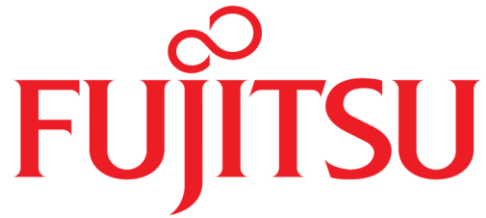


PRIMERGY RX2530 M2
1U Rack Server



4x 3.5"



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



10x 2.5"



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	describes base unit of TX2560 M1 and RX2560 M1
2		describes rack mount kits and services
3	CPU	Order code and Infos of E5-2600v3 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 Components
12	LAN_FC_IB	Fibre Channel Controller
13		Infiniband Controller
14	PSU	Power supply units, power cables, country specific op
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 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 some cases as well description of content

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

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

For further information see:

Link to datasheet:

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

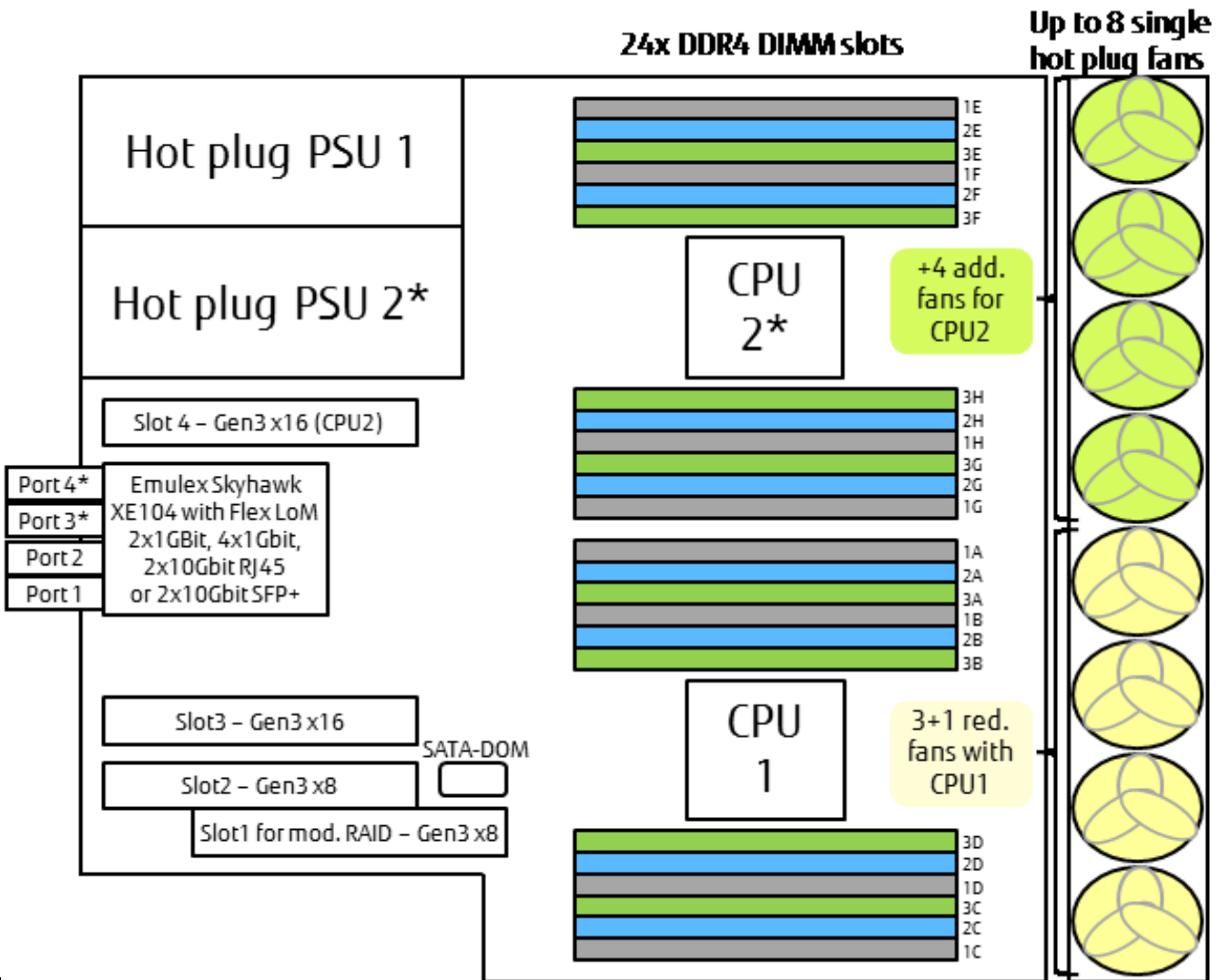
(extranet)

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

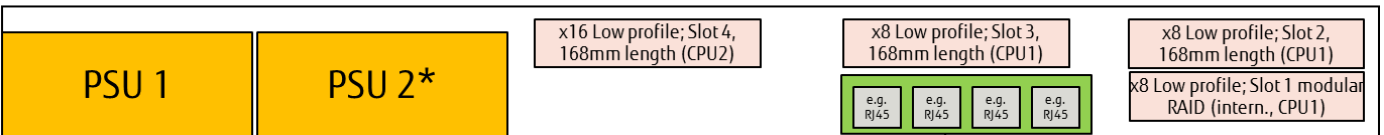
SAS	Drives, RAID	Serial attached SCSI Device (HDD, SSD, LTO drives); SAS2.0 = 6Gbit/s; SAS3.0 = 12Gbit/s
SATA	Drives, RAID	Serial ATA (HDD, SSD) current SATA speed = 6Gbit/s
HDD	Drives	Hard disk drive (Non volatile storage device), 2.5" (SFF) or 3.5" (LFF)
SSD	Drives	Solid state disk (Non volatile storage 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	Part for assembly ex factory, derived from German word "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	Loose delivery, derived from German word "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 M2 schematics of the System board and fans

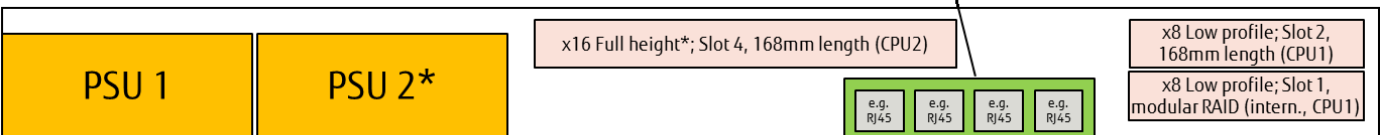


PRIMERGY RX2530 M2 rear view with PSU, PCIe slots and dynamic LoM

Standard: RX2530 - Rear view



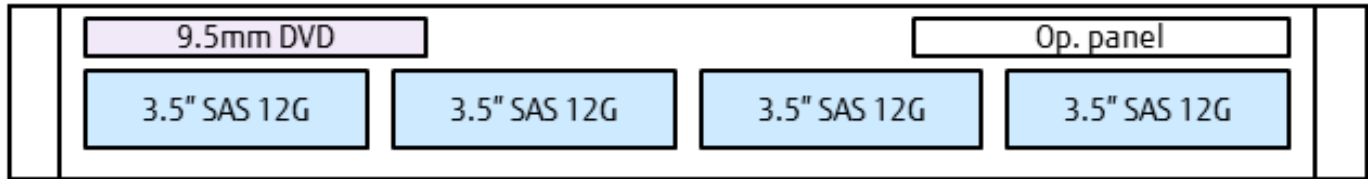
Option: Full height riser



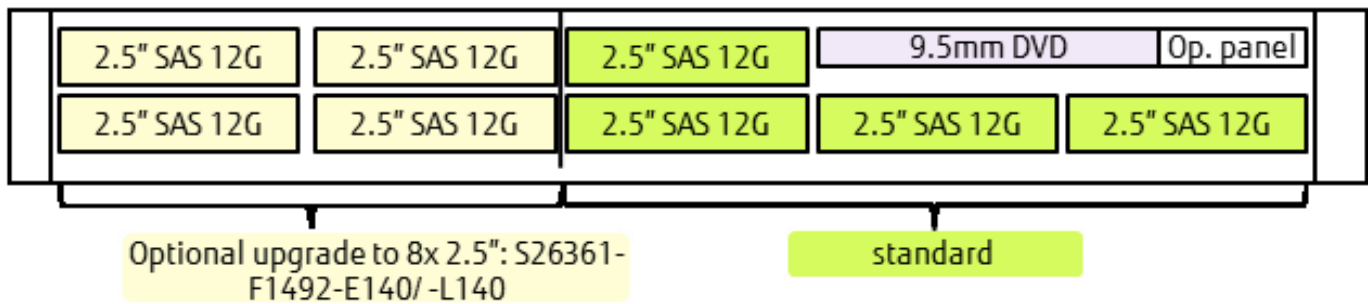
* = option

PRIMERGY RX2530 M2 front view with drives and operation panel

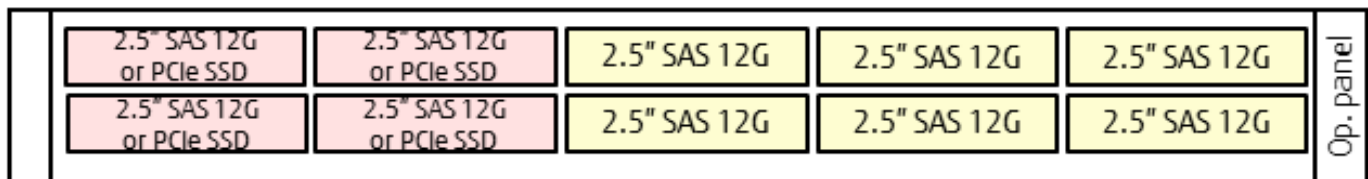
RX2530 4x3.5"- Front view



RX2530 4x2.5"- Front view



RX2530 10x2.5"- Front view



recommended components for RX2530 M2	#
Independant Mode installation	1x
PLAN EM 4x1Gb T interface card	1x
Region kit APAC/EMEA/India	1x
iRMC S4 advanced pack	1x
Cool safe Advanced Thermal design	1x
Modular PSU 450W platinum hot plug	2x

Chapter 1 - base unit

Start

Power supply units & cooling
The PRIMERGY RX2530 M2 offer bays for 1x or 2x direct attached hot plug (opt. redundant) power supply units of 450W or 800W with up to 96% efficiency. The PRIMERGY RX2530 M2 are 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 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.

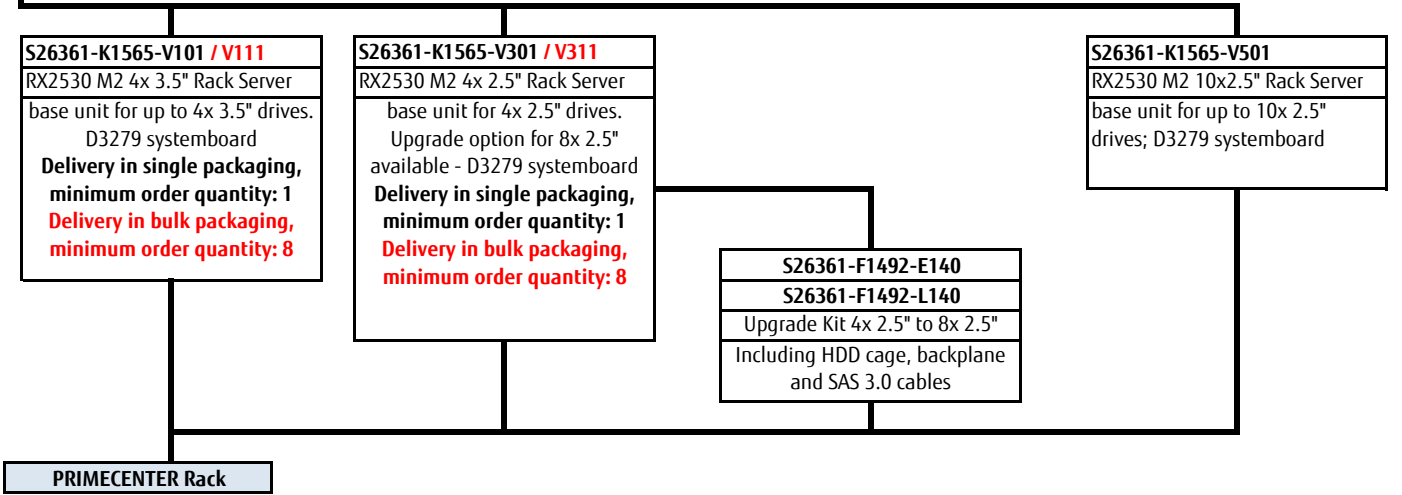
Platform
Fujitsu Systemboard D3279 "made in Germany" based on Chipset Intel® C612
> 2 serial QPI links (Quick Path Interconnect)
> Up to two Xeon E5-2600 v4 series CPUs
Slots: as standard 4 PCIe slots are on Board - please see schematics in "description"
> 3 PCIe slots low profile, 167mm length @ first CPU:
Slot 1 PCIe-Gen3 x8 (internal) - only for modular RAID/SAS controller
Slot 2 PCIe-Gen3 x8
Slot 3 PCIe-Gen3 x16
> 1 PCIe slot low profile, 167mm length @ second CPU:
Slot 4 PCIe-Gen3 x8
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 8x 2.5" SATA drives
System RAM up to DDR4-2400 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

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.

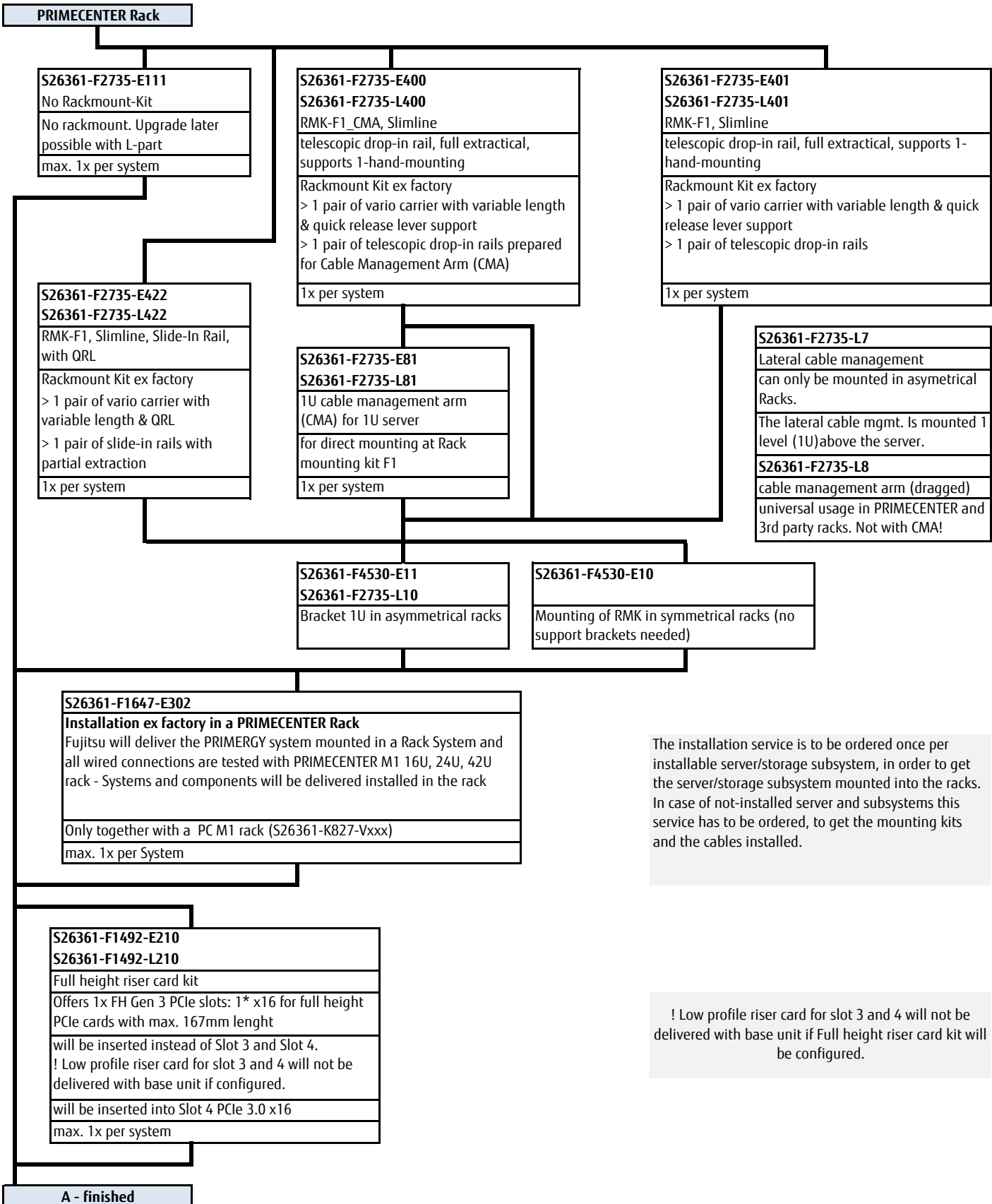
Software
* ServerView Suite Software incl. ServerStart, ServerBooks, Management Software and Updates

Connectivity

<p>Interfaces at rear side</p> <ul style="list-style-type: none"> - 1 service LAN RJ45 (1 Gbit) - 1x VGA (15 pins) - 2x USB 3.0 & 1x USB2.0 <p>Flex LoM with 1 of these options: RJ45: 2x1Gbit, 4x1Gbit or 2x10Gbit SFP+: 2x10Gbit ... or Dummy module (i.e. no LAN connector)</p>	<p>Interfaces at front</p> <p>for base units with up to 8 HDD: 2x USB 3.0 for base units with 10HDD: 1x USB2.0 (on "ear")</p> <p>Interfaces internal</p> <ul style="list-style-type: none"> - 1x USB 3.0, 1x UFM - 1x SATA DOM - 2x 4* SATA 6G
--	---



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.

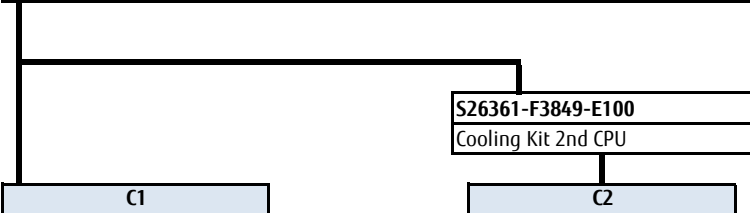
Chapter 3 - CPU

B

There are 2 processor sockets available. Please configure 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-L303
Xeon E5-2609v4 8C/8T 1.70GHz 20MB 6.4GT/s 1866MHz 85W	S26361-F3933-E109	S26361-F3933-L309
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-L320
Xeon E5-2630v4 10C/20T 2.20GHz 25MB 8.0GT/s 2133MHz 85W	S26361-F3933-E130	S26361-F3933-L330
Xeon E5-2640v4 10C/20T 2.40GHz 20MB 8.0GT/s 2133MHz 90W	S26361-F3933-E140	S26361-F3933-L340
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-L350
Xeon E5-2660v4 14C/28T 2.00GHz 35MB 9.6GT/s 2400MHz 105W	S26361-F3933-E160	S26361-F3933-L360
Xeon E5-2680v4 14C/28T 2.40GHz 35MB 9.6GT/s 2400MHz 120W	S26361-F3933-E180	S26361-F3933-L380
Xeon E5-2690v4 14C/28T 2.60GHz 35MB 9.6GT/s 2400MHz 135W	S26361-F3933-E190	S26361-F3933-L390
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-L323
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	S26361-F3933-L337
Xeon E5-2643v4 6C/12T 3.40GHz 20MB 9.6GT/s 2400MHz 135W	S26361-F3933-E143	S26361-F3933-L343
Xeon E5-2667v4 8C/16T 3.20GHz 25MB 9.6GT/s 2400MHz 135W	S26361-F3933-E167	S26361-F3933-L367
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	S26361-F3933-L383
Xeon E5-2695v4 18C/36T 2.10GHz 45MB 9.6GT/s 2400MHz 120W	S26361-F3933-E195	S26361-F3933-L395
Xeon E5-2697v4 18C/36T 2.30GHz 45MB 9.6GT/s 2400MHz 145W	S26361-F3933-E197	S26361-F3933-L397
Xeon E5-2697Av4 16C/32T 2.60GHz 40MB 9.6GT/s 2400MHz 145W	S26361-F3933-E191	S26361-F3933-L391
Xeon E5-2698v4 20C/40T 2.20GHz 50MB 9.6GT/s 2400MHz 135W	S26361-F3933-E198	S26361-F3933-L398
Xeon E5-2699v4 22C/44T 2.20GHz 55MB 9.6GT/s 2400MHz 145W	S26361-F3933-E199	S26361-F3933-L399
Xeon E5-2699Av4 22C/44T 2.40GHz 55MB 9.6GT/s 2400MHz 145W	S26361-F3933-E192	S26361-F3933-L392
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	S26361-F3933-L331
Xeon E5-2650Lv4 14C/28T 1.70GHz 35MB 9.6GT/s 2400MHz 65W	S26361-F3933-E151	S26361-F3933-L351



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

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 E5-2699Av4 22C/44T 2.40GHz 55MB 9.6GT/s 2400MHz 145W	S26361-F3933-E192
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
D	

Chapter 4 - DDR4 System memory

D

The Systemboard of RX2530 M2, D3279, 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 2DPC R-DIMM (depending on CPU*)
 up to 2.400 MHz with 2DPC LR-DIMM (depending on CPU*)
 1.866 MHz 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 2.400MHz, 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	

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	64GB	4R	128GB	8R
1DPC					48GB				48GB		112GB	
2DPC	8GB		24GB		48GB		112GB		112GB		240GB	
3DPC	16GB		40GB		80GB		176GB		176GB		368GB	

Registered Memory (RDIMM) with SDDC (chipkill) and ECC 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
 ** available from Q4/2017

E

Detailed information

Mode	Configuration	RDIMM		Use case, advantage
			RDIMM 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	12x64GB	12x128GB	with one CPU
Max. Memory per System	24 Modules / System	1.536GB	3.072GB	if second CPU is configured

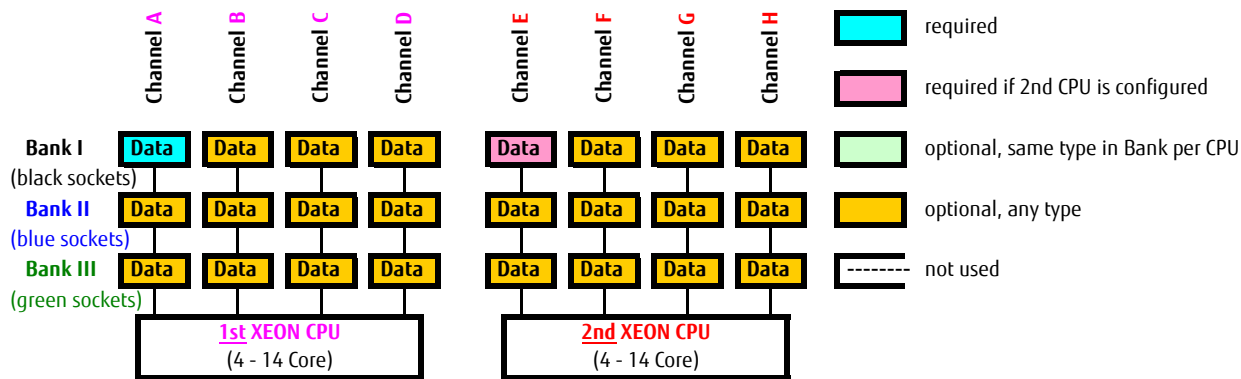
Max. DDR4 memory speed depends on the memory configuration (DIMM per channel) and the type of CPU. The memory channel with the lowest speed defines the speed of all CPU channels in the system

Mem. Speed provided by CPU	Maximum memory-bus speed [MHz]					
	RDIMM 2400MHz			LRDIMM 2400MHz		
Type of Memory	RDIMM 2400MHz			LRDIMM 2400MHz		
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	2 133
CPU with 2133MHz DDR4 Bus	2 133	2 133	1 866	2 133	2 133	2 133
CPU with 1866MHz DDR4 Bus	1 866	1 866	1 866	1 866	1 866	1 866

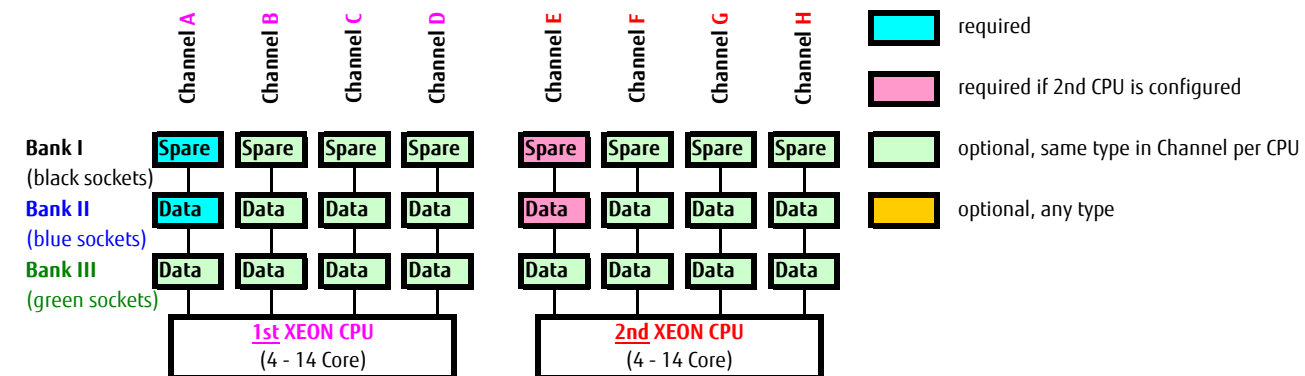
The memory sockets on the Systemboards are color coded

Bank I	black sockets	Bank II	blue sockets	Bank III	green sockets
---------------	---------------	----------------	--------------	-----------------	---------------

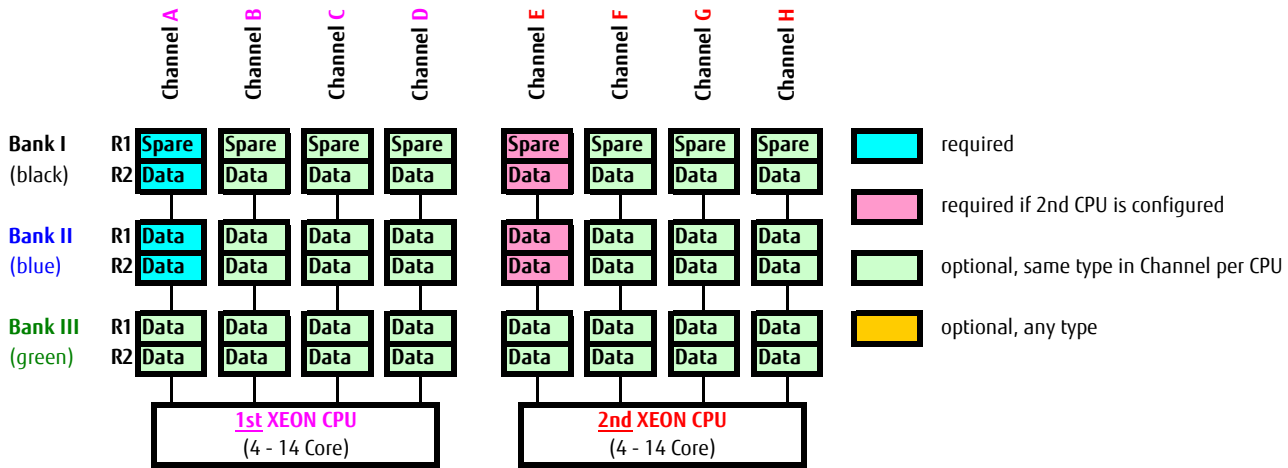
Independant channel mode



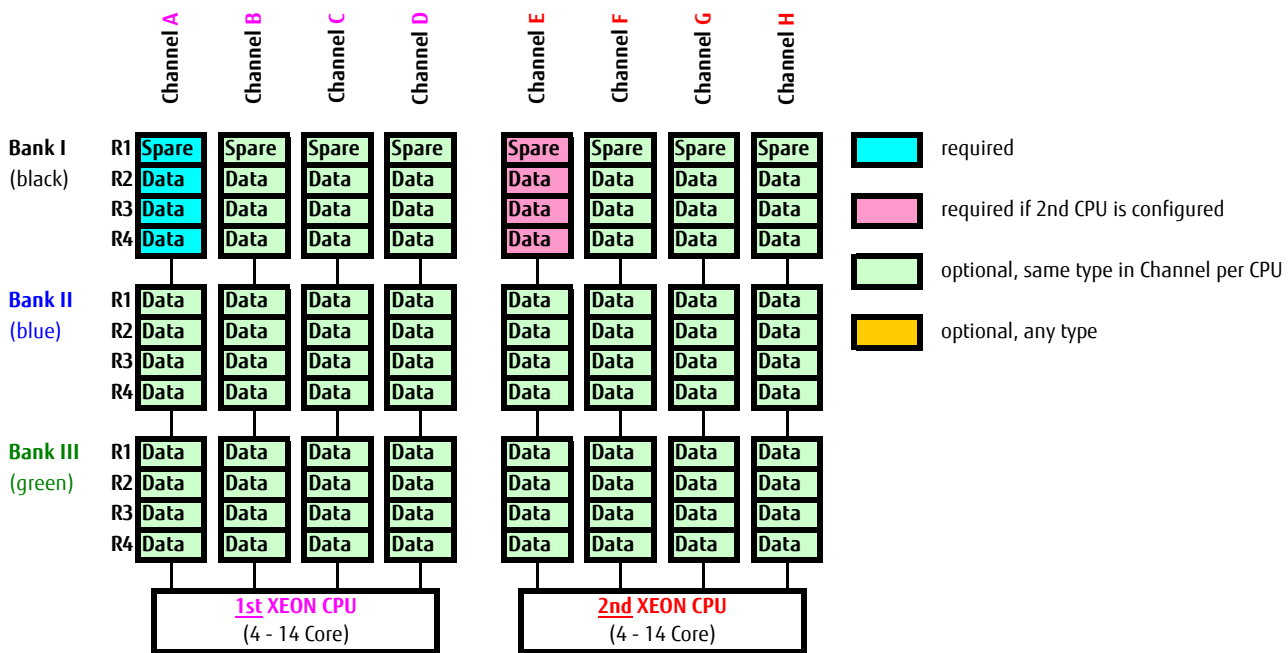
Rank sparing mode --- 1-Rank Memory modules (R-DIMM)



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

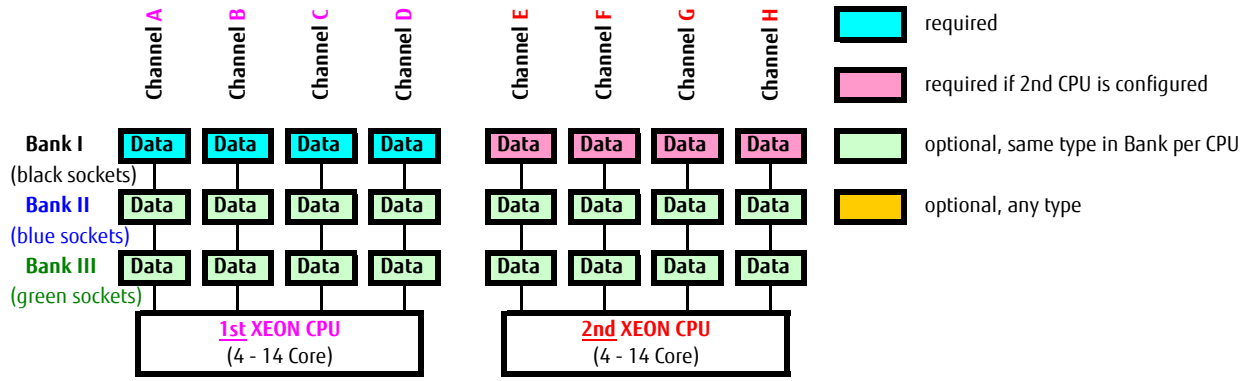


Rank sparing mode --- 4-Rank Memory modules (LR-DIMM)

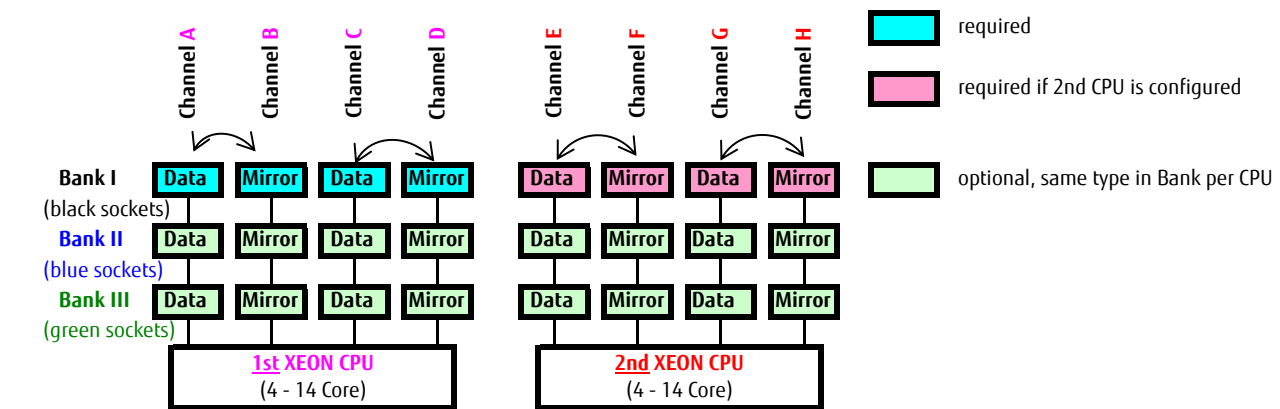


Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel. The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing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

Performance Channel Mode

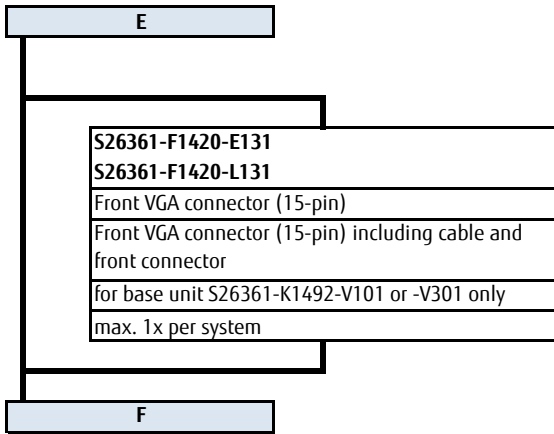


Mirror Channel Mode

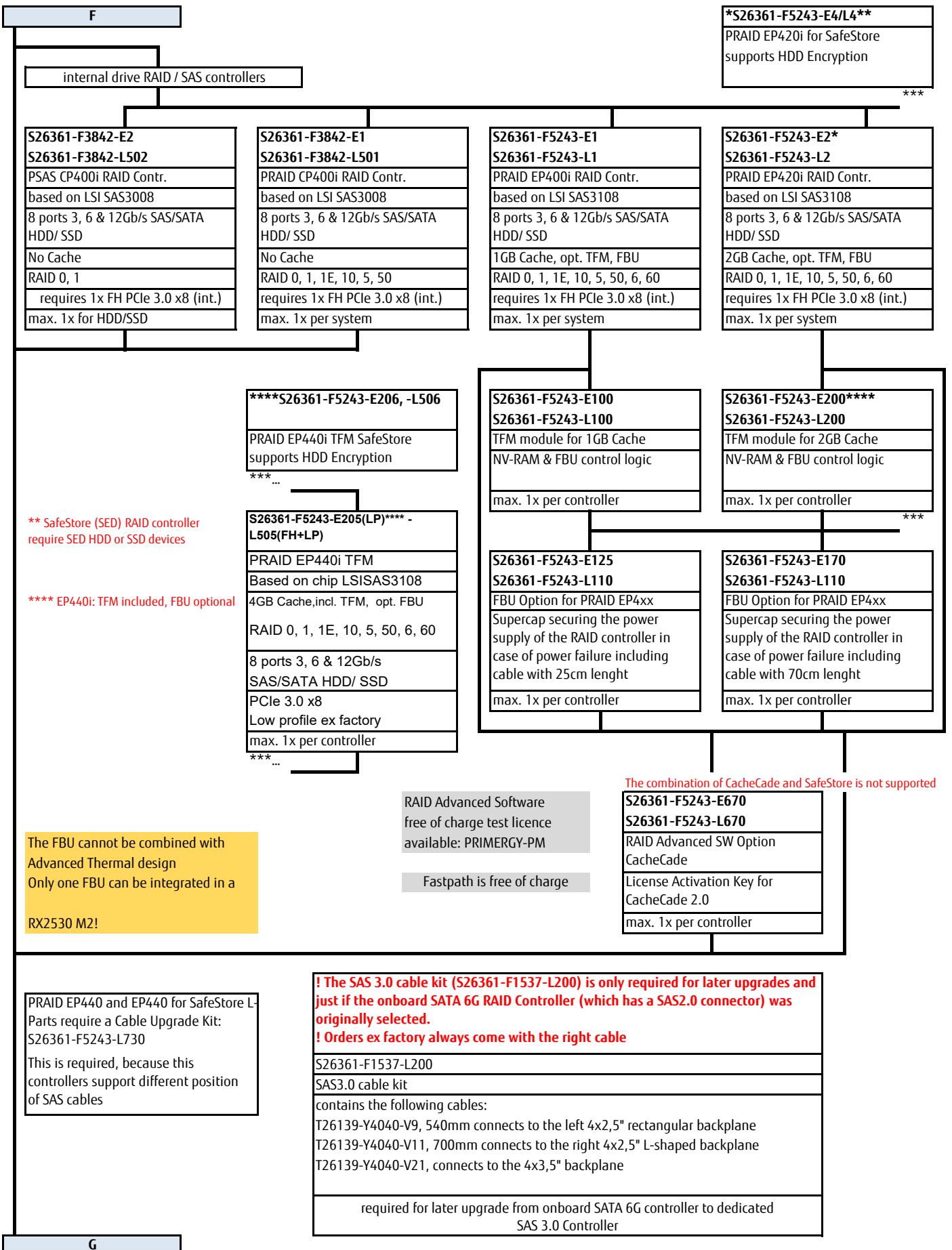


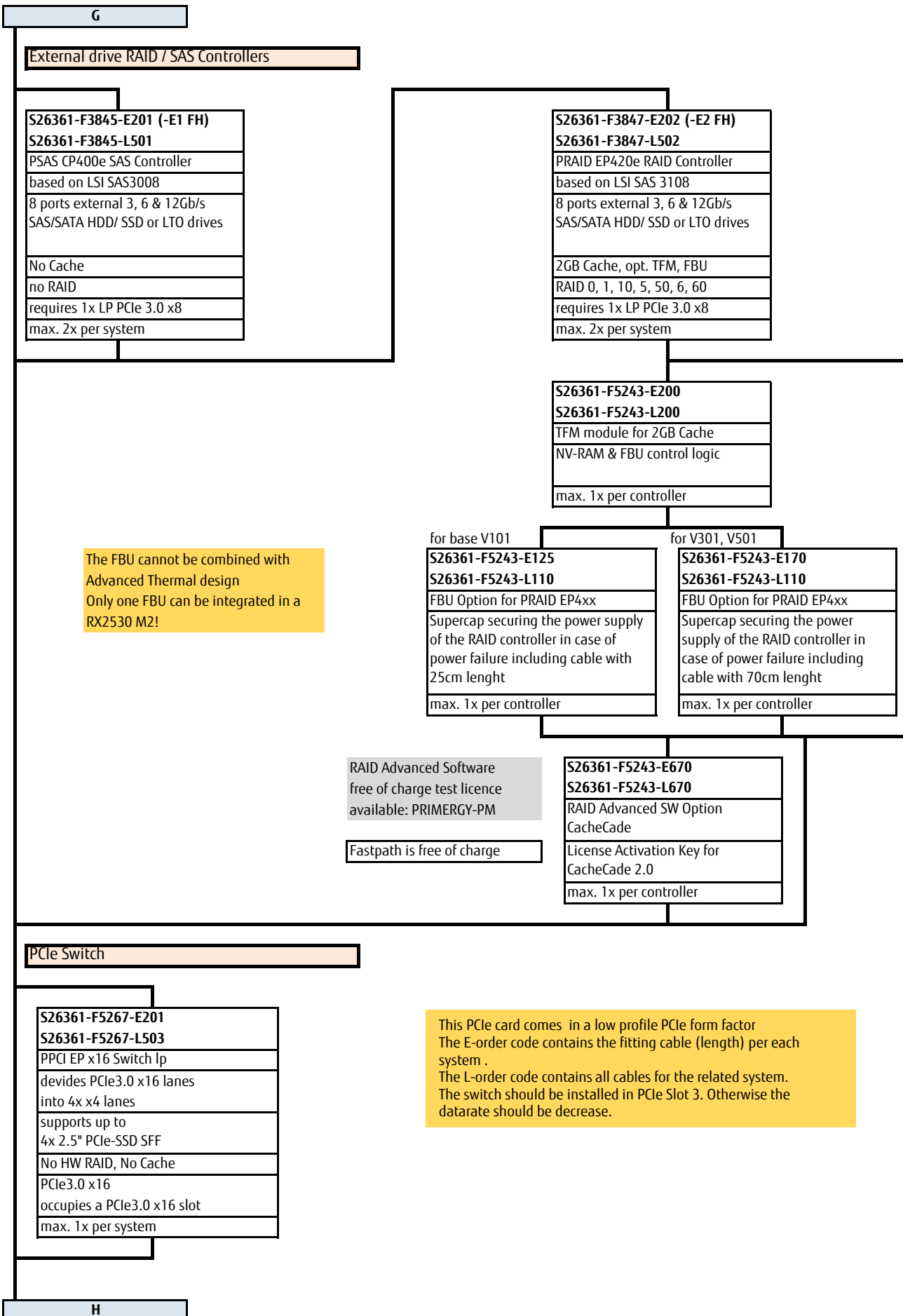
Mirrored Channel Mode requires identical modules on channel A,B, C, D (1st CPU) or channel E, F, G and H (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 4 identical modules has to be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

Chapter 5 - Graphics options



Chapter 7 - SAS / RAID Controller

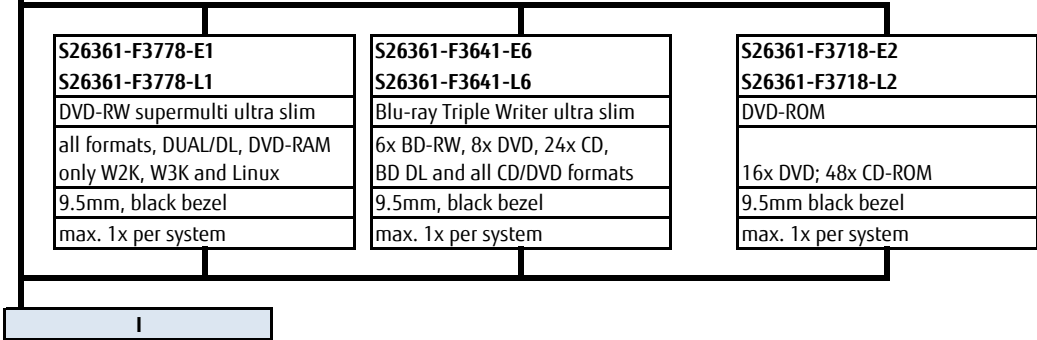




Chapter 8 - ODD optical disk drives

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

H
Config with 1x 9.5mm bay



Chapter 10 - storage drives

I

Currently, BC SAS/ BC SATA drives can not be mixed with SAS/SATA drives without restrictions. This affects V301 and V501 versions. It is possible, though, to apply a mixture between those types of following rules are obeyed: Even numbers (2,4,6,8) of BC SATA or BC SAS drives can be mixed with any number of non-BC drives. (in V301, also 7 of 8 slots can be BC SAS or BC SATA). Until further notice, in case our customer requires a drive mix as permitted above, unfortunately it can only be served via special release. 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>
dwdp (5y): 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 6G or SAS 12G .
Mission-Critical (MC)=SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.
Warranty:
SSD and SATA DOM (except for SLC) 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" PCIe-SSD, SSD and SATADOM

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

capacity	Formfactor	Interface	Category	dwdp (5y)	order code E-part	order code L-part
400GB	2.5" (SFF)	12GBit/s	mainly write	10	S26361-F5608-E400	S26361-F5608-L400
800GB	2.5" (SFF)	12GBit/s	mainly write	10	S26361-F5608-E800	S26361-F5608-L800
1.6TB	2.5" (SFF)	12GBit/s	mainly write	10	S26361-F5608-E160	S26361-F5608-L160
400GB	2.5" (SFF)	12GBit/s	SED mainly write	10	S26361-F5611-E400	S26361-F5611-L400
800GB	2.5" (SFF)	12GBit/s	SED mainly write	10	S26361-F5611-E800	S26361-F5611-L800
1.6TB	2.5" (SFF)	12GBit/s	SED mainly write	10	S26361-F5611-E160	S26361-F5611-L160
480GB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5614-E480	S26361-F5614-L480
960GB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5614-E960	S26361-F5614-L960
1.92TB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5614-E192	S26361-F5614-L192
3.84TB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5614-E384	S26361-F5614-L384
400GB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5666-E400	S26361-F5666-L400
800GB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5666-E800	S26361-F5666-L800
1.6TB	2.5" (SFF)	12GBit/s	read / write	3	S26361-F5666-E160	S26361-F5666-L160
3.2TB	2.5" (SFF)	12GBit/s	read / write	2.3	S26361-F5666-E320	S26361-F5666-L320
480GB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5617-E480	S26361-F5617-L480
960GB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5617-E960	S26361-F5617-L960
1.92TB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5617-E192	S26361-F5617-L192
3.84TB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5617-E384	S26361-F5617-L384
480GB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5670-E480	S26361-F5670-L480
960GB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5670-E960	S26361-F5670-L960
1.92TB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5670-E192	S26361-F5670-L192
3.84TB	2.5" (SFF)	12GBit/s	read intensive	1	S26361-F5670-E384	S26361-F5670-L384

max. 10x - depending on base unit & configuration

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

capacity	Formfactor	Interface	Category	dwdp (5y)	order code E-part	order code L-part
240GB	2.5" (SFF)	6Gb/s	read / write	3	S26361-F5588-E240	S26361-F5588-L240
480GB	2.5" (SFF)	6Gb/s	read / write	3	S26361-F5588-E480	S26361-F5588-L480
240GB	2.5" (SFF)	6Gb/s	read / write	3.6	S26361-F5675-E240	S26361-F5675-L240
480GB	2.5" (SFF)	6Gb/s	read / write	3.6	S26361-F5675-E480	S26361-F5675-L480
960GB	2.5" (SFF)	6Gb/s	read / write	3	S26361-F5588-E960	S26361-F5588-L960
1.92TB	2.5" (SFF)	6Gb/s	read / write	3	S26361-F5588-E192	S26361-F5588-L192
120GB	2.5" (SFF)	6Gb/s	read intensive	0.3	S26361-F5525-E120	S26361-F5525-L120
800GB	2.5" (SFF)	6Gb/s	read intensive	0.3	S26361-F5525-E800	S26361-F5525-L800
240GB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E240	S26361-F5632-L240
480GB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E480	S26361-F5632-L480
800GB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E800	S26361-F5632-L800
960GB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E960	S26361-F5632-L960
1.2TB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E120	S26361-F5632-L120
1.6TB	2.5" (SFF)	6Gb/s	read intensive	1	S26361-F5632-E160	S26361-F5632-L160

max. 10x - depending on base unit & configuration

F5675: as soon as available

J

J

SATA DOM Non volatile storage drive for booting

capacity	FF	Interface	Category		dwpd (5y)	order code E-part	order code L-part
64GB	DOM	6GBit/s	Boot		0.14	S26361-F5618-E64	S26361-F5618-L64
128GB	DOM	6GBit/s	Boot		0.13	S26361-F5618-E128	S26361-F5618-L128

SATADOM is designed for use as a boot drive with the Endurance Spec. above.

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



Mixed configuration SATA DOM SLC with SATA DOM not allowed

SATA DOM SLC Non volatile storage drive for booting

capacity	FF	Interface	Category			order code E-part	order code L-part
64GB	DOM	6GBit/s	Boot			S26361-F5620-E64	S26361-F5620-L64

SATADOM SLC is designed for use as a Virtual SAN boot drive.

max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware ESXi 6.0 U2 or later is supported.

2.5" (SFF) Hard drives



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

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

capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
1TB	7 200	12Gb/s	128MB	512n				S26361-F5600-E100	S26361-F5600-L100
2TB	7 200	12Gb/s	128MB	512n				S26361-F5600-E200	S26361-F5600-L200
1TB	7 200	12Gb/s	128MB	512e				S26361-F5573-E100	S26361-F5573-L100
2TB	7 200	12Gb/s	128MB	512e				S26361-F5573-E200	S26361-F5573-L200

max. 10x - depending on base unit & configuration

HDD SAS 2.5" (SFF) Enterprise Mission Critical with 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				S26361-F5550-E130	S26361-F5550-L130
600GB	10 000	12Gb/s	128MB	512n				S26361-F5550-E160	S26361-F5550-L160
900GB	10 000	12Gb/s	128MB	512n				S26361-F5550-E190	S26361-F5550-L190
1.2TB	10 000	12Gb/s	128MB	512n				S26361-F5550-E112	S26361-F5550-L112
300GB	10 000	12Gbit/s	128MB	512n	SED			S26361-F5581-E130	S26361-F5581-L130
600GB	10 000	12Gbit/s	128MB	512n	SED			S26361-F5581-E160	S26361-F5581-L160
1.2TB	10 000	12Gbit/s	128MB	512n	SED			S26361-F5581-E112	S26361-F5581-L112
600GB	10 000	12Gb/s	128MB	512e				S26361-F5543-E160	S26361-F5543-L160
900GB	10 000	12Gb/s	128MB	512e				S26361-F5543-E190	S26361-F5543-L190
1.2TB	10 000	12Gb/s	128MB	512e				S26361-F5543-E112	S26361-F5543-L112
1.8TB	10 000	12Gb/s	128MB	512e				S26361-F5543-E118	S26361-F5543-L118
1.8TB	10 000	12Gbit/s	128MB	512e	SED			S26361-F5582-E118	S26361-F5582-L118
300GB	15 000	12Gb/s	128MB	512n				S26361-F5531-E530	S26361-F5531-L530
450GB	15 000	12Gb/s	128MB	512n				S26361-F5531-E545	S26361-F5531-L545
600GB	15 000	12Gb/s	128MB	512n				S26361-F5531-E560	S26361-F5531-L560

max. 10x - depending on base unit & configuration.



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

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

capacity	RPM	Interface	Cache	sector				order code E-part	order code L-part
1TB	7 200	6Gb/s	128MB	512n				S26361-F3956-E100	S26361-F3956-L100
2TB	7 200	6Gb/s	128MB	512n				S26361-F3956-E200	S26361-F3956-L200
1TB	7 200	6Gb/s	128MB	512e				S26361-F3907-E100	S26361-F3907-L100
2TB	7 200	6Gb/s	128MB	512e				S26361-F3907-E200	S26361-F3907-L200

max. 10x - depending on base unit & configuration

K

K

3.5" (LFF) Hard drives

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

capacity	Formfactor	Interface		Endurance	dwpd (5y)	order code E-part	order code L-part
400GB	3.5" (LFF)	12Gb/s		Write Intensive	10	S26361-F5607-E400	S26361-F5607-L400
800GB	3.5" (LFF)	12Gb/s		Write Intensive	10	S26361-F5607-E800	S26361-F5607-L800
1.6TB	3.5" (LFF)	12Gb/s		Write Intensive	10	S26361-F5607-E160	S26361-F5607-L160
480GB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5612-E480	S26361-F5612-L480
960GB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5612-E960	S26361-F5612-L960
1.92TB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5612-E192	S26361-F5612-L192
3.84TB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5612-E384	S26361-F5612-L384
400GB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5662-E400	S26361-F5662-L400
800GB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5662-E800	S26361-F5662-L800
1.6TB	3.5" (LFF)	12Gb/s		Mixed Use	3	S26361-F5662-E160	S26361-F5662-L160
3.2TB	3.5" (LFF)	12Gb/s		Mixed Use	2.3	S26361-F5662-E320	S26361-F5662-L320
480GB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5615-E480	S26361-F5615-L480
960GB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5615-E960	S26361-F5615-L960
1.92TB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5615-E192	S26361-F5615-L192
3.84TB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5615-E384	S26361-F5615-L384
480GB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5668-E480	S26361-F5668-L480
960GB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5668-E960	S26361-F5668-L960
1.92TB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5668-E192	S26361-F5668-L192
3.84TB	3.5" (LFF)	12Gb/s		Read Intensive	1	S26361-F5668-E384	S26361-F5668-L384

only possible in RX2530 M2 base unit with up to 4x3.5" HDD max. 4x HDD

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

capacity	Formfactor	Interface	Category	dwpd (5y)	order code E-part	order code L-part
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
240GB	3.5" (LFF)	6Gb/s	read / write	3.6	S26361-F5673-E240	S26361-F5673-L240
480GB	3.5" (LFF)	6Gb/s	read / write	3.6	S26361-F5673-E480	S26361-F5673-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
120GB	3.5" (LFF)	6Gb/s	read intensive	0.3	S26361-F5530-E120	S26361-F5530-L120
800GB	3.5" (LFF)	6Gb/s	read intensive	0.3	S26361-F5530-E800	S26361-F5530-L800
240GB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E240	S26361-F5630-L240
480GB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E480	S26361-F5630-L480
800GB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E800	S26361-F5630-L800
960GB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E960	S26361-F5630-L960
1.2TB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E120	S26361-F5630-L120
1.6TB	3.5" (LFF)	6Gb/s	read intensive	1	S26361-F5630-E160	S26361-F5630-L160

only possible in RX2530 M2 base unit with up to 4x3.5" HDD max. 4x HDD

F5673: as soon as available

HDD SAS 3.5" (LFF) 2.5" Enterprise Mission critical HDD with 3.5" hot plug/hot replace tray

capacity	RPM	Interface	Cache	sector		order code E-part	order code L-part
300GB	15 000	12Gb/s	128MB	512n		S26361-F5532-E530	S26361-F5532-L530
450GB	15 000	12Gb/s	128MB	512n		S26361-F5532-E545	S26361-F5532-L545
600GB	15 000	12Gb/s	128MB	512n		S26361-F5532-E560	S26361-F5532-L560
300GB	10 000	12Gb/s	128MB	512n		S26361-F5568-E130	S26361-F5568-L130
600GB	10 000	12Gb/s	128MB	512n		S26361-F5568-E160	S26361-F5568-L160
1.2TB	10 000	12Gb/s	128MB	512n		S26361-F5568-E112	S26361-F5568-L112
1.8TB	10 000	12Gb/s	128MB	512e		S26361-F5569-E118	S26361-F5569-L118

only possible in RX2530 M2 base unit with up to 4x3.5" HDD max. 4x HDD

8/10TB HDDs not released with PSAS CP400i (S26361-F3842-E2)

HDD SAS 3.5" (LFF) Enterprise Business critical with hot plug/hot replace tray

capacity	RPM	Interface	Cache	sector		order code E-part	order code L-part
1TB	7 200	6Gb/s	32MB	512n		S26361-F3820-E100	S26361-F3820-L100
2TB	7 200	6Gb/s	32MB	512n		S26361-F3820-E200	S26361-F3820-L200
4TB	7 200	6Gb/s	32MB	512n		S26361-F3820-E400	S26361-F3820-L400
2TB	7 200	12Gb/s	128MB	512e		S26361-F5571-E200	S26361-F5571-L200
4TB	7 200	12Gb/s	128MB	512e		S26361-F5571-E400	S26361-F5571-L400
6TB	7 200	12Gb/s	128MB	512e		S26361-F5571-E600	S26361-F5571-L600
8TB	7 200	12Gb/s	256MB	512e		S26361-F5571-E800	S26361-F5571-L800
10TB	7 200	12Gb/s	256MB	512e		S26361-F5571-E100	S26361-F5571-L100
6TB	7 200	12GBit/s	128MB	512e	SED	S26361-F5584-E600	S26361-F5584-L600
10TB	7 200	12Gb/s	256MB	512e	SED	S26361-F5624-E100	S26361-F5624-L100

only possible in RX2530 M2 base unit with up to 4x3.5" HDD max. 4x HDD

K1

K1

8/10TB HDDs not released with PSAS CP400i (S26361-F3842-E2)

HDD SATA 3.5" (LFF) Enterprise Business critical with hot plug/hot replace tray										
capacity	RPM	Interface	Cache	sector					order code E-part	order code L-part
1TB	7 200	6Gb/s	64MB	512n					S26361-F3950-E100	S26361-F3950-L100
2TB	7 200	6Gb/s	64MB	512n					S26361-F3815-E200	S26361-F3815-L200
4TB	7 200	6Gb/s	64MB	512n					S26361-F3815-E400	S26361-F3815-L400
4TB	7 200	6Gb/s	128MB	512e	not released for Japan/APAC				S26361-F3904-E400	S26361-F3904-L400
6TB	7 200	6Gb/s	128MB	512e					S26361-F3904-E600	S26361-F3904-L600
8TB	7 200	6Gb/s	256MB	512e					S26361-F3904-E800	S26361-F3904-L800
10TB	7 200	6Gb/s	256MB	512e					S26361-F3904-E100	S26361-F3904-L100

only possible in RX2530 M2 base unit with up to 4x3.5" HDD max. 4x HDD

L

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 EMEA	2x RJ45 plug for 10GBASE-T	S26361-F5302-E210	S26361-F5302-L210
PLAN EM 2x10Gb T interface card v2 APC, JP	2x RJ45 plug for 10GBASE-T	S26361-F5302-E220	S26361-F5302-L220
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		Max. 3x LAN Controller per System (configuration of different Contr. possible)	
1Gb Ethernet controller with RJ45 interface (1000BASE-T)			
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	3x	2 port, Intel	S26361-F4610-E202
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	3x	4 port, Intel	S26361-F4610-E204
max. 3 Controller per system			

10Gb Ethernet network components			
10Gb Ethernet controller with RJ45 interface (10GBASE-T)			
Eth Ctrl 2x10GBase-T PCIe x8 X540-T2 LP	2x	2 port NIC, Intel	S26361-F3752-E202
PLAN EP X550-T2 2x10GBASE-T LP	2x	2 port NIC, Intel	S26361-F3948-E202
PLAN EP OCe14102 2x 10GBase-T LP	2x	2 port NIC with RDMA, Emulex	S26361-F5557-E201
10Gb Ethernet controller with SFP+ interface (for SFP+ modules or twinax cables, Fujitsu / Intel based)			
Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+	2x	2 port NIC, Intel 82599 based	S26361-F3629-E202
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
SFP+ Module SMF 10GbE LC	2x	SMF / LR SFP+ module, up to 10km	S26361-F3986-E4
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY
SFP+ active Twinax Cable Fujitsu	2x	customized cable length	S26361-F3989-E600
SFP+ active Twinax Cable Brocade	2x	(best fitting cable length is defined during rack installation at the factory)	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 LP	2x	2 port NIC with RDMA, Emulex	S26361-F5536-E202
PCNA EP OCe14102 2x 10Gb LP	2x	2 port CNA with FCoE & RDMA, Emulex	S26361-F5250-E201
PCNA EP OCe14102 2x 10Gb DMF LP	1x	2 port CNA with DMF for PAN, Emulex	S26361-F5250-E210
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
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY
SFP+ active Twinax Cable Fujitsu	2x	customized cable length	S26361-F3989-E600
SFP+ active Twinax Cable Brocade	2x	(best fitting cable length is defined during rack installation at the factory)	S26361-F3873-E500
SFP+ passive Twinax Cable Cisco	2x		S26361-F4571-E500
max. 2x SFP+ or Twinax Cable per controller			
max. 2 Controller per system			

25/10Gb Ethernet network components			
25/10Gb Ethernet controller with 2x SFP28 cages (for twinax cables or optical transceiver SFP+ modules)			
Dual speed support, auto-sense - supports 25Gbps and 10Gbps line rate per-port			
PLAN EP QL45212 2x25Gb LP	2x	Dual Port NIC, RoCE RDMA, WS2016, Qlogic	S26361-F5622-E202
optional 25Gb SFP28 module with LC connector for Fujitsu / Intel / Qlogic based controller			
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY
SFP28 Twinaxial Cable Fujitsu	2x	customized cable length	future
SFP28 Twinax Cable Brocade	2x	(best fitting cable length is defined during rack installation at the factory)	future
max. 2x SFP28 Twinax Cable per controller			
optional 10Gb SFP+ module with LC connector for Fujitsu / Intel / Qlogic based controller			
SFP+ Transceiver Module MMF 10GbE LC	2x	MMF / SR SFP+ module, up to 400m	S26361-F3986-E3
SFP+ Transceiver Module SMF 10GbE LC	2x	SMF / LR SFP+ module, up to 10km	S26361-F3986-E4
Twinax Anschlussplatz Primergy	2x	virtual connector for twinax cables	V:TWX CONNECTOR-PY
SFP+ active Twinax Cable Fujitsu	2x	customized cable length	S26361-F3989-E600
SFP+ active Twinax Cable Brocade	2x	(best fitting cable length is defined during rack installation at the factory)	S26361-F3873-E500
max. 2x SFP+ or Twinax Cable per controller			
max. 2 Controller per system			

special release only; max 1 controller			
40Gb Ethernet controller with QSFP+ interface (for QSFP+ modules or twinax cables, Emulex)			
PCNA EP OCe14401 1x 40Gb LP	1x	2x QSFP+ plugs for twinax or modules	S26361-F5539-E201
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
Twinax Anschlussplatz Primergy	1x	virtual connector for twinax cables	V:TWX CONNECTOR-40
QSFP+ active Twinax Cable	1x	customized cable length	S26361-F3986-E400
QSFP+ aktives Twinax Kabel Brocade	1x	(best fitting cable length is defined during rack installation at the factory)	S26361-F5317-E40
max. 1x QSFP+ or Twinax Cable per controller			
max. 2 Controller per system			

Network cables for later upgrade

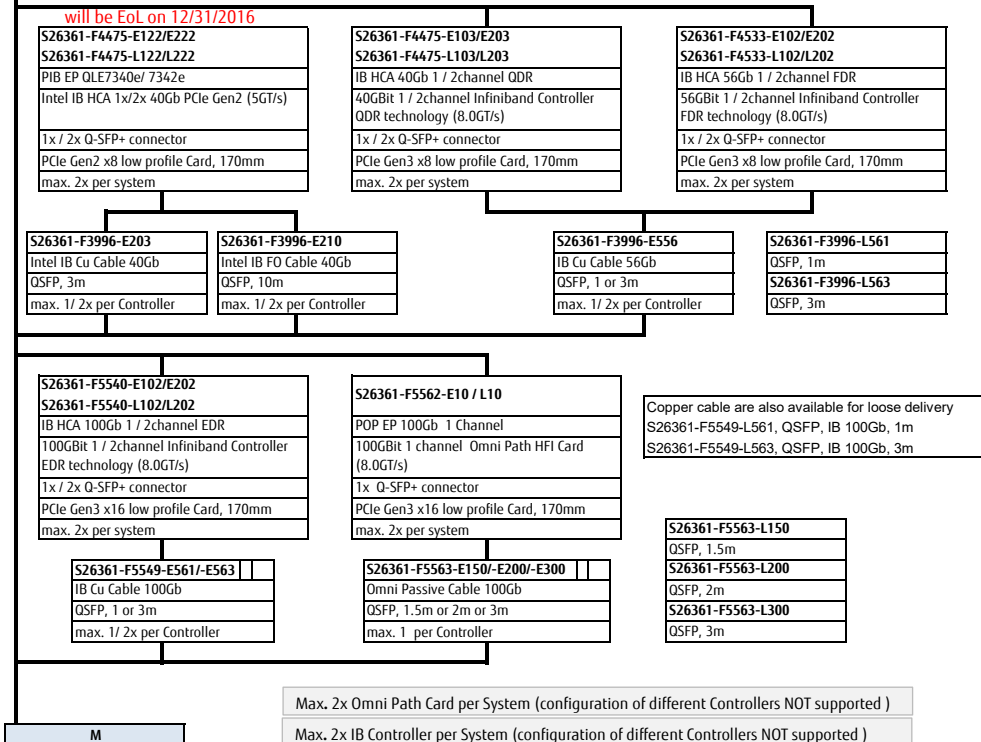
Fujitsu active SFP+ Twinax 10Gb cable		Fujitsu QSFP+ / QSFP+ Twinax 40Gb cable	
SFP+ active Twinax Cable Fujitsu 2m	S26361-F3989-L102	QSFP+ passive Twinax Cable Fujitsu 2m	S26361-F3986-L402
SFP+ active Twinax Cable Fujitsu 5m	S26361-F3989-L105	QSFP+ passive Twinax Cable Fujitsu 5m	S26361-F3986-L405
SFP+ active Twinax Cable Fujitsu 10m	S26361-F3989-L110	QSFP+ active Twinax Cable Fujitsu 10m	S26361-F3986-L410
Brocade active SFP+ Twinax 10Gb cable		Brocade active QSFP+ / QSFP+ Twinax 40Gb cable	
SFP+ active Twinax Cable Brocade 1m	S26361-F3873-L501	QSFP+ active Twinax Cable Brocade 1m	S26361-F5317-L41
SFP+ active Twinax Cable Brocade 3m	S26361-F3873-L503	QSFP+ active Twinax Cable Brocade 3m	S26361-F5317-L43
SFP+ active Twinax Cable Brocade 5m	S26361-F3873-L505	QSFP+ active Twinax Cable Brocade 5m	S26361-F5317-L45
		40GE Direct Attached QSFP-OSFP, 10m, 1 pack	D:QSFP-OSFP-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

Chapter 12 - Fibre Channel Controller

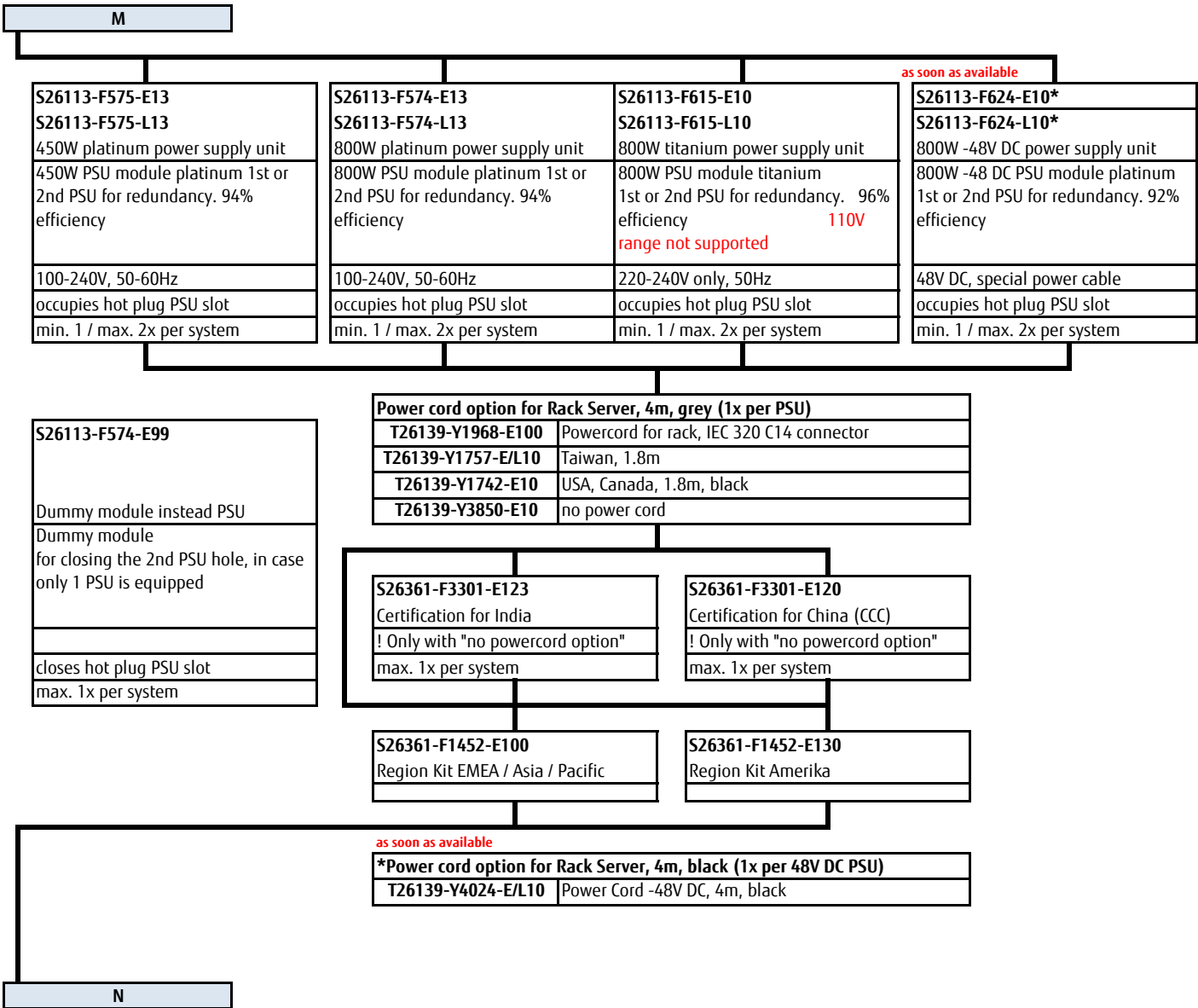
32Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)				
Triple speed support - supports 32Gb, 16Gb, and 8Gb				
PFC EP LPe32000 1x 32Gb LP	2x	1 port, low profile, Broadcom/Emulex	S26361-F4044-E201	S26361-F4044-L501
PFC EP LPe32002 2x 32Gb LP	2x	2 port, low profile, Broadcom/Emulex	S26361-F4044-E202	S26361-F4044-L502
16Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)				
Dual speed support - supports 16Gb and 8Gb				
PFC EP LPe31000 1x 16Gb Emulex LP	3x	1 port, low profile, Emulex	S26361-F5596-E201	S26361-F5596-L501
PFC EP LPe31002 2x 16Gb Emulex LP	3x	2 port, low profile, Emulex	S26361-F5596-E202	S26361-F5596-L502
PFC EP QLE2690 1x 16Gb LP	3x	1 port, low profile, Qlogic	S26361-F5580-E201	S26361-F5580-L501
PFC EP QLE2692 2x 16Gb LP	3x	2 port, low profile, Qlogic	S26361-F5580-E202	S26361-F5580-L502
16Gb Fibre Channel controller generation 5 with LC interface for 50µm optical cables (OM3 or OM4)				
Predecessor - Dual speed support - supports 16Gb and 8Gb				
PFC EP LPe16000 1x 16Gb LP	3x	1 port, low profile, Emulex	S26361-F4994-E201	S26361-F4994-L501
PFC EP LPe16002 2x 16Gb LP	3x	2 port, low profile, Emulex	S26361-F4994-E202	S26361-F4994-L502
PFC EP QLE2670 1x 16Gb LP	3x	1 port, low profile, Qlogic	S26361-F5313-E201	S26361-F5313-L501
PFC EP QLE2672 2x 16Gb LP	3x	2 port, low profile, Qlogic	S26361-F5313-E202	S26361-F5313-L502
8Gb Fibre Channel controller generation 4 with LC interface for 50µm optical cables (OM3 or OM4)				
Dual speed support - supports 8Gb and 4Gb				
FC Ctrl 8Gb/s 1 Kanal LPe1250 MMF LC LP	3x	1 port, low profile, Emulex	S26361-F3961-E201	S26361-F3961-L201
FC Ctrl 8Gb/s 2 Kanal LPe12002 MMF LC LP	3x	2 port, low profile, Emulex	S26361-F3961-E202	S26361-F3961-L202
FC Ctrl 8Gb/s 1 Kanal QLE2560 MMF LC LP	3x	1 port, low profile, Qlogic	S26361-F3631-E201	S26361-F3631-L201
FC Ctrl 8Gb/s 2 Kanal QLE2562 MMF LC LP	3x	2 port, low profile, Qlogic	S26361-F3631-E202	S26361-F3631-L202
max. 3 Controller per system (mixed configurations are supported)				

as soon as available, GA planned Q1/2017

Chapter 13 - Infiniband Controllers



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



Chapter 15 - Accessories

N

<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
--	------------------



0

Chapter 16 - others

0

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

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

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

S26361-F3552-L23
TPM 1.2 Module

You would like to add some customer specific solutions?



- With our made4you service we fulfill any individual requirement and wish of our customers perfectly - e.g.
- > 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 via customer.projects@ts.fujitsu.com.



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

Date of change [dd.mm.yyyy]	Folder / order code / description	Name	What has been changed / comment
01.04.2016	PY RX2530 M2		First Release
10.05.2016	S26361-F5580-xxxx	Freise, Peter	QLE269x finally released
19.05.2016	S26361-F3926-*	Karakas, Özcan	2.5 BC-SAS HDDs removed.
19.05.2016	S26361-F3816-*	Karakas, Özcan	2.5 BC-SATA HDDs removed.
02.06.2016	S26361-F5243-E4/L4	Seil, Fabian	added
16.06.2016	S26361-F3552-L23	Seil, Fabian	added TPM 1.2 Module
22.06.2016	S26361-F3934-E517	Ruf, Klaus-Dieter	64GB 3DS RDIMM added
12.07.2016	S26361-F5600-*	Sudo, Tatsuya	added
13.07.2016			box numbering of document updated
15.07.2016	S26361-F5607/F5608-*	Sudo, Tatsuya	added
15.07.2016	S26361-F5612/F5614/F5615/F5617-*	Sudo, Tatsuya	added
05.08.2016	S26361-F5600-*	Sudo, Tatsuya	now available
05.08.2016	S26361-F3956-*	Sudo, Tatsuya	added
02.08.2016	S26361-F3935-E515/L515	Seil, Fabian	added
19.09.2016	T26139-Y4024-E/L10	Johannes Linne	added Power Cord -48V DC, 4m, black
20.09.2016	LAN / S26361-F5622-E202, -L502	Lösch, Ulrich	Added: PLAN EP QL45212
27.09.2016		Seil, Fabian	Memory page updated
26.10.2016	S26361-F3933-L367	Seil, Fabian	added
27.10.2016	S26361-F3933-E192	Seil, Fabian	added
31.10.2016	HD_SSD / SSD SAS	Sudo, Tatsuya	updated
31.10.2016	HD_SSD / S26361-F3956-E100/L100	Sudo, Tatsuya	added
31.10.2016	LAN	Lösch, Ulrich	Yellow highlighting removed from PLAN EP QL45212
31.10.2016	FC	Lösch, Ulrich	Yellow highlighting removed from PFC EP LPe3100X
01.11.2016	HD_SSD / S26361-F5620-E64/L64	Sudo, Tatsuya	added
03.11.2016	S26341-F103-L140	Seil, Fabian	changed to new USB Optical Disc Drive
08.11.2016	S26361-F5302-E220, -L220	Lösch, Ulrich	New product: PLAN EM 2x10Gb T interface card APC, JP
23.11.2016	LAN	Seil, Fabian	New Fibre Channel Controller added
13.12.2016	S26361-F5243-E4/L4	Seil, Fabian	VS50 for EMEA only
21.12.2016	HD_SSD / S26361-F3904/F5571-E800/E100	Sudo, Tatsuya	added
21.12.2016	HD_SSD / S26361-F5630/F5632-*	Sudo, Tatsuya	added
26.12.2016	HD_SSD / SED	Sudo, Tatsuya	added
11.01.2017	S26361-F3933-L3*	Seil, Fabian	loose components added
17.01.2017	HD_SSD / 8/10TB HDDs	Sudou, Tatsuya	Info-Text added
24.01.2017	RAM	Seil, Fabian	Memory speed corrected
07.02.2017	HD_SSD / S26361-F5618-*	Sudou, Tatsuya	added
08.02.2017	S26361-F5243-E4/L4	Seil, Fabian	comment added
14.02.2017	S26361-F5243-E5, E205, L505, E6, E206, L506 and S26361-F5243-L730	Seil, Fabian	Included PRAID EP440i + EP440i for Safestore + Cable Set
08.03.2017	S26361-F3948-E202/L502	Seil, Fabian	added
14.03.2017	S26361-F3933-L3*	Seil, Fabian	loose components added
14.03.2017	S26361-F3934-E517/L517	Seil, Fabian	comment added
14.03.2017	SED controller, SED drives	Johannes Linne	added comment to allow SED ctrl. or SED Drive only
23.03.2017	HD_SSD / S26361-F5618-* / F5583-*	Sudou, Tatsuya	Endurance updated / removed
12.04.2017	HD_SSD / SATA DOM SLC	Sudou, Tatsuya	comment updated
27.04.2017	T26139-Y1757-E/L10	Seil, Fabian	powercord for Taiwan added
27.04.2017	USB Devices	M.Maridakis	New ext. ODD added
27.04.2017	PLAN EP QL45212	U.Lösch	updated
03.05.2017	RAID	Seil, Fabian	EP440i info changed
06.06.2017	HD_SSD / F5666/F5670/F5662/F5668-*	Sudou, Tatsuya	added
06.06.2017	HD_SSD / F5588/F5589-E120 /	Sudou, Tatsuya	F5525/F5530-E240/E480 / F5522-E64/E128 removed
06.06.2017	S26361-F5243-E206, -L506, -E205, -L505	Seil, Fabian	product name changed
13.06.2017	RAID	Seil, Fabian	descriptions of FBU options changed
24.07.2017	HD_SSD / F5673/F5675-*	Sudou, Tatsuya	added
05.09.2017	HD_SSD / F5534/F5546-*	Sudou, Tatsuya	removed (EOL)
19.10.2017	HD_SSD / F5298/F5320/F5592/F5593-*	Sudou, Tatsuya	removed (EOL)
25.10.2017	RAID	Spörl, Anna	note in Z2653 changed
25.10.2017	S26113-F624-E10 48V DC PSU	Linne, Johannes	change efficiency 92%