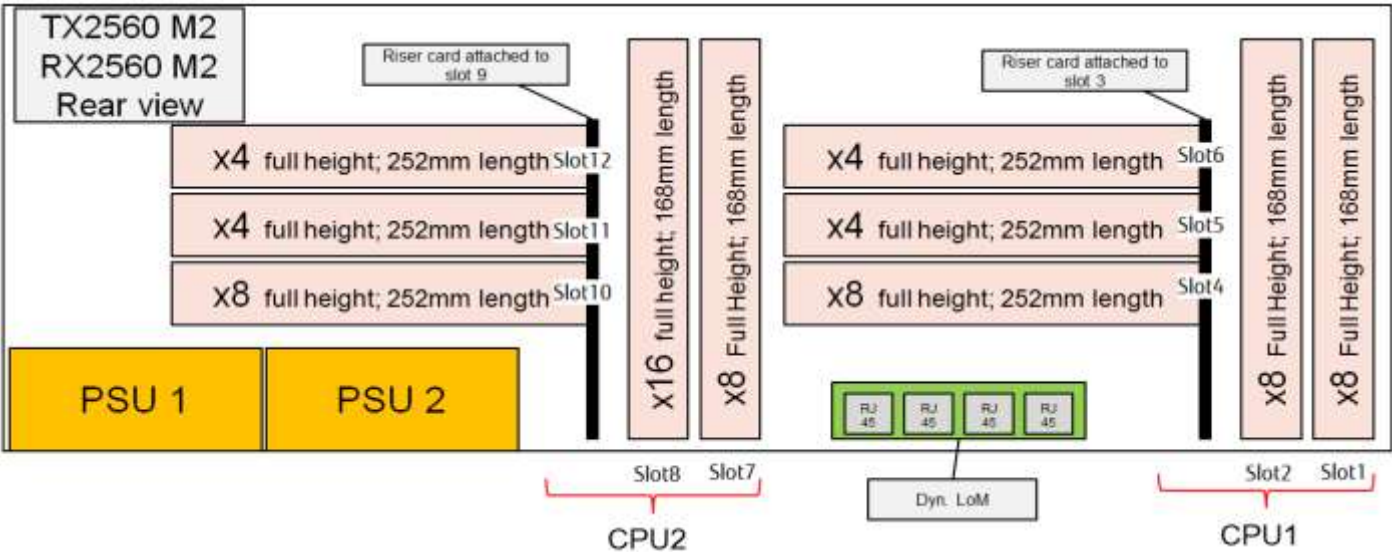
Please find the details of drive configurations in chapter 6

* = option
1 = in the bottom and mid drive area either 2.5" or 3.5" are allowed

Rear view with 6x Gen 3 PCIe slots on Board



Option: Rear view with up to 10x Gen 3 PCIe slots (4x on Board, 6x on riser card)



recommended components for TX/RX2560 M2	#
Independant Mode installation	1x
PLAN EM 4x1Gb T interface card	1x
Region kit APAC/EMEA/India	1x
iRMC S4 advanced pack	1x
Modular PSU 450W platinum hot plug	2x

Chapter 1 - base unit

Start

Power supply units & cooling

The PRIMERGY TXRX2560 M2 offer bays for 1x or 2x direct attached hot plug (opt. redundant) power supply units of 450W or 800W or 1.200W with up to 96% efficiency. The PRIMERGY TX/RX2560 M2 are equipped with high performance full height processor heat pipes and 3x 120mm high power fans (2+1 redundant) with optimized blades and with optimized fan control for both - silent and save operation.

Server Management

iRMC S4 (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 D3289 made in Germany based on Chipset Intel® C612

> 2 serial QPI links (Quick Path Interconnect)

> Up to two Xeon EP2600 v3 series CPUs

Slots: As standard 6 PCIe slots are on Board, with riser cards up to max. 10 PCIe slots are possible - please see schematics in "description"

> 3 slots on Board Full height, 167mm lenth @ first CPU:

Slot 1 PCIe-Gen3 x8 - supports modular RAID functions

Slot 2 PCIe-Gen3 x8

Slot 3 PCIe-Gen3 x16 (occupied in case of risercard operation)

instead of slot3, there may be risercard1 installed with 1x *8 and 2x *4 slots (Full height, 252mm lenth)

Slot 4 PCIe-Gen3 x8

Slot 5 PCIe-Gen3 x4

Slot 6 PCIe-Gen3 x4

> 3 PCIe slots Full height, 167mm lenth@ second CPU:

Slot 7 PCIe-Gen3 x8

Slot 8 PCIe-Gen3 x16

Slot 9 PCIe-Gen3 x16 (occupied in case of risercard operation)

instead of slot9, there may be risercard2 installed with 1x *8 and 2x *4 slots (Full height, 252mm lenth)

Slot 10 PCIe-Gen3 x8

Slot 11 PCIe-Gen3 x4

Slot 12 PCIe-Gen3 x4

System RAM up to DDR4-2133 MHz

2x12 memory slots for max. 1.5TB* DDR4 RAM available (12 slots per CPU). Memory speed depends on CPU and configuration, please see folder "CPU" and "RAM" for further details.

* Chipset supports with future models up to 3TB - implementation in PRIMERGY TX/RX2560 M2 pending.

LAN

LAN on Motherboard based on the high performance Chip Emulex XE104 with flexible LAN connections.

Software

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

Connectivity

Interfaces at rear side

- optional 1x RS-232-C (serial, 9 pin)

- 1 service LAN RJ45 (1 Gbit)

- 1x VGA (15 pins)

- 2x USB 3.0 & 2x USB 2.0 no USB wakeup

Flex LoM with 1 of these options:

RJ45: 2x1Gbit, 4x1Gbit or 2x10Gbit

SFP+: 2x10Gbit ... or Dummy module (i.e. no LAN o.B.)

Interfaces at front

- 2x USB 3.0 no USB wakeup

Interfaces internal

- 1x internal USB 3.0 connectors for backup devices

- 1x USB 2.0, 1x UFM

- 1x SATA DOM

- 2x 4* SATA 6G (only via customizing)

S26361-K1583-V101

TX2560 M2 Floorstand System

Tower base unit with D3289
systemboard & lockable frontbezel

A

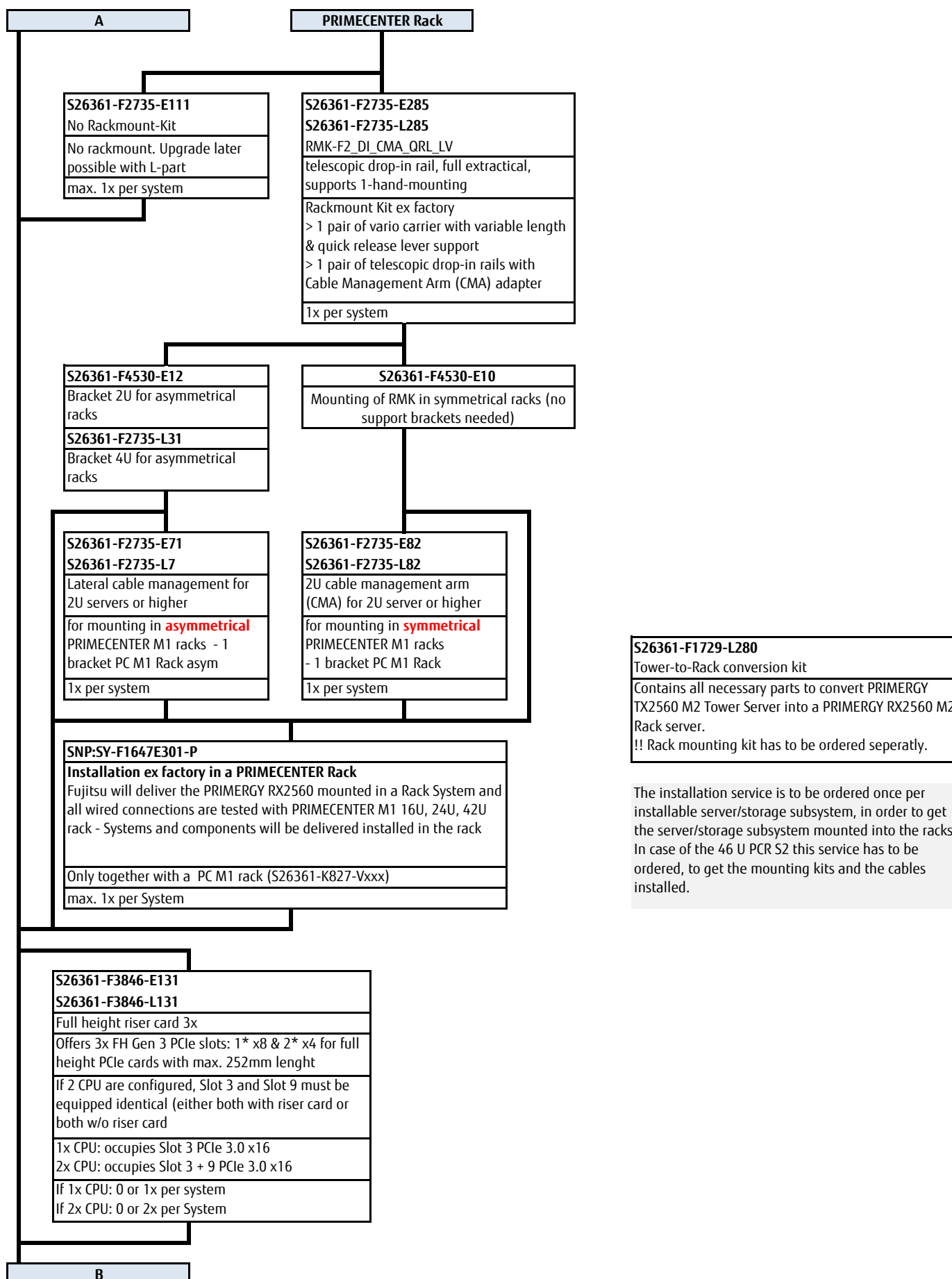
S26361-K1583-V301

RX2560 M2 Rack System

Tower base unit with D3289
systemboard & rack frontbezel

PRIMECENTER Rack

Chapter 2 - Rack architecture



S26361-F1729-L280
Tower-to-Rack conversion kit
Contains all necessary parts to convert PRIMERGY TX2560 M2 Tower Server into a PRIMERGY RX2560 M2 Rack server.
!! Rack mounting kit has to be ordered separately.

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 the 46 U PCR S2 this service has to be ordered, to get the mounting kits and the cables installed.

Chapter 3 - CPU

B

There are 2 processor sockets available. Please configure minimum 1 Processor, maximum 2 processors.

>> In case of Dual processor operation, processor 2 must be the same as processor 1.

>> for the processors on the left side (marked with blue headers) you may choose 1x or 2x CPUs

>> for the processors on the right side (marked with orange headers) you must choose 2x CPUs ("Dual processor only")

* HT = Hyper Threading

Xeon E5-26xx v4 series (R) Basic

64-bit Intel Xeon processor supporting DDR4 @ 1.866MHz & QPI Bus @ 6.4 GT/s

Xeon E5-2603v4 6C/6T 1.70GHz 15MB 6.4GT/s 1866MHz 85W	S26361-F3933-E103	S26361-F3933-L503
Xeon E5-2609v4 8C/8T 1.70GHz 20MB 6.4GT/s 1866MHz 85W	S26361-F3933-E109	S26361-F3933-L509

Xeon E5-26xx v4 series (R) Standard

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus 8.0 GT/s

Xeon E5-2620v4 8C/16T 2.10GHz 20MB 8.0GT/s 2133MHz 85W	S26361-F3933-E120	S26361-F3933-L520
Xeon E5-2630v4 10C/20T 2.20GHz 25MB 8.0GT/s 2133MHz 85W	S26361-F3933-E130	S26361-F3933-L530
Xeon E5-2640v4 10C/20T 2.40GHz 20MB 8.0GT/s 2133MHz 90W	S26361-F3933-E140	S26361-F3933-L540

Xeon E5-26xx v4 series (R) Advanced

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

Xeon E5-2650v4 12C/24T 2.20GHz 30MB 9.6GT/s 2400MHz 105W	S26361-F3933-E150	S26361-F3933-L550
Xeon E5-2660v4 14C/28T 2.00GHz 35MB 9.6GT/s 2400MHz 105W	S26361-F3933-E160	n.a.
Xeon E5-2680v4 14C/28T 2.40GHz 35MB 9.6GT/s 2400MHz 120W	S26361-F3933-E180	n.a.
Xeon E5-2690v4 14C/28T 2.60GHz 35MB 9.6GT/s 2400MHz 135W	S26361-F3933-E190	n.a.

Xeon E5-26xx v4 series (R) Frequency optimized

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 8.0 GT/s

Xeon E5-2623v4 4C/8T 2.60GHz 10MB 8.0GT/s 2133MHz 85W	S26361-F3933-E123	S26361-F3933-L523
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Xeon E5-26xx v4 series (R) Frequency optimized

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

Xeon E5-2637v4 4C/8T 3.50GHz 15MB 9.6GT/s 2400MHz 135W	S26361-F3933-E137	n.a.
Xeon E5-2643v4 6C/12T 3.40GHz 20MB 9.6GT/s 2400MHz 135W	S26361-F3933-E143	n.a.
Xeon E5-2667v4 8C/16T 3.20GHz 25MB 9.6GT/s 2400MHz 135W	S26361-F3933-E167	n.a.

Xeon E5-26xx v4 series (R) High Core Count

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 8.0 GT/s

Xeon E5-2683v4 16C/32T 2.10GHz 40MB 9.6GT/s 2400MHz 120W	S26361-F3933-E183	n.a.
Xeon E5-2695v4 18C/36T 2.10GHz 45MB 9.6GT/s 2400MHz 120W	S26361-F3933-E195	n.a.
Xeon E5-2697v4 18C/36T 2.30GHz 45MB 9.6GT/s 2400MHz 145W	S26361-F3933-E197	n.a.
Xeon E5-2697Av4 16C/32T 2.60GHz 40MB 9.6GT/s 2400MHz 145W	S26361-F3933-E191	n.a.
Xeon E5-2698v4 20C/40T 2.20GHz 50MB 9.6GT/s 2400MHz 135W	S26361-F3933-E198	n.a.
Xeon E5-2699v4 22C/44T 2.20GHz 55MB 9.6GT/s 2400MHz 145W	S26361-F3933-E199	n.a.

Xeon E5-26xx v4 series (R) Low Power

64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133/2400 MHz & QPI Bus @ 8.0 GT/s

Xeon E5-2630Lv4 10C/20T 1.80GHz 25MB 8.0GT/s 2133MHz 55W	S26361-F3933-E131	n.a.
Xeon E5-2650Lv4 14C/28T 1.70GHz 35MB 9.6GT/s 2400MHz 65W	S26361-F3933-E151	n.a.

S26361-F3849-E100

Cooling Kit 2nd CPU

For configuring a 2nd CPU please order the
required heat pipe with this order code

C1

C2

C1	C2
Xeon E5-26xx v4 series (R) Basic 64-bit Intel Xeon processor supporting DDR4 @ 1.866MHz & QPI Bus @ 6.4 GT/s	
Xeon E5-2603v4 6C/6T 1.70GHz 15MB 6.4GT/s 1866MHz 85W	S26361-F3933-E103
Xeon E5-2609v4 8C/8T 1.70GHz 20MB 6.4GT/s 1866MHz 85W	S26361-F3933-E109
Xeon E5-26xx v4 series (R) Standard 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus 8.0 GT/s	
Xeon E5-2620v4 8C/16T 2.10GHz 20MB 8.0GT/s 2133MHz 85W	S26361-F3933-E120
Xeon E5-2630v4 10C/20T 2.20GHz 25MB 8.0GT/s 2133MHz 85W	S26361-F3933-E130
Xeon E5-2640v4 10C/20T 2.40GHz 20MB 8.0GT/s 2133MHz 90W	S26361-F3933-E140
Xeon E5-26xx v4 series (R) Advanced 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2650v4 12C/24T 2.20GHz 30MB 9.6GT/s 2400MHz 105W	S26361-F3933-E150
Xeon E5-2660v4 14C/28T 2.00GHz 35MB 9.6GT/s 2400MHz 105W	S26361-F3933-E160
Xeon E5-2680v4 14C/28T 2.40GHz 35MB 9.6GT/s 2400MHz 120W	S26361-F3933-E180
Xeon E5-2690v4 14C/28T 2.60GHz 35MB 9.6GT/s 2400MHz 135W	S26361-F3933-E190
Xeon E5-26xx v4 series (R) Frequency optimized 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 8.0 GT/s	
Xeon E5-2623v4 4C/8T 2.60GHz 10MB 8.0GT/s 2133MHz 85W	S26361-F3933-E123
Xeon E5-26xx v4 series (R) Frequency optimized 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2637v4 4C/8T 3.50GHz 15MB 9.6GT/s 2400MHz 135W	S26361-F3933-E137
Xeon E5-2643v4 6C/12T 3.40GHz 20MB 9.6GT/s 2400MHz 135W	S26361-F3933-E143
Xeon E5-2667v4 8C/16T 3.20GHz 25MB 9.6GT/s 2400MHz 135W	S26361-F3933-E167
Xeon E5-26xx v4 series (R) High Core Count 64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus @ 8.0 GT/s	
Xeon E5-2683v4 16C/32T 2.10GHz 40MB 9.6GT/s 2400MHz 120W	S26361-F3933-E183
Xeon E5-2695v4 18C/36T 2.10GHz 45MB 9.6GT/s 2400MHz 120W	S26361-F3933-E195
Xeon E5-2697v4 18C/36T 2.30GHz 45MB 9.6GT/s 2400MHz 145W	S26361-F3933-E197
Xeon E5-2697Av4 16C/32T 2.60GHz 40MB 9.6GT/s 2400MHz 145W	S26361-F3933-E191
Xeon E5-2698v4 20C/40T 2.20GHz 50MB 9.6GT/s 2400MHz 135W	S26361-F3933-E198
Xeon E5-2699v4 22C/44T 2.20GHz 55MB 9.6GT/s 2400MHz 145W	S26361-F3933-E199
Xeon E5-26xx v4 series (R) Low Power 64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus @ 8.0 GT/s	
Xeon E5-2630Lv4 10C/20T 1.80GHz 25MB 8.0GT/s 2133MHz 55W	S26361-F3933-E131
Xeon E5-2650Lv4 14C/28T 1.70GHz 35MB 9.6GT/s 2400MHz 65W	S26361-F3933-E151
Separate orderable CPU upgrade kits	
S26361-F3933-L537	Xeon E5-2637v4 4C/8T 3.50GHz 15MB 9.6GT/s 2400MHz 135W
S26361-F3933-L567	Xeon E5-2667v4 8C/16T 3.20GHz 25MB 9.6GT/s 2400MHz 135W
special release only special release only	
D	

Chapter 4 - DDR4 System memory

D

The Systemboard of TX/RX2560 M2, D3289, offers 24 DDR4 slots with up to 2.400MHz.
768GB DDR4 LRDIMM (12x 64GB 4R per CPU)
384GB DDR4 RDIMM (12x 32GB 2R per CPU)
=> max. 1.536GB for two CPUs (768GB per CPU), using LRDIMM
=> max. 3.072GB for two CPUs, using upcoming 8Rx4 LRDIMM technology with 128GB per module
The memory area is divided into 4 channels per CPU with 3 slots each
up to 2.400 MHz with 1DPC R-DIMM (depending on CPU*)
up to 2.400 MHz with 2DPC LR-DIMM (depending on CPU*)
1.866MHz with 3DPC
DDR4 memory is operated at 1.2V
Registered and load reduced DIMM cannot be operated together in one Server.
* = means: some CPU types support less than 2.133MHz, please check the details in the chapter "CPU"

S26361-F3694-E10	Independent Memory Mode
Independent Channel Mode allows all channels to be populated in any order. All channels must run at the same interface frequency. But each channel may run at different DIMM timings (RAS latency, CAS latency, and so forth). The slowest memory module defines to bus speed.	
Configuration: minimum 1 memory module per CPU, maximum 12 memory modules per CPU	
S26361-F3694-E1	Rank sparing mode
BIOS preconfiguration for rank sparing. Spare of other ranks on the same channel. Spare Rank is not shown in System Memory.	
Configuration: minimum 2x 1R/2R or 1x 4R memory modul(es) per CPU, maximum 12 memory modules per CPU	
S26361-F3694-E2	Performance Memory Mode
BIOS preconfiguration for maximum Performance. Four identical memory modules will be equipped in each slot of each channel to achieve highest memory performance. Always a multiple of 4 identical modules must be configured per CPU. All four modules are active and full capacity can be used.	
Configuration: minimum 4 memory module or 8 memory module or 12 memory modules per CPU	
S26361-F3694-E3	Mirror Channel Mode
BIOS preconfiguration for Mirror mode. Four identical memory modules are always equipped in one memory bank to use the mirrored channel mode. Only two modules contain active data, the remain two modules contain mirrored data.	
Configuration: minimum 4 memory module or 8 memory module or 12 memory modules per CPU	



Resulting memory capacity / Rank Sparing Mode, 1 Channel populated									
	RDIMM						LRDIMM		
	8GB	1R	16GB	2R	32GB	2R	64GB	4R	128GB 8R
1DPC							48GB		112GB
2DPC	8GB		24GB		48GB		112GB		240GB
3DPC	16GB		40GB		80GB		176GB		368GB

Registered Memory (RDIMM) with SDDC (chipkill) support			
8GB (1x8GB) 1Rx4 DDR4-2400 R ECC	single rank	S26361-F3934-E511	S26361-F3934-L511
16GB (1x16GB) 2Rx4 DDR4-2400 R ECC	Dual rank	S26361-F3934-E512	S26361-F3934-L512
32GB (1x32GB) 2Rx4 DDR4-2400 R ECC	Dual rank	S26361-F3934-E515	S26361-F3934-L515
Registered Memory (RDIMM 3DS) with SDDC (chipkill) and ECC support			
64GB (1x64GB) 4Rx4 DDR4-2400 3DS ECC	Quad rank	S26361-F3934-E517	S26361-F3934-L517
Registered Memory (RDIMM) without SDDC support			
8GB (1x8GB) 2Rx8 DDR4-2400 R ECC	Dual rank	S26361-F3934-E514**	S26361-F3934-L514**
16GB (1x16GB) 2Rx8 DDR4-2400 R ECC	Dual rank	S26361-F3934-E513	S26361-F3934-L513
Load Reduced Memory (LRDIMM) with SDDC (chipkill) support			
32GB (1x32GB) 4Rx4 DDR4-2400 LR ECC	Quad rank	S26361-F3935-E515	S26361-F3935-L515
64GB (1x64GB) 4Rx4 DDR4-2400 LR ECC	Quad rank	S26361-F3935-E516	S26361-F3935-L516
128GB (1x128GB) 8Rx4 DDR4-2400 LR ECC	Quad rank	S26361-F3935-E517*	S26361-F3935-L517*

* late availability expected
** special release only

E

Detailed information

Mode	Configuration	RDIMM	RDIMM	Use case, advantage
			LRDIMM	
		x8	x4	
SDDC (chipkill) support	any	no	yes	supports detecting multi-bit errors
Independant channel mode	1, 2 or 3 Modules per Bank	yes	yes	offers max. flexibility, upgradeability, capacity
Mirrored channel mode *)	4 identical Modules / Bank	no	yes	offers maximum security
Performance mode	4 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	LRDIMM	Notes
Min. Memory per CPU	1 Module / CPU	1x8GB	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

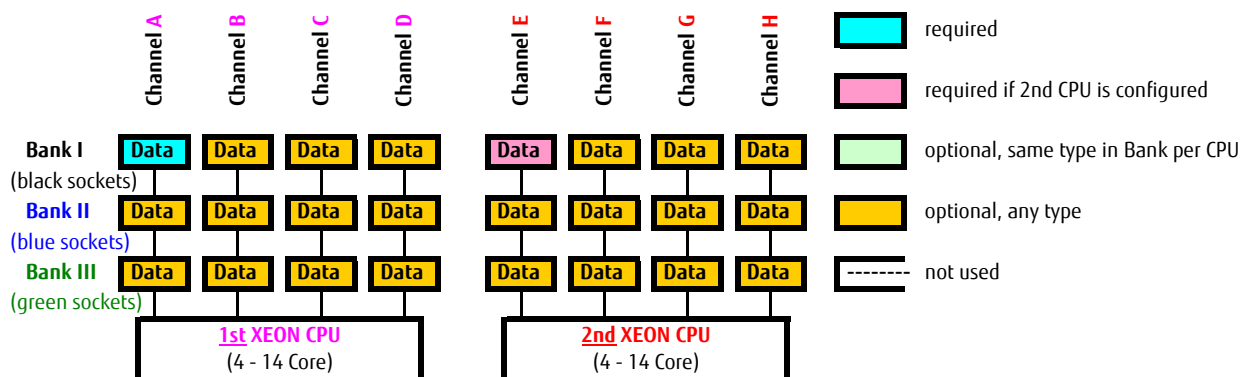
Max. DDR4 memory speed depends on the memory configuration (DIMM per channel) and the type of CPU. The memory channel with the lowest speed defines the speed of all CPU channels in the system

Mem. Speed provided by CPU		Maximum memory-bus speed [MHz]				
Type of Memory	RDIMM 2400MHz			LRDIMM 2400MHz		
Voltage setting (BIOS)	1.2V					
CPU type \ Dimm per channel	1 DPC*	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC
CPU with 2400MHz DDR4 Bus	2.400	2.400	1.866	2.400	2.400	1.866
CPU with 2133MHz DDR4 Bus	2.133	2.133	1.866	2.133	2.133	1.866
CPU with 1866MHz DDR4 Bus	1.866	1.866	1.600	1.866	1.866	1.600

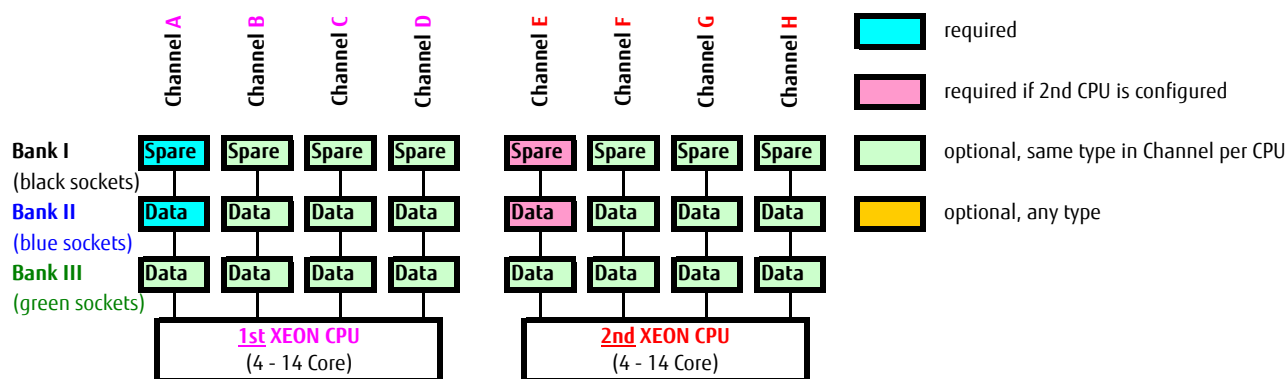
The memory sockets on the Systemboards are color coded

Bank I	black sockets	Bank II	blue sockets	Bank III	green sockets
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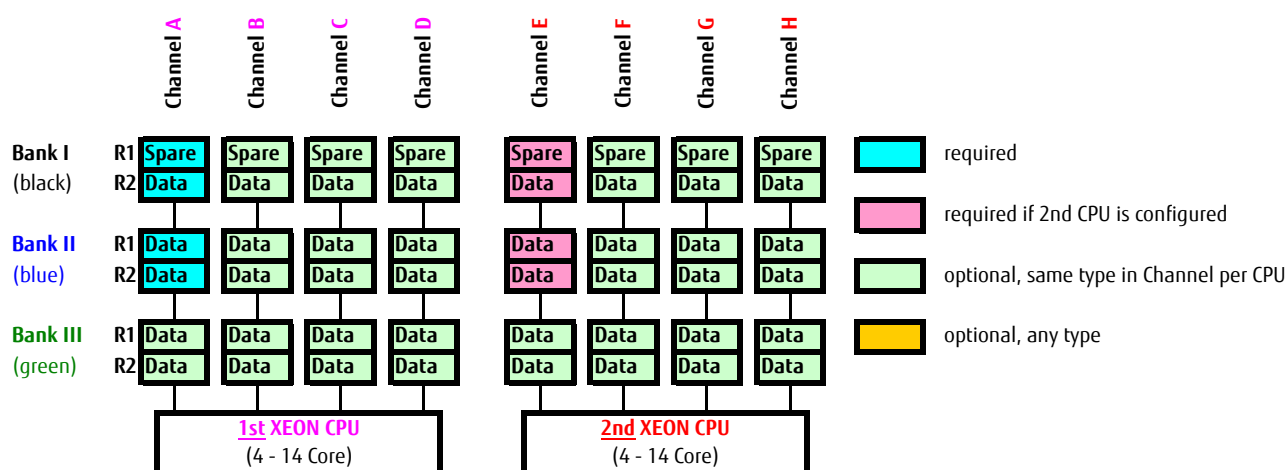
Independant channel mode



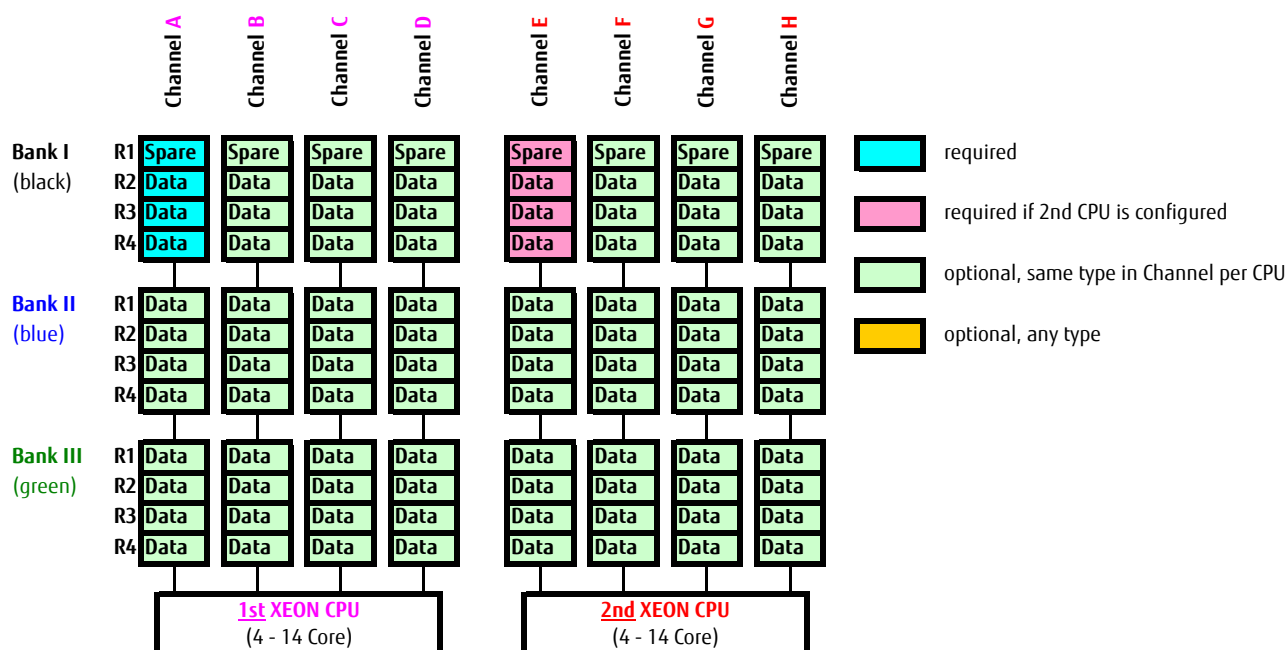
Rank sparing mode --- 1-Rank Memory modules (R-DIMM)



Rank sparing mode --- 2-Rank Memory modules (R-DIMM)

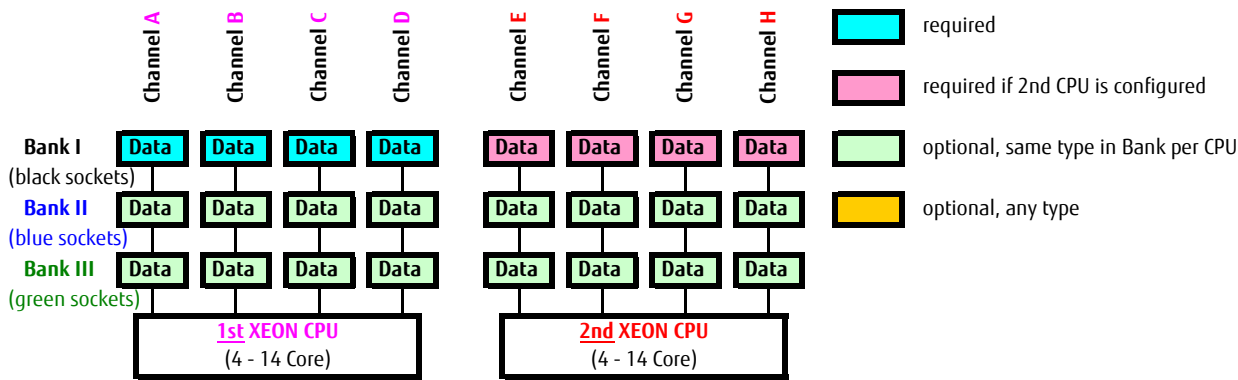


Rank sparing mode --- 4-Rank Memory modules (LR-DIMM)

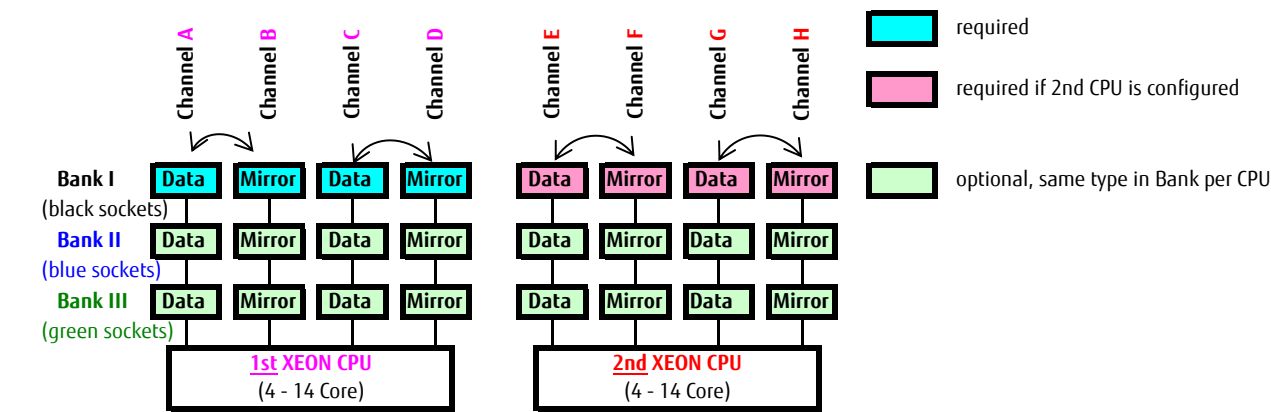


Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel. The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing mode is to achieve max. available memory, e.g. 6 DIMMs will be spread across two channels, each with 3DPC

Performance Channel Mode



Mirror Channel Mode



Mirrored Channel Mode requires identical modules on channel A,B, C, D (1st CPU) or channel E, F, G and 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 4 identical modules has to be ordered.

Chapter 5 - Graphics cards

E

S26361-F2748-E538

S26361-F2748-L538

PGRA CP NVS 1GB VGA 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

occupies slot 3 (or 8)

max. 1x per system

The high end optional NVIDIA NVS315 graphic card offers dual head operation and full 3D video support.

The cables for either two times DVI-I or VGA connections are included.

Remote Video direction via iRMC must be disabled.

This PCIe-x16 card can also be installed in a PCIe-x4, x8 or standard x16 slot.

S26361-F1420-E130

S26361-F1420-L130

Front VGA connector (15-pin)

Front VGA connector (15-pin)

max. 1x per system

F

Chapter 6 - HD drive cage

F

Definition:

HD drive cage = metal box providing 4 bays for 3.5" HDD or 8 bays for 2.5" HDD/SSD (see sample pictures left).

Please choose one of the drive cage kits of the following pages. Each kit contains all relevant parts (metal cage, SAS 3.0 backplanes, SAS 3.0 cables and mounting materials). Kits for more than 8x SAS 3.0 HDD contain a 24x or 32x SAS 3.0 Expander included as well in the kit. Kits for PCIe SSD cages contain the 4x *4 PCIe switch and relevant cables already. The red dotted line highlights the content of each drive cage kit.

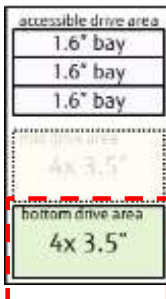
1) indicates the order code of the complete kit, explanation & describes the content

2) lists the recommended or possible RAID controllers with the related order code

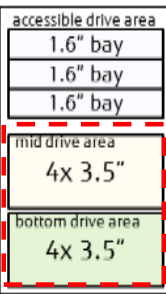
3) describes how many drive bays for ODD / backup drives are available

4) lists the available upgrade kit options after purchase.

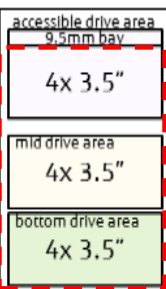
! for upgrades in the accessible drive area the mid drive area must be completed first!



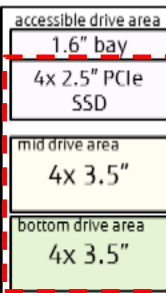
1) S26361-F3900-E304 Basic 3.5" kit for 4x SAS 3.0 HDD mounted in the bottom drive area	
1x 3.5" kit for up to 4x 3.5" HDD incl. SAS 3.0 Backplane & SAS 3.0 cable mounted in bottom drive area	
2a) recommended RAID configuration	
1x S26361-F3842-E1	PRAID CP400i
2b) possible RAID controllers	
S26361-F5243-E1	PRAID EP400i - 1GB Cache
S26361-F5243-E2	PRAID EP420i - 2GB Cache
3) accessible drive area 3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available	
4) S26361-F3900-L1 4x 3.5" HDD kit for mid drive area (Possible alternative: S26361-F3900-E308)	
4) S26361-F3900-L2 4x 3.5" HDD kit incl. Expander, SAS 3.0 BPL & cables for accessible drive area (Possible alternative: S26361-F3900-E312);	
4) S26361-F3900-L21 4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for accessible drive area (Possible alternative: S26361-F3900-E408); Note: 2nd CPU required for this option!	



1) S26361-F3900-E308 Medium 3.5" kit for 8x SAS 3.0 HDD mounted in the bottom and mid drive area	
2x 3.5" HDD cages for up to 8x 3.5" HDD incl. SAS 3.0 Backplanes & SAS 3.0 cables mounted in the bottom and mid drive area	
2a) recommended RAID configuration	
1x S26361-F3842-E1	PRAID CP400i
S26361-F5243-E1	PRAID EP400i - 1GB Cache
S26361-F5243-E2	PRAID EP420i - 2GB Cache
3) accessible drive area 3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available	
4) S26361-F3900-L2 4x 3.5" HDD kit incl. Expander, SAS 3.0 BPL & cables for accessible drive area	
4) S26361-F3900-L21 4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for accessible drive area; Note: 2nd CPU required for this option!	



1) S26361-F3900-E312 Maximum 3.5" kit for 12x HDD mounted in the bottom, mid & accessible drive area	
3x 3.5" HDD cages for bottom, mid and accessible drive area for up to 12x 3.5" HDD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cables. HDD cage (acc. Area) are mounted directly to the housing - higher noise levels may occur	
2a) recommended RAID configuration	
1x S26361-F3842-E2	PSAS CP400i for MS spaces
S26361-F5243-E1	PRAID EP400i - 1GB Cache
S26361-F5243-E2	PRAID EP420i - 2GB Cache
3) accessible drive area !! 1x 9.5mm" bay for ultra slim DVD or Blu Ray available	
4) S26361-F3900-E125 2x NON hotplug 2.5" HDD mounted on metal bracket aside the 3.5" HD cages, con. at Expander	
4) S26361-F3900-L125 2x NON hotplug 2.5" HDD to be mounted on metal bracket, connected at Expander	



1) S26361-F3900-E408 Performance 3.5" kit for 8x 3.5" HDD plus 4x 2.5" PCIe-SSD	
2x 3.5" HDD cages for bottom & mid drive area plus 4x 2.5" PCIe-SSD SFF cage for accessible drive area for up to 8x 3.5" HDD & 4x 2.5" PCIe-SSD SFF SAS 3.0 Backplanes, and 4x *4 PCIe switch and all required cables	
2a) recommended RAID configuration	
1x S26361-F3842-E1	PRAID CP400i
S26361-F5243-E1	PRAID EP400i - 1GB Cache
S26361-F5243-E2	PRAID EP420i - 2GB Cache
3) accessible drive area !! 1x 1.6" bay for DVD, Blu Ray, LTO or RDX drives available	
4) S26361-F3900-L22 4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for upgrade to 8x PCIe SSD	
5) Restrictions !2nd CPU is mandatory (PCIe switch is inserted in Slot9)	

accessible drive area 1.6" bay 1.6" bay 1.6" bay 8x 2.5" bottom drive area 8x 2.5"	1) S26361-F3900-E208 Basic 2.5" kit for 8x SAS 3.0 HDD or SSD mounted in the bottom drive area basic 2.5" HDD kit for up to 8x 2.5" SAS 3.0 HDD or SSD incl. SAS 3.0 Backplane & SAS 3.0 cable	
	2a) recommended RAID configuration	2b) possible RAID controllers
	1x S26361-F3842-E1	PRAID CP400i
		S26361-F5243-E1 PRAID EP400i - 1GB Cache
		S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available
4) S26361-F3900-L11		8x 2.5" HDD kit for mid drive area incl. Expander, SAS 3.0 BPL & cables; (Possible alternative: S26361-F3900-E216)
4) S26361-F3900-L12		8x 2.5" HDD kit SAS 3.0 BPL & cables for accessible drive area*; (Possible alternative: S26361-F3900-E223)
4) S26361-F3900-L13		4x 3.5" HDD kit SAS 3.0 BPL & cables for accessible drive area*; (Possible alternative: S26361-F3900-E220)
4) S26361-F3900-L21		4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for accessible drive area; (Note: 2nd CPU required for this option!)
*) S26361-F3900-L11 is mandatory		

accessible drive area 1.6" bay 1.6" bay 1.6" bay mid drive area 8x 2.5" bottom drive area 8x 2.5"	1) S26361-F3900-E216 mid 2.5" kit for 16x SAS 3.0 HDD or SSD mounted in the bottom & mid drive area mid 2.5" HDD kit for up to 16x 2.5" SAS 3.0 HDD or SSD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable	
	2a) recommended RAID configuration	2b) possible RAID controllers
	1x S26361-F3842-E2	PSAS CP400i for MS spaces
		S26361-F5243-E1 PRAID EP400i - 1GB Cache
		S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available
4) S26361-F3900-L12		8x 2.5" HDD kit SAS 3.0 BPL & cables for accessible drive area; (Possible alternative: S26361-F3900-E223)
4) S26361-F3900-L13		4x 3.5" HDD kit SAS 3.0 BPL & cables for accessible drive area; (Possible alternative: S26361-F3900-E220)
4) S26361-F3900-L21		4x 2.5" PCIe-SSD SFF kit incl. 4x *4 switch and cables for accessible drive area; (Possible alternative: S26361-F3900-E416); (Note: 2nd CPU required for this option!)

accessible drive area 1.6" bay 8x 2.5" mid drive area 8x 2.5" bottom drive area 8x 2.5"	1) S26361-F3900-E223 Supreme 2.5" kit for 24x SAS 3.0 HDD or SSD mounted in the bottom, mid and accessible drive area Supreme 2.5" HDD kit for up to 24x 2.5" SAS 3.0 HDD or SSD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable. ! HDD cages are mounted directly to the housing - higher noise levels may occur	
	2a) recommended RAID configuration	2b) possible RAID controllers
	1x S26361-F3842-E2	PSAS CP400i for MS spaces
		S26361-F5243-E1 PRAID EP400i - 1GB Cache
		S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		1x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available
no upgrades possible		

accessible drive area 1.6" bay 1.6" bay 1.6" bay mid drive area 24x 2.5" bottom drive area	1) S26361-F3900-E224 Supreme 2.5" kit for 24x SAS 3.0 HDD or SSD mounted in the bottom & mid drive area Supreme 2.5" HDD kit for up to 24x 2.5" SAS 3.0 HDD or SSD incl. 32x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable. ! HDD cages are mounted directly to the housing - higher noise levels may occur	
	2a) recommended RAID configuration	2b) possible RAID controllers
	1x S26361-F3842-E2	PSAS CP400i for MS spaces
		S26361-F5243-E1 PRAID EP400i - 1GB Cache
		S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available
4) S26361-F3900-L12		8x 2.5" HDD kit SAS 3.0 BPL & cables for accessible drive area; (Possible alternative: S26361-F3900-E232);
4) S26361-F3900-L13		4x 3.5" HDD kit SAS 3.0 BPL & cables for accessible drive area; (Possible alternative: S26361-F3900-E228);
4) S26361-F3900-L21		4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for accessible drive area; (Possible alternative: S26361-F3900-E424); (Note: N 2nd CPU is required for this option!)

accessible drive area 1.6" bay 8x 2.5" mid drive area 24x 2.5" bottom drive area	1) S26361-F3900-E232 Storage 2.5" kit for 32x SAS 3.0 HDD/SSD mounted in the bottom, mid & acc. drive area Storage 2.5" HDD kit for up to 32x 2.5" SAS 3.0 HDD or SSD incl. 32x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable. ! HDD cages are mounted directly to the housing - higher noise levels may occur	
	2a) recommended RAID configuration	2b) possible RAID controllers
	1x S26361-F3842-E2	PSAS CP400i for MS spaces
		S26361-F5243-E1 PRAID EP400i - 1GB Cache
		S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		!! 1x 1.6" bay for DVD, Blu Ray, LTO or RDX drives available
4) no upgrades possible		

accessible drive area 9.5mm bay 4x 3.5" mid drive area 8x 2.5" bottom drive area 8x 2.5"	1) S26361-F3900-E220 Mixed 2.5"/3.5" kit for 16x 2.5" HDD/SSD (bottom/mid) plus 4x 3.5" HDD (acc. Drive area)		
	2x 2.5" HDD cages for bottom & mid drive area plus 4x 3.5" HDD cage for accessible drive area for up to 16x 2.5" HDD & 4x 3.5" HDD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes and SAS 3.0 cables. ! HDD cages are mounted directly to the housing - higher noise levels may occur		
	2a) recommended RAID configuration		
	1x S26361-F3842-E2	PSAS CP400i for MS spaces	S26361-F5243-E1 PRAID EP400i - 1GB Cache S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		!! 1x 9.5mm" bay for ultra slim DVD or Blu Ray available	
4) no upgrades possible			

accessible drive area 9.5mm bay 4x 3.5" mid drive area 24x 2.5" bottom drive area	1) S26361-F3900-E228 Mixed 2.5"/3.5" kit for 24x 2.5" HDD/SSD (bottom/mid) plus 4x 3.5" HDD (acc. Drive area)		
	2.5" HDD cage for bottom & mid drive area plus 3.5" HDD cage for accessible drive area for up to 24x 2.5" HDD & 4x 3.5" HDD incl. 32x SAS 3.0 Expander, SAS 3.0 Backplanes and SAS 3.0 cables. ! HDD cages are mounted directly to the housing - higher noise levels may occur		
	2a) recommended RAID configuration		
	1x S26361-F3842-E2	PSAS CP400i for MS spaces	S26361-F5243-E1 PRAID EP400i - 1GB Cache S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		!! 1x 9.5mm" bay for ultra slim DVD or Blu Ray available	
4) no upgrades possible			

accessible drive area 1.6" bay 4x 2.5" PCIe SSD mid drive area 8x 2.5" bottom drive area 8x 2.5"	1) S26361-F3900-E416 high performance 2.5" kit for 16x SAS 3.0 HDD/SSD (bottom/mid) + 4x 2.5" PCIe-SSD SFF		
	2x 2.5" HDD cage for bottom and mid drive area plus 2.5" PCIe-SSD SFF cage for up to 16x 2.5" SAS 3.0 HDD or SSD & 4x 2.5" PCIe-SSD SFF incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes, SAS 3.0 cable and 4x *4 PCIe switch & cables		
	2a) recommended RAID configuration		2b) possible RAID controllers
	1x S26361-F3842-E2	PSAS CP400i for MS spaces	S26361-F5243-E1 PRAID EP400i - 1GB Cache S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		!! 1x 1.6" bay for DVD, Blu Ray, LTO or RDX drives available	
4) S26361-F3900-L22		4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for upgrade to 8x PCIe SSD	
5) Restrictions		!2nd CPU is mandatory (PCIe switch is inserted in Slot9)	

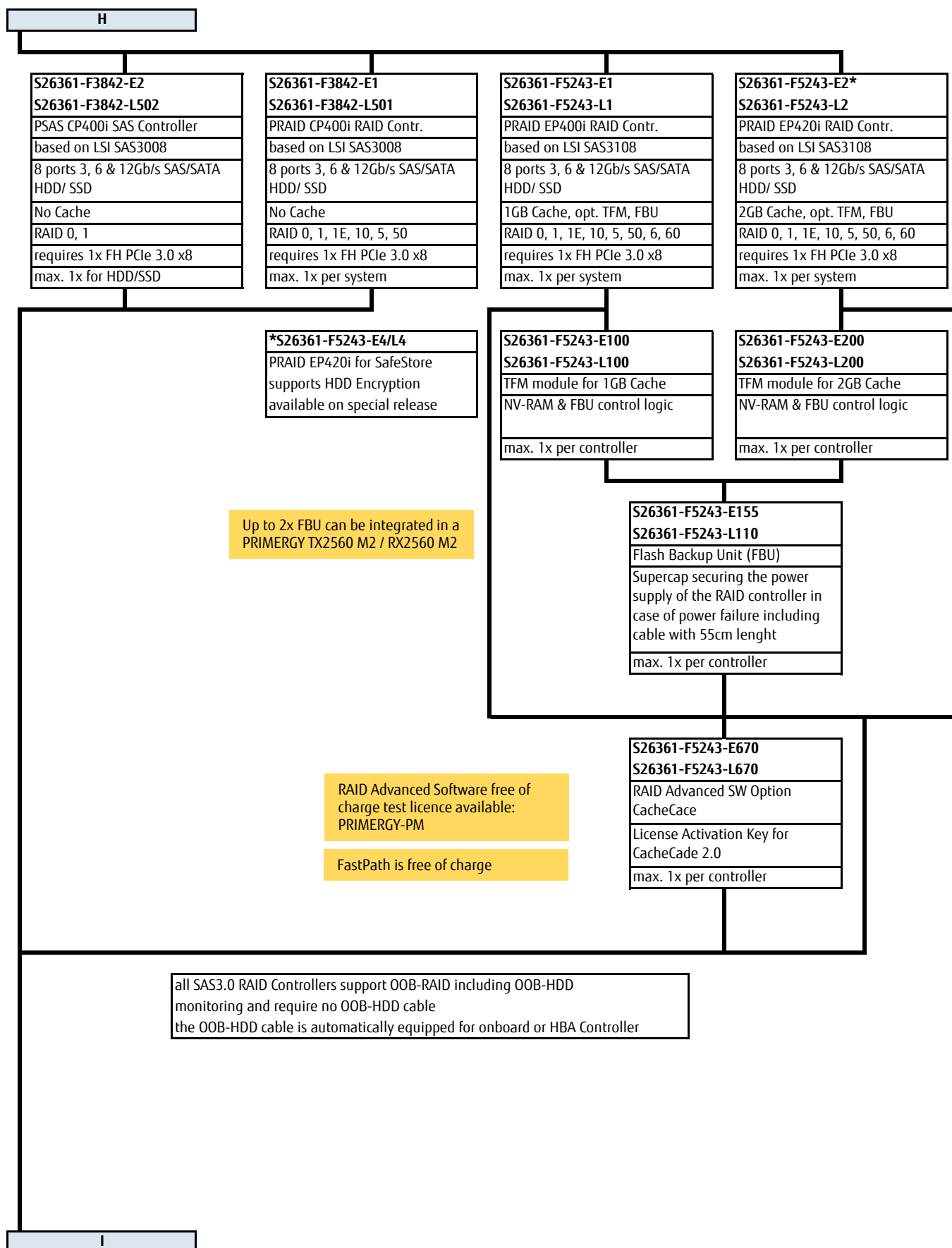
accessible drive area 1.6" bay 4x 2.5" PCIe SSD mid drive area 24x 2.5" bottom drive area	1) S26361-F3900-E424 Ultimate Performance 2.5"/3.5" kit for 24x 2.5" HDD/SSD (bottom/mid) plus 4x 2.5" PCIe-SSD SFF (acc. Drive area)		
	2.5" HDD cage for bottom & mid drive area plus 2.5" PCIe-SSD SFF cage for accessible drive area for up to 24x 2.5" HDD & 4x 2.5" PCIe-SSD SFF incl. 32x SAS 3.0 Expander, SAS 3.0 Backplanes, SAS 3.0 cables and 4x *4 PCIe switch & cables. ! HDD cages are mounted directly to the housing - higher noise levels may occur		
	2a) recommended RAID configuration		
	1x S26361-F3842-E2	PSAS CP400i for MS spaces	S26361-F5243-E1 PRAID EP400i - 1GB Cache S26361-F5243-E2 PRAID EP420i - 2GB Cache
3) accessible drive area		!! 1x 1.6" bay for DVD, Blu Ray, LTO or RDX drives available	
4) S26361-F3900-L22		4x 2.5" PCIe-SSD SFF kit incl. 4* x4 switch and cables for upgrade to 8x PCIe SSD	
5) Restrictions		!2nd CPU is mandatory (PCIe switch is inserted in Slot9)	

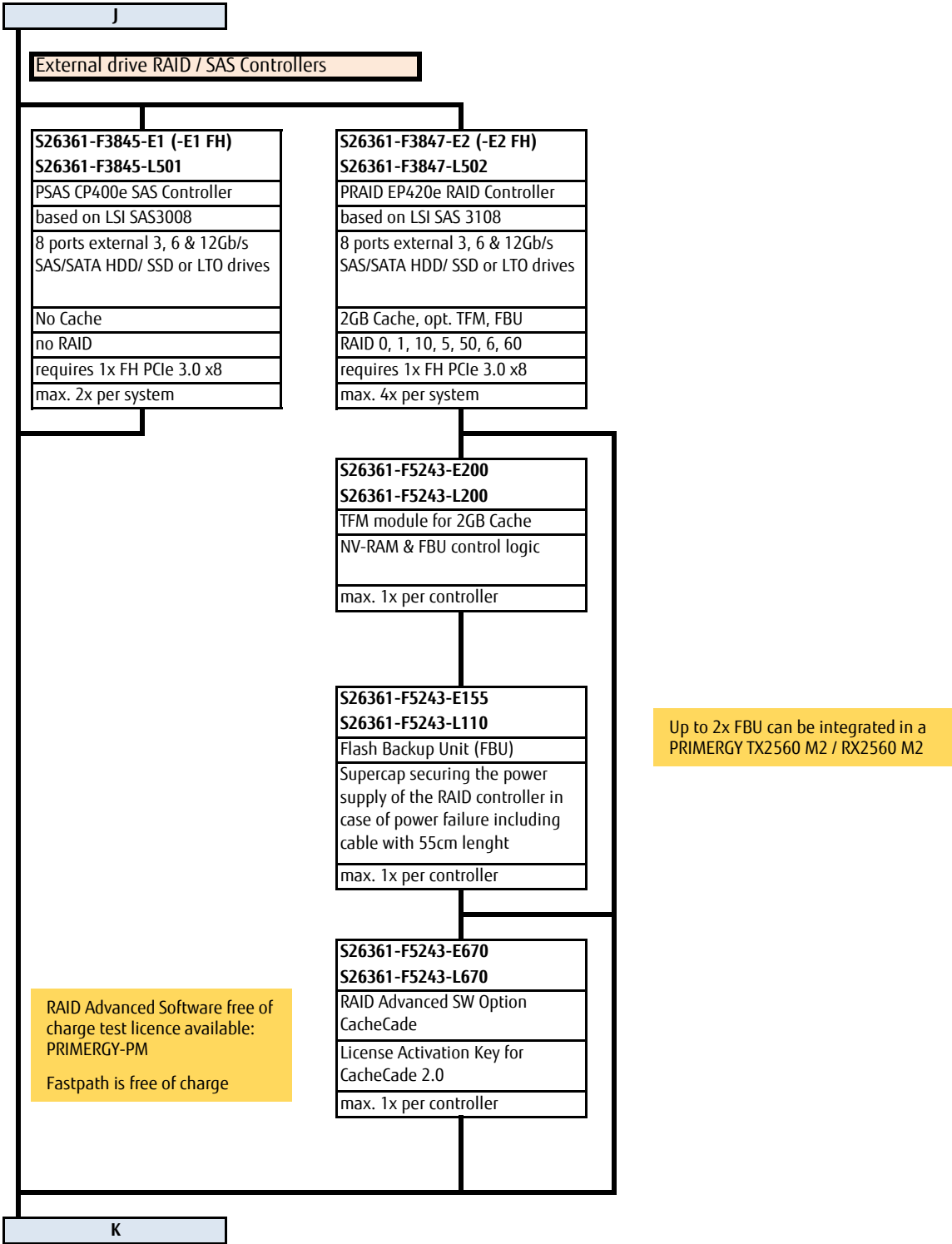
You did not find your preferred drive cage configuration in this comprehensive list of popular bundles?

--> Please contact our made4you team (mailto:customer.projects@ts.fujitsu.com) for more customer specific solutions or visit us:
<https://partners.ts.fujitsu.com/order-supply/General%20information/made4you>
E.g. 2nd RAID Controller, boot from onboard SATA, 2x non-hot-plug HDD ex factory, ...

G

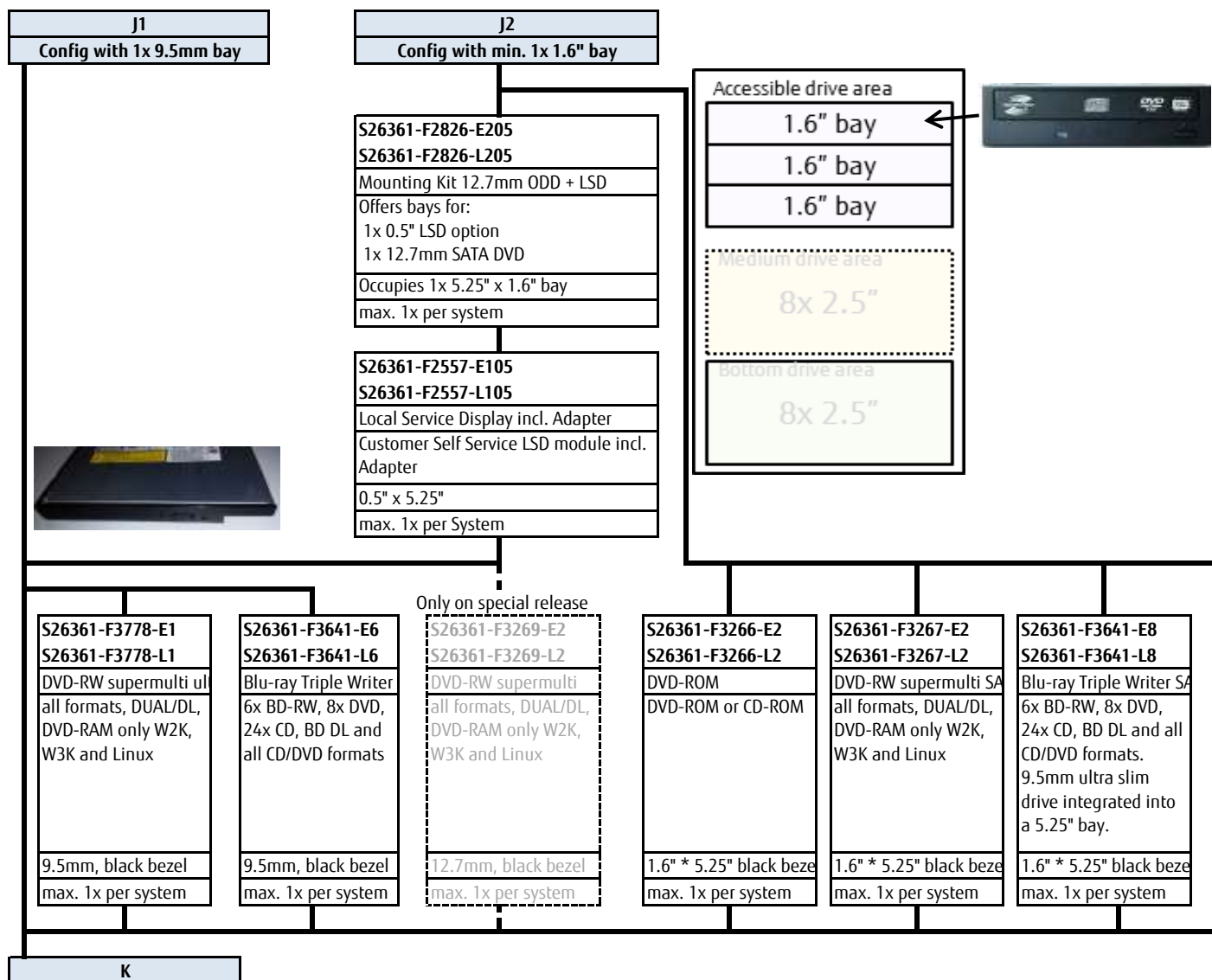
Chapter 7 - SAS / RAID Controller





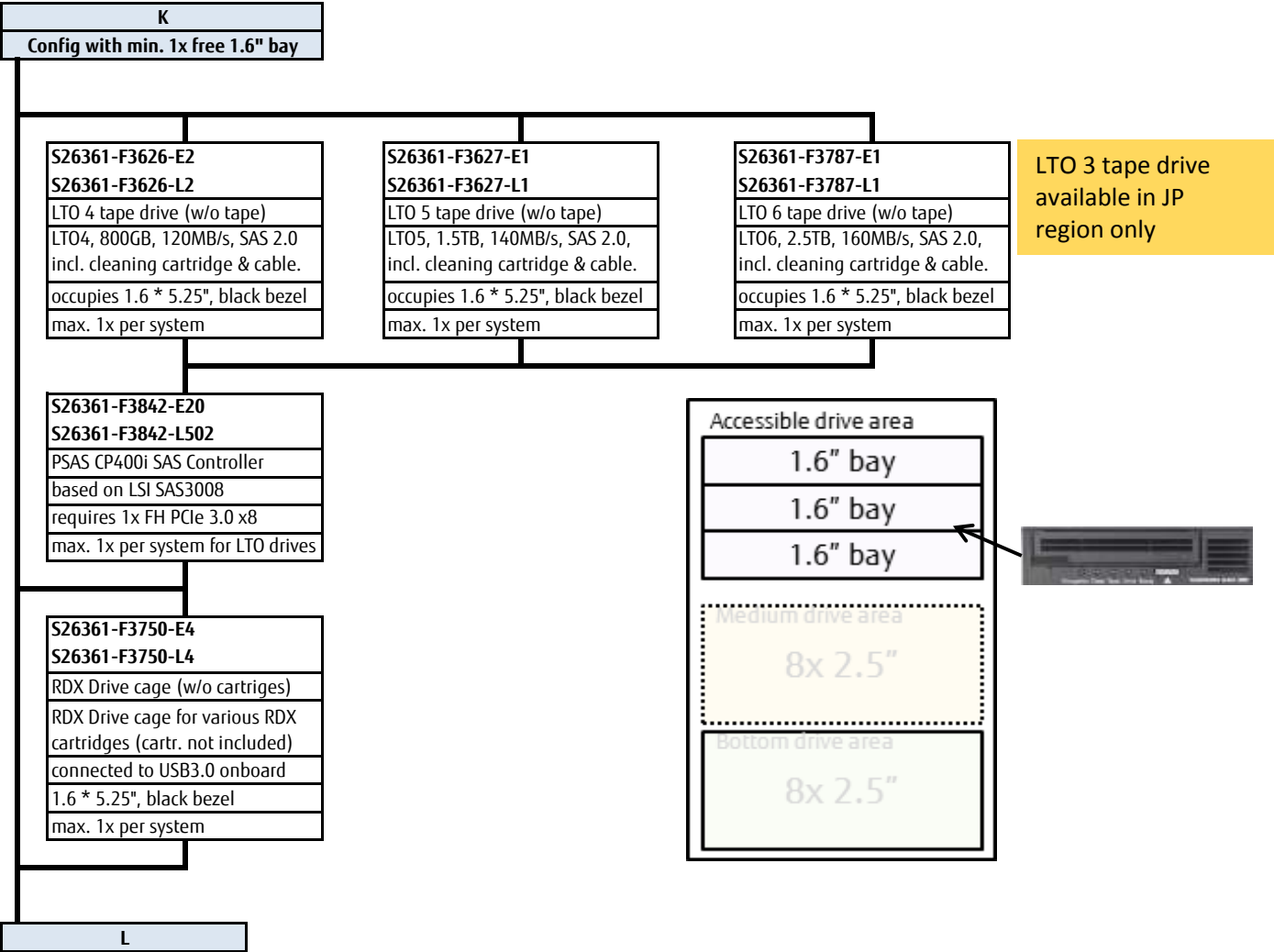
Chapter 8 - ODD optical disk drives

With most configurations the TX / RX2560 M2 offers 3 x 1.6" bay in the accessible drives area located at the top of the Tower Server (or at the right side of the Rack) for various ODD and or backup drives.
Depending on the HDD drive configuration there may be some or all of these 1.6" bays already occupied - please find the number of available bays and the size listed as point 3) at each of the drive bundles. All bundles with limitations are highlighted with 2 exclamation marks in the front (e.g. "!! 1x 9.5mm ...")



Chapter 9 - backup drives

With most configurations the TX / RX2560 M2 offers 3 x 1.6" bay in the accessible drives area located at the top of the Tower Server (or at the right side of the Rack) for various ODD and or backup drives.
Depending on the HDD drive configuration there may be some or all of these 1.6" bays already occupied - please find the number of available bays and the size listed as point 3) at each of the drive bundles. All bundles with limitations are highlighted with 2 exclamation marks in the front (e.g. "!! 1x 9.5mm ...")



Chapter 10 - storage drives

Hard Disk Sector Format

SAS drives require a dedicated SAS / RAID Controller
SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.
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 is not supported.
512n & 512e HDDs can be mixed, but cannot be used in one logical RAID volume.
SATA DOM: VMware is not supported.
dwdp (5y): drive writes per day over 5 years.
HDD Classes:
Business-Critical (BC) -SATA=Nearline SATA Enterprise Drives / 7.2Krpm, SATA 6G.
Business-Critical (BC) -SAS=Nearline SATA Enterprise Drives / 7.2Krpm, SAS 6G or SAS 12G .
Mission-Critical (MC)=SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.

L

2.5" PCIe-SSD, SSD and SATADOM

2.5" PCIe-SSD's require one of the HDD cage kits with PCIe support
!2nd CPU is mandatory (PCIe switch is inserted in Slot9)

PCIe-SSD 2.5" (SFF) with hot plug/hot replace tray

capacity	Formfactor	Interface	read	write	latency	Endurance	dwdp	order code E-part	order code L-part
800GB	2.5" (SFF)	Gen 3 x4			20µs	mainstream	10	S26361-F5534-E800	S26361-F5534-L800
1.6TB	2.5" (SFF)	Gen 3 x4			20µs	mainstream	10	S26361-F5534-E161	S26361-F5534-L161
2.0TB	2.5" (SFF)	Gen 3 x4			20µs	mainstream	10	S26361-F5534-E201	S26361-F5534-L201

max. 4x PCIe SSD per system (requires a HDD cage kit with PCIe support (S26391-F3900-E4xx or -L21);
upgrade to 8x PCIe SSD is possible with additional 4x 2.5" PCIe-SSD SFF kit (S26361-F3900-L22);

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

capacity	Formfactor	Interface	read	write		Endurance	dwdp (5y)	order code E-part	order code L-part
200GB	2.5" (SFF)	12Gbit/s	as long as in stock			mainstream	10	S26361-F5298-E200	S26361-F5298-L200
400GB	2.5" (SFF)	12Gbit/s	as long as in stock			mainstream	10	S26361-F5298-E400	S26361-F5298-L400
800GB	2.5" (SFF)	12Gbit/s	as long as in stock			mainstream	10	S26361-F5298-E800	S26361-F5298-L800
1.6TB	2.5" (SFF)	12Gbit/s	as long as in stock			mainstream	10	S26361-F5298-E160	S26361-F5298-L160
400GB	2.5" (SFF)	12Gbit/s	as soon as available			Write Intensive	10	S26361-F5608-E400	S26361-F5608-L400
800GB	2.5" (SFF)	12Gbit/s	as soon as available			Write Intensive	10	S26361-F5608-E800	S26361-F5608-L800
1.6TB	2.5" (SFF)	12Gbit/s	as soon as available			Write Intensive	10	S26361-F5608-E160	S26361-F5608-L160
480GB	2.5" (SFF)	12Gbit/s	as soon as available			Mixed Use	3	S26361-F5614-E480	S26361-F5614-L480
960GB	2.5" (SFF)	12Gbit/s	as soon as available			Mixed Use	3	S26361-F5614-E960	S26361-F5614-L960
1.92TB	2.5" (SFF)	12Gbit/s	as soon as available			Mixed Use	3	S26361-F5614-E192	S26361-F5614-L192
3.84TB	2.5" (SFF)	12Gbit/s	as soon as available			Mixed Use	3	S26361-F5614-E384	S26361-F5614-L384
480GB	2.5" (SFF)	12Gbit/s	as soon as available			Read Intensive	1	S26361-F5617-E480	S26361-F5617-L480
960GB	2.5" (SFF)	12Gbit/s	as soon as available			Read Intensive	1	S26361-F5617-E960	S26361-F5617-L960
1.92TB	2.5" (SFF)	12Gbit/s	as soon as available			Read Intensive	1	S26361-F5617-E192	S26361-F5617-L192
3.84TB	2.5" (SFF)	12Gbit/s	as soon as available			Read Intensive	1	S26361-F5617-E384	S26361-F5617-L384

max. 8x, 16x, 24x or 32x - depending on the HD cage kit chosen.

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

capacity	Formfactor	Interface	read	write		Endurance	dwdp (5y)	order code E-part	order code L-part
200GB	2.5" (SFF)	6Gbit/s				mainly write	10	S26361-F5592-E200	S26361-F5592-L200
400GB	2.5" (SFF)	6Gbit/s				mainly write	10	S26361-F5592-E400	S26361-F5592-L400
800GB	2.5" (SFF)	6Gbit/s				mainly write	10	S26361-F5592-E800	S26361-F5592-L800
1.2TB	2.5" (SFF)	6Gbit/s				mainly write	10	S26361-F5592-E120	S26361-F5592-L120
120GB	2.5" (SFF)	6Gbit/s				read / write	3	S26361-F5588-E120	S26361-F5588-L120
240GB	2.5" (SFF)	6Gbit/s				read / write	3	S26361-F5588-E240	S26361-F5588-L240
480GB	2.5" (SFF)	6Gbit/s				read / write	3	S26361-F5588-E480	S26361-F5588-L480
960GB	2.5" (SFF)	6Gbit/s				read / write	3	S26361-F5588-E960	S26361-F5588-L960
1.92TB	2.5" (SFF)	6Gbit/s				read / write	3	S26361-F5588-E192	S26361-F5588-L192
120GB	2.5" (SFF)	6Gbit/s				read intensive	0.3	S26361-F5525-E120	S26361-F5525-L120
240GB	2.5" (SFF)	6Gbit/s				read intensive	0.3	S26361-F5525-E240	S26361-F5525-L240
480GB	2.5" (SFF)	6Gbit/s				read intensive	0.3	S26361-F5525-E480	S26361-F5525-L480
800GB	2.5" (SFF)	6Gbit/s				read intensive	0.3	S26361-F5525-E800	S26361-F5525-L800

max. 8x, 16x, 24x or 32x - depending on the HD cage kit chosen.

SATA DOM Non volatile storage drive for booting only

capacity	FF	Interface			Endurance	order code E-part	order code L-part
64GB	DOM	6Gbit/s			172 TBW (Sequential write)	S26361-F5522-E64	S26361-F5522-L64
128GB	DOM	6Gbit/s			345 TBW (Sequential write)	S26361-F5522-E128	S26361-F5522-L128

max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware is not supported.

HDD SATA 2.5" 7.2K (SFF) Business critical with hot plug/hot replace tray

capacity	RPM	Interface	Cache	sector			order code E-part	order code L-part
500GB	7.200	6Gbit/s	64MB	512n			S26361-F3926-E500	S26361-F3926-L500
1.0TB	7.200	6Gbit/s	64MB	512n			S26361-F3926-E100	S26361-F3926-L100
2.0TB	7.200	6Gbit/s	128MB	512n	as soon as available		S26361-F3956-E200	S26361-F3956-L200
1.0TB	7.200	6Gbit/s	128MB	512e			S26361-F3907-E100	S26361-F3907-L100
2.0TB	7.200	6Gbit/s	128MB	512e			S26361-F3907-E200	S26361-F3907-L200

max. 8x, 16x, 24x or 32x - depending on the HD cage kit chosen.

2.5" (SFF) Hard drives

HDD SAS 2.5" 7.2K (SFF) Business critical with hot plug/hot replace tray

capacity	RPM	Interface	Cache	sector			order code E-part	order code L-part
1.0TB	7.200	12Gbit/s	128MB	512n			S26361-F5600-E100	S26361-F5600-L100
2.0TB	7.200	12Gbit/s	128MB	512n			S26361-F5600-E200	S26361-F5600-L200
1.0TB	7.200	12Gbit/s	128MB	512e			S26361-F5573-E100	S26361-F5573-L100
2.0TB	7.200	12Gbit/s	128MB	512e			S26361-F5573-E200	S26361-F5573-L200

max. 8x, 16x, 24x or 32x - depending on the HD cage kit chosen.

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SAS 10K HDDs not released with PSAS CP400i (S26361-F3842-E2)

HDD SAS 2.5" 10K (SFF) Enterprise performance with hot plug/hot replace tray									
capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
300GB	10,000	12Gbit/s	128MB	512n			as soon as available	S26361-F5550-E130	S26361-F5550-L130
600GB	10,000	12Gbit/s	128MB	512n			as soon as available	S26361-F5550-E160	S26361-F5550-L160
900GB	10,000	12Gbit/s	128MB	512n			as soon as available	S26361-F5550-E190	S26361-F5550-L190
1.2TB	10,000	12Gbit/s	128MB	512n			as soon as available	S26361-F5550-E112	S26361-F5550-L112
600GB	10,000	12Gbit/s	128MB	512e			as soon as available	S26361-F5543-E160	S26361-F5543-L160
900GB	10,000	12Gbit/s	128MB	512e			as soon as available	S26361-F5543-E190	S26361-F5543-L190
1.2TB	10,000	12Gbit/s	128MB	512e			as soon as available	S26361-F5543-E112	S26361-F5543-L112
1.8TB	10,000	12Gbit/s	128MB	512e			as soon as available	S26361-F5543-E118	S26361-F5543-L118
max. 8x, 16x, 24x or 32x - depending on the HD cage kit choosen.									

HDD SAS 2.5" 15K (SFF) Enterprise performance with hot plug/hot replace tray									
capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
146GB	15,000	6Gbit/s	32MB	512n			not released for Japan/APAC	S26361-F5538-E514	S26361-F5538-L514
300GB	15,000	12Gbit/s	128MB	512n				S26361-F5531-E530	S26361-F5531-L530
450GB	15,000	12Gbit/s	128MB	512n				S26361-F5531-E545	S26361-F5531-L545
600GB	15,000	12Gbit/s	128MB	512n				S26361-F5531-E560	S26361-F5531-L560
max. 8x, 16x, 24x or 32x - depending on the HD cage kit choosen.									

3.5" (LFF) Hard drives

HDD SAS 3.5" 7.2K (LFF) business critical with hot plug/hot replace tray									
capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
1TB	7,200	6Gbit/s	32MB	512n				S26361-F3820-E100	S26361-F3820-L100
2TB	7,200	6Gbit/s	32MB	512n				S26361-F3820-E200	S26361-F3820-L200
4TB	7,200	6Gbit/s	32MB	512n				S26361-F3820-E400	S26361-F3820-L400
2TB	7,200	12Gbit/s	128MB	512e				S26361-F5571-E200	S26361-F5571-L200
4TB	7,200	12Gbit/s	128MB	512e				S26361-F5571-E400	S26361-F5571-L400
6TB	7,200	12Gbit/s	128MB	512e				S26361-F5571-E600	S26361-F5571-L600
max. 4x, 8x, or 12x - depending on the HD cage kit choosen.									

512e drives are not supported with the current versions of vSphere and VSAN



SAS 10K HDDs not released with PSAS CP400i (S26361-F3842-E2)

HDD SAS 3.5" 10K/15K (LFF) 2.5" HDD Enterprise performance with 3.5" hot plug/hot replace tray									
capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
300GB	10,000	12Gb/s	128MB	512n			as soon as available	S26361-F5568-E130	S26361-F5568-L130
600GB	10,000	12Gb/s	128MB	512n			as soon as available	S26361-F5568-E160	S26361-F5568-L160
1.2TB	10,000	12Gb/s	128MB	512n			as soon as available	S26361-F5568-E112	S26361-F5568-L112
1.8TB	10,000	12Gb/s	128MB	512e			as soon as available	S26361-F5569-E118	S26361-F5569-L118
300GB	15,000	12Gb/s	128MB	512n				S26361-F5532-E530	S26361-F5532-L530
450GB	15,000	12Gb/s	128MB	512n			as soon as available	S26361-F5532-E545	S26361-F5532-L545
600GB	15,000	12Gb/s	128MB	512n			as soon as available	S26361-F5532-E560	S26361-F5532-L560
max. 4x, 8x, or 12x - depending on the HD cage kit choosen.									

512e drives are not supported with the current versions of vSphere and VSAN

HDD SATA 3.5" 7.2K (LFF) business critical with hot plug/hot replace tray									
capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
1TB	7,200	6Gbit/s	64MB	512n				S26361-F3950-E100	S26361-F3950-L100
2TB	7,200	6Gbit/s	64MB	512n				S26361-F3815-E200	S26361-F3815-L200
4TB	7,200	6Gbit/s	64MB	512n				S26361-F3815-E400	S26361-F3815-L400
4TB	7,200	6Gbit/s	128MB	512e			not released for Japan/APAC	S26361-F3904-E400	S26361-F3904-L400
6TB	7,200	6Gbit/s	128MB	512e				S26361-F3904-E600	S26361-F3904-L600
max. 4x, 8x, or 12x - depending on the HD cage kit choosen.									

512e drives are not supported with the current versions of vSphere and VSAN

SSD SATA 3.5" (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray									
capacity	Formfactor	Interface	Category	dwps (5y)				order code E-part	order code L-part
200GB	3.5" (LFF)	6Gb/s	mainly write	10				S26361-F5593-E200	S26361-F5593-L200
400GB	3.5" (LFF)	6Gb/s	mainly write	10				S26361-F5593-E400	S26361-F5593-L400
800GB	3.5" (LFF)	6Gb/s	mainly write	10				S26361-F5593-E800	S26361-F5593-L800
1.2TB	3.5" (LFF)	6Gb/s	mainly write	10				S26361-F5593-E120	S26361-F5593-L120
120GB	3.5" (LFF)	6Gb/s	read / write	3				S26361-F5589-E120	S26361-F5589-L120
240GB	3.5" (LFF)	6Gb/s	read / write	3				S26361-F5589-E240	S26361-F5589-L240
480GB	3.5" (LFF)	6Gb/s	read / write	3				S26361-F5589-E480	S26361-F5589-L480
960GB	3.5" (LFF)	6Gb/s	read / write	3				S26361-F5589-E960	S26361-F5589-L960
1.92TB	3.5" (LFF)	6Gb/s	read / write	3				S26361-F5589-E192	S26361-F5589-L192
	3.5" (LFF)	6Gb/s	read-intensive						
	3.5" (LFF)	6Gb/s	read-intensive						
	3.5" (LFF)	6Gb/s	read-intensive						
max. 4x, 8x, or 12x - depending on the HD cage kit choosen.									

10DWPD SSDs as soon as available

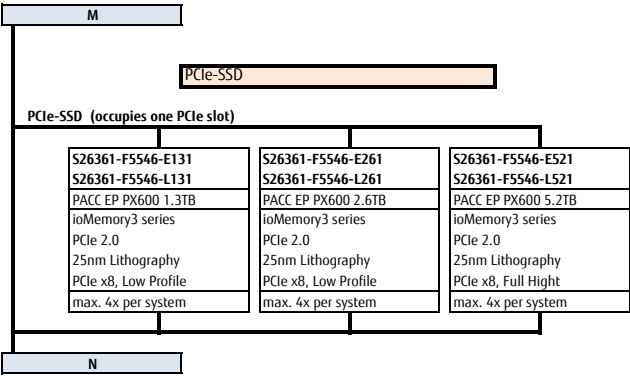
2.5" NON-hot-plug HDD for internal bays

(*) as soon as available

(**) as long as in stock

2.5" Drives for NON-hot-plug bays (internal)									
capacity	Type	RPM	Interface	Interface	Cache	sector		Endurance	order code E-part
250GB	HDD	7,200	6Gbit/s	SATA 6G	64MB	512n	**	-0-	S26361-F3908-E250
1.0TB	HDD	7,200	6Gbit/s	SATA 6G	128MB	512n	*)	-0-	S26361-F3957-E100
120GB	SSD	-0-	6Gbit/s	SATA 6G	-0-	-0-		read intensive	S26361-F5556-E120
120GB	SSD	-0-	6Gbit/s	SATA 6G	-0-	-0-		Mixed-Use	S26361-F5603-E120
500GB	HDD	7,200	6Gbit/s	SAS 6G	64MB	512n		-0-	S26361-F5555-E500
300GB	HDD	10,000	12Gbit/s	SAS 12G	128MB	512n		-0-	S26361-F5554-E130
only possible in TXRX2560 M2 base unit with 12x 3.5" HDD HD cage kit (S26361-F3900-E312) -- These HDD are intended to be Boot HDD and are mounted in a NON-hot-plug cage in the interior of the Server. Can be secured via the key lock.									

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Chapter 11 - LAN Components

Dynamic LoM interface cards

one DynamicLoM order code is mandatory

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

PLAN EM blind panel	Blind panel if no DynamicLoM	S26361-F5302-E100	n/a
PLAN EM 2x1Gb T interface card	2x RJ45 plug for 1000BASE-T	S26361-F5302-E201	S26361-F5302-L201
PLAN EM 4x1Gb T interface card	4x RJ45 plug for 1000BASE-T	S26361-F5302-E401	S26361-F5302-L401
PLAN EM 2x10Gb T interface card	2x RJ45 plug for 10GBASE-T	S26361-F5302-E210	S26361-F5302-L210
PLAN EM 2x10Gb SFP interface card	2x SFP+ plugs for twinax or modules for SFP modules and cables see link	S26361-F5302-E211	S26361-F5302-L211

required 1x per system

1Gb Ethernet network components

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

PLAN AP 1x1Gbit Cu Intel I210-T1	6x	1 port, Intel	S26361-F3852-E1	S26361-F3852-L501
PLAN CP 2x1Gbit Cu Intel I350-T2	6x	2 port, Intel	S26361-F4610-E2	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4	6x	4 port, Intel	S26361-F4610-E4	S26361-F4610-L504

max. 6 Controller per system

10Gb Ethernet network components

as soon as available

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

Eth Ctrl 2x10GBase-T PCIe x8 X540-T2	6x	2 port NIC, Intel	S26361-F3752-E2	S26361-F3752-L502
PLAN EP X550-T2 2x10GBASE-T	6x	2 port NIC, Intel	S26361-F3948-E2	S26361-F3948-L502
PLAN EP OCE14102 2x 10GBase-T	6x	2 port NIC with RDMA, Emulex	S26361-F5557-E1	S26361-F5557-L501

10Gb Ethernet controller with SFP+ interface (for SFP+ modules or twinax cables, Fujitsu / Intel based)

Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+	4x	2 port NIC, Intel 82599 based	S26361-F3629-E2	S26361-F3629-L502
PLAN EP X710-DA2 2x10Gb SFP+	4x	2 port NIC, Intel	S26361-F3640-E2	S26361-F3640-L502

optional 10Gb SFP+ module with LC connector for Fujitsu / Intel based controller

SFP+ Module MMF 10GbE LC	2x	MMF / SR SFP+ module, up to 400m	S26361-F3986-E3	S26361-F3986-L3
SFP+ Module SMF 10GbE LC	2x	SMF / LR SFP+ module, up to 10km	S26361-F3986-E4	S26361-F3986-L4
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	2x	customized cable length (best fitting cable length is defined during rack installation at the factory)	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x		S26361-F3873-E500	
SFP+ passive Twinax Cable Cisco	2x		S26361-F4571-E500	

max. 2x SFP+ or Twinax Cable per controller

10Gb Ethernet controller with SFP+ interface (for SFP+ modules or twinax cables, Emulex)

PLAN EP OCE14102 2x10Gb	6x	2 port NIC with RDMA, Emulex	S26361-F5536-E2	S26361-F5536-L502
PCNA EP OCE14102 2x 10Gb	6x	2 port CNA with FCoE & RDMA, Emulex	S26361-F5250-E1	S26361-F5250-L501

optional 10Gb SFP+ module with LC connector for Emulex controller

PCNA SFP+ MMF Modul OCE14102	2x	MMF / SR SFP+ module, up to 400m	S26361-F5250-E110	S26361-F5250-E110
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	2x	customized cable length (best fitting cable length is defined during rack installation at the factory)	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x		S26361-F3873-E500	
SFP+ passive Twinax Cable Cisco	2x		S26361-F4571-E500	

max. 2x SFP+ or Twinax Cable per controller

max. 6 Controller per system

On special release only

40Gb Ethernet controller with QSFP+ interface (for QSFP+ modules or twinax cables, Emulex)

PCNA EP OCE14401 1x 40Gb	2x	1x QSFP+ plugs for twinax or modules	S26361-F5539-E1	S26361-F5539-L501
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optional 40Gb QSFP+ module with MTO connector for Emulex controller

SFP+ Module MMF 10GbE LC	1x	MMF / SR SFP+ module, up to 400m	S26361-F5539-E140	S26361-F5539-L140
Twinax Anschlussplatz Primergy	1x	virtual connector for twinax cables	V:TWX CONNECTOR-40	
QSFP+ active Twinax Cable	1x	customized cable length (best fitting cable length is defined during rack installation at the factory)	S26361-F3986-E400	see table at the bottom of this page
QSFP+ aktives Twinax Kabel Brocade	1x		S26361-F5317-E40	

max. 1x QSFP+ or Twinax Cable per controller

max. 1 Controller per system

Q

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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

Fujitsu QSFP+ / QSFP+ Twinax 40Gb cable

QSFP+ passive Twinax Cable Fujitsu 2m	S26361-F3986-L402
QSFP+ passive Twinax Cable Fujitsu 5m	S26361-F3986-L405
QSFP+ active Twinax Cable Fujitsu 10m	S26361-F3986-L410

Brocade active QSFP+ / QSFP+ Twinax 40Gb cable

QSFP+ active Twinax Cable Brocade 1m	S26361-F5317-L41
QSFP+ active Twinax Cable Brocade 3m	S26361-F5317-L43
QSFP+ active Twinax Cable Brocade 5m	S26361-F5317-L45
40GE Direct Attached QSFP-QSFP,10m,1pack	D:QSFP-QSFP-AOC10L
Brocade active QSFP+ / 4xSFP+ Twinax 40Gb cable	
QSFP+/4xSFP+ Breakout Cable Brocade 1m	S26361-F5317-L401
QSFP+/4xSFP+ Breakout Cable Brocade 3m	S26361-F5317-L403
QSFP+/4xSFP+ Breakout Cable Brocade 5m	S26361-F5317-L405
4x10GE Direct QSFP-4SFP Cable,10m,1-pack	D:QSFP-4SFP-AOC10L

R

Chapter 12 - Fibre Channel Controller

R

8Gb Fibre Channel controller generation 4 with LC interface for 50µm optical cables (OM3 or OM4)

FC Ctrl 8Gb/s 1 Kanal LPe1250 MMF LC	8x	1 port, full height, Emulex	S26361-F3961-E1	S26361-F3961-L1
FC Ctrl 8Gb/s 2 Kanal LPe12002 MMF LC	8x	2 port, full height, Emulex	S26361-F3961-E2	S26361-F3961-L2
FC Ctrl 8Gb/s 1 Kanal QLE2560 MMF LC	8x	1 port, full height, Qlogic	S26361-F3631-E1	S26361-F3631-L1
FC Ctrl 8Gb/s 2 Kanal QLE2562 MMF LC	8x	2 port, full height, Qlogic	S26361-F3631-E2	S26361-F3631-L2

16Gb Fibre Channel controller generation 5 with LC interface for 50µm optical cables (OM3 or OM4)

PFC EP LPe16000 1x 16Gb	8x	1 port, full height, Emulex	S26361-F4994-E1	S26361-F4994-L501
PFC EP LPe16002 2x 16Gb	8x	2 port, full height, Emulex	S26361-F4994-E2	S26361-F4994-L502
PFC EP QLE2670 1x 16Gb	8x	1 port, full height, Qlogic	S26361-F5313-E1	S26361-F5313-L501
PFC EP QLE2672 2x 16Gb	8x	2 port, full height, Qlogic	S26361-F5313-E2	S26361-F5313-L502

16Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)

PFC EP LPe31000 1x 16Gb Emulex	8x	1 port, full height, Emulex	S26361-F5596-E1	S26361-F5596-L501
PFC EP LPe31002 2x 16Gb Emulex	8x	2 port, full height, Emulex	S26361-F5596-E2	S26361-F5596-L502
PFC EP QLE2690 1x 16Gb	8x	1 port, full height, Qlogic	S26361-F5580-E1	S26361-F5580-L501
PFC EP QLE2692 2x 16Gb	8x	2 port, full height, Qlogic	S26361-F5580-E2	S26361-F5580-L502

max. 8 Controller per system (mixed configurations are supported)

as soon as available, GA planned July 2016

Chapter 13 - Infiniband Controllers

in total max. 2x Controller per System

S26361-F4533-E102

S26361-F4533-L102

IB HCA 56Gb 1channel FDR

56GBit 1channel Infiniband Controller with
FDR technology (8.0GT/s)

Q-SFP+ connector

PCIe Gen3 x8 full height Card, 170mm

max. 2x per system

S26361-F4533-E202

S26361-F4533-L202

IB HCA 56Gb 2channel FDR

56GBit 2channel Infiniband Controller with
FDR technology (8.0GT/s)

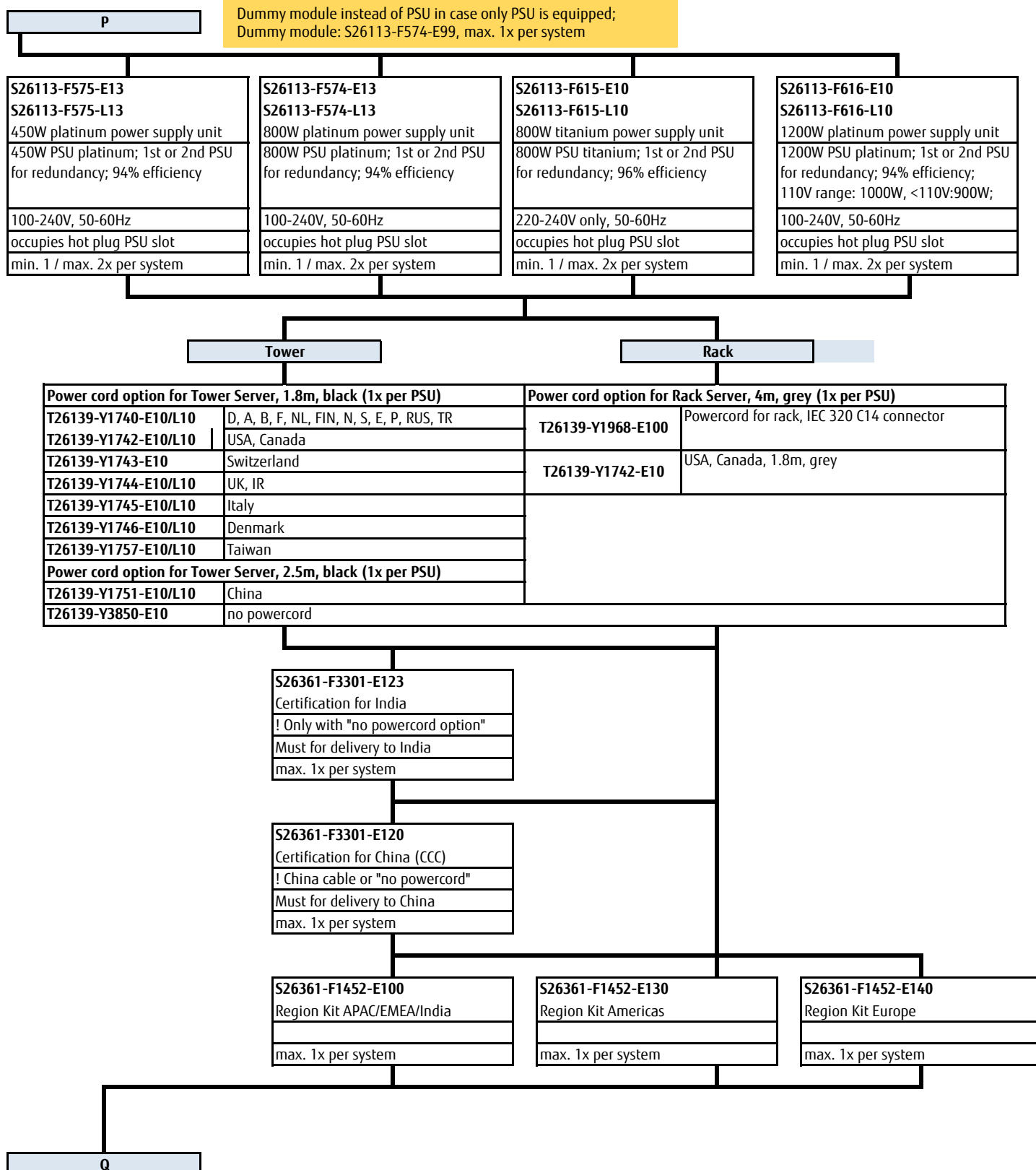
Q-SFP+ connector

PCIe Gen3 x8 full height Card, 170mm

max. 2x per system

P

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



Chapter 15 - Accessories

Q

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

USB Mouse:

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



USB 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 Keyboards for Tower Servers for following countries:

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



USB Optical Disc Drive

Fujitsu External Super Multi Drive	S26341-F103-L135
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Please find the layout of all Fujitsu keyboards here:
<http://abg0355a.abg.fsc.net/>

R



Chapter 16 - others

R

S26361-F1790-E243

S26361-F1790-L244

iRMC S4 advanced pack

integrated remote Management controller activation key for graphical console redirection and remote media redirection

max. 1x per system

The ATD feature cannot operate with LTO drives.

They will be excluded from configurations with ATD

S26361-F3776-E240

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-E245

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-F3120-E3

S26361-F3120-L3

Serial port - RS232 (rear side)

Serial port - RS232 mounted at rear side, connected via cable

max. 1x per system

This option serial port is dedicated for several PRIMERGY Servers and will be delivered with full height and low profile brackets, which are not required for PRIMERGY TX2560 M2 / RX2560 M2.

S26361-F3552-E6

S26361-F3552-L6

TPM 1.2 Module

max. 1x per system

S26361-F3552-E10

S26361-F3552-L10

TPM 2.0 Module

max. 1x per system

S26361-F3552-L23

TPM 1.2 Module

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made4you

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- > special hardware configurations,
- > staging services ex factory,
- > extended lifecycle management,
- > customer specific logos, component,
- > BIOS fixes and many more.

For further information please contact us



Fujitsu Portfolio

Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability

Your Server is ready

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