PRIMERGY RX2530 M1
1U Rack Server

4x 3.5"

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

10x 2.5"

Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	describes base unit of 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_FC_IB	LAN Components
12		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
	LLC	Long life cycle components

Instructions

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

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

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

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

Chapter xx - description of chapter

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

S26361-F4610-E2 **S26361-F4610-L3**	<-- order code E-part (bold) -- <-- order code L-part (bold)
PLAN 2x1Gb Ethern. Controller	<-- "name" of this part
i350-T2 chip (based on Intel Powerville) offers 2x1Gb RJ45 connectors	<--description of this part, in same cases as well description of content
PCIe Gen2 x4 full height card	<--requires a free PCIe slot --> means total amount of PCIe slots reduced
max. 6x per system	<--indicates how often this part can be configured in the related Server

For further information see:

Link to datasheet:
http:// xxx

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

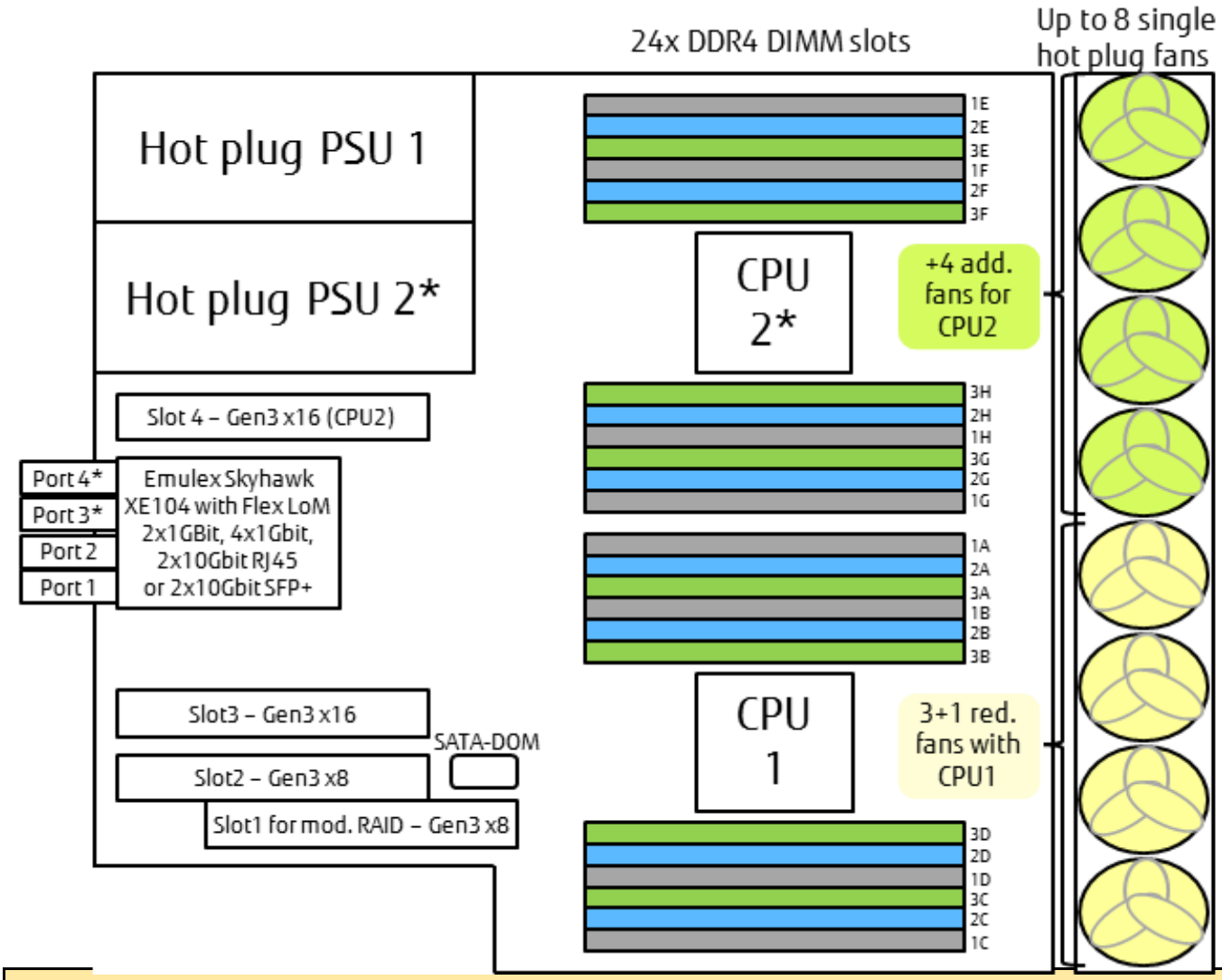
https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx
(extranet)

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

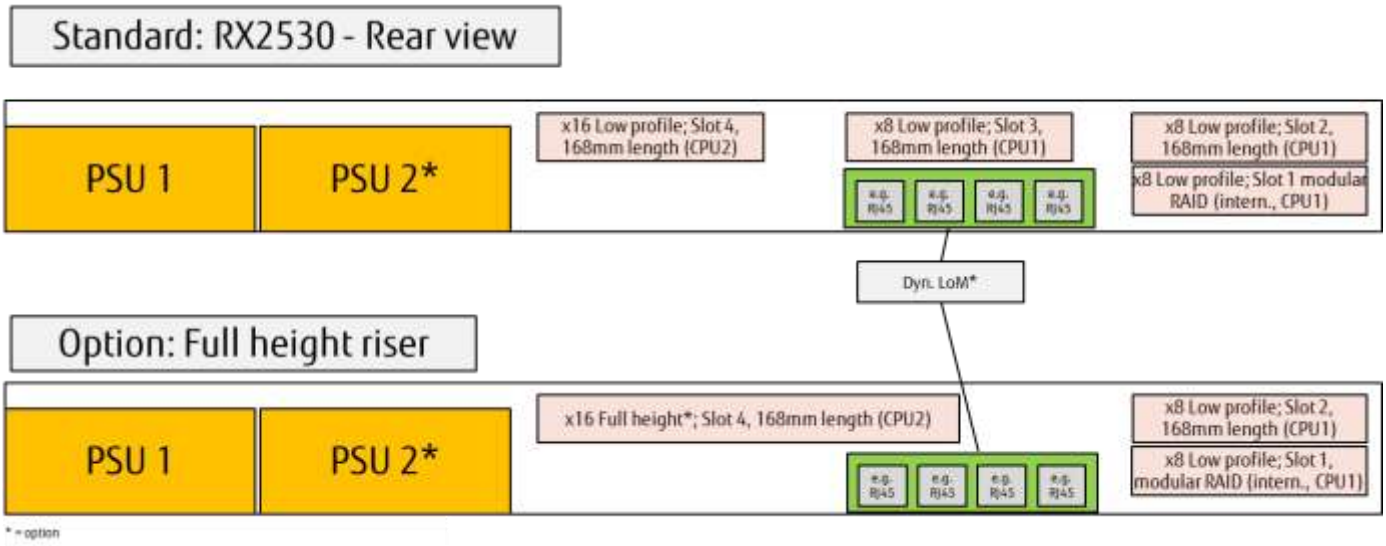
Abbreviations

SAS	Drives, RAID	Serial attached SCSI Device (HDD, SSD, LTO drives); SAS2.0 = 6GBit/s; SAS3.0 = 12GBit/s
SATA	Drives, RAID	Serial ATA (HDD, SSD) current SATA speed = 6GBit/s
HDD	Drives	Hard disk drive (Non volatile storage device), 2.5" (SFF) or 3.5" (LFF)
SSD	Drives	Solid state disk (Non volatile storage device), 2.5" (SFF)
SFF	Drives	small form factor (=2.5")
LFF	Drives	large form factor (=3.5")
CPU	Processor	central processing unit ("processor")
RAID	Drives, RAID	RAID 0 = max speed, RAID 1 = mirroring, RAID 5 = 1 out of x drives is spare
Spaces	OS	Microsoft spaces, optimized in Win2012 R2 offers software RAID and storage tiering
vSAN	OS	
storage tiering	RAID	offers optimized storage allocation (fast area for "hot data"; slower area for "cold data")
hot data	Drives	Data which are currently being processed
cold data	Drives	Data which are currently not processed (only stored)
ODD	Drives	optical disk drive (i.e. DVD-player, DVD-burner, Blu ray player, blu ray burner)
OS	operating system	OS=operating system - required for running, organize and administrating the server
E-Part	"Einbau-Part"	"e.g. S26361-F1234-**E**240" ordercode with "E" means it is either integrated into to Server (CPU, Mem, ..) or integrated in the shipping box (Keyboard, Mouse, ..)
L-Part	"Lose Lieferung-Part"	"e.g. S26361-F1234-**L**240" ordercode with "L" means, the part will be shipped with extra package, may be as well with extra shipment

PRIMERGY RX2530 M1 schematics of the System board and fans

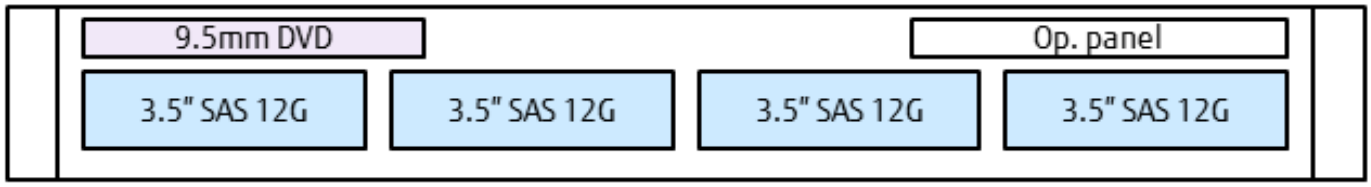


PRIMERGY RX2530 M1 rear view with PSU, PCIe slots and dynamic LoM

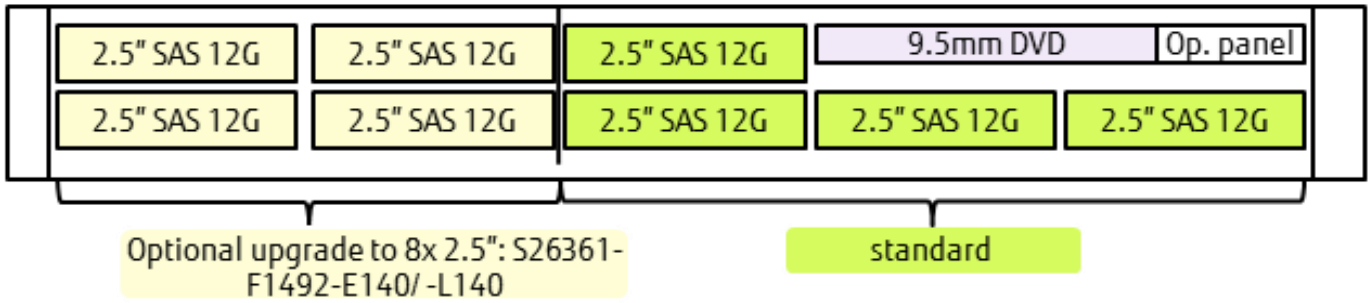


PRIMERGY RX2530 M1 front view with drives and operation panel

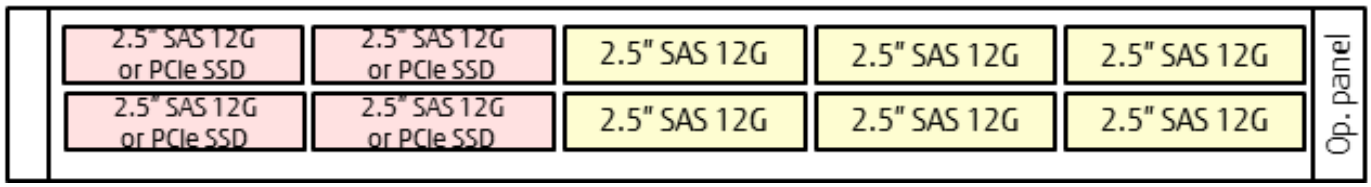
RX2530 4x3.5"- Front view



RX2530 4x2.5"- Front view



RX2530 10x2.5"- Front view



recommended components for RX2530 M1	#
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 M1 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 M1 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.

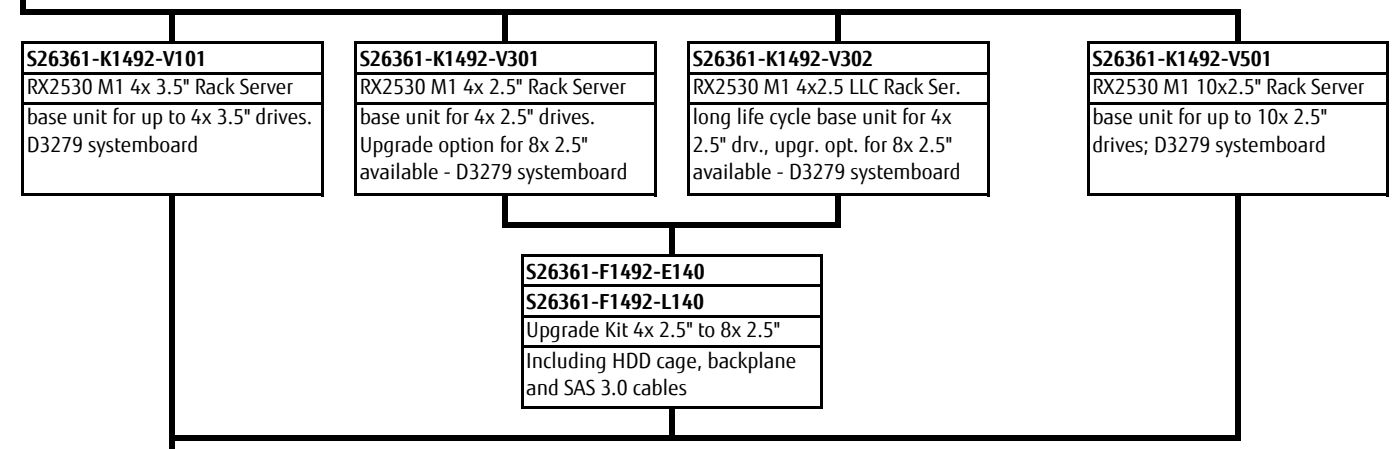
Platform
Fujitsu Systemboard D3279 "made in Germany" based on Chipset Intel® C612
> 2 serial QPI links (Quick Path Interconnect)
> Up to two Xeon E5-2600 v3 series CPUs
Slots: as standard 4 PCIe slots are on Board - please see schematics in "description"
> 3 PCIe slots low profile, 167mm length @ first CPU:
Slot 1 **PCIe-Gen3 x8** - supports modular RAID functions
Slot 2 **PCIe-Gen3 x8**
Slot 3 **PCIe-Gen3 x16**
> 1 PCIe slot low profile, 167mm length @ second CPU:
Slot 4 **PCIe-Gen3 x8**
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 4x 3.5" SATA drives (up to 8x 2.5" SATA drives starting Febr. 2015)
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 RX2530 M1 pending.

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

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

Connectivity

Interfaces at rear side	Interfaces at front
- 1 service LAN RJ45 (1 Gbit)	for base units with up to 8 HDD: 2x USB 3.0
- 1x VGA (15 pins)	for base units with 10HDD: 1x USB2.0 (on "ear")
- 2x USB 3.0 & 1x USB2.0	Interfaces internal
Flex LoM with 1 of these options:	- 1x USB 3.0, 1x UFM
RJ45: 2x1Gbit, 4x1Gbit or 2x10Gbit	- 1x SATA DOM
SFP+: 2x10Gbit ... or Dummy module (i.e. no LAN connector)	- 2x 4* SATA 6G



PRIMECENTER Rack

Chapter 2 - Rack architecture

PRIMECENTER Rack

S26361-F2735-E111
No Rackmount-Kit
No rackmount. Upgrade later possible with L-part
max. 1x per system

S26361-F2735-E400
S26361-F2735-L400
RMK-F1_CMA, Slimline
telescopic drop-in rail, full extractical, supports 1-hand-mounting
Rackmount Kit ex factory
> 1 pair of vario carrier with variable length & quick release lever support
> 1 pair of telescopic drop-in rails prepared for Cable Management Arm (CMA)
1x per system

S26361-F2735-E401
S26361-F2735-L401
RMK-F1, Slimline
telescopic drop-in rail, full extractical, supports 1-hand-mounting
Rackmount Kit ex factory
> 1 pair of vario carrier with variable length & quick release lever support
> 1 pair of telescopic drop-in rails
1x per system

S26361-F2735-E81
S26361-F2735-L81
1U cable management arm (CMA) for 1U server
for direct mounting at Rack mounting kit F1
1x per system

S26361-F2735-L7
Lateral cable management
can only be mounted in asymetrical Racks.
The lateral cable mgmt. Is mounted 1 level (1U)above the server.

S26361-F2735-L8
cable management arm (dragged)
universal usage in PRIMECENTER and 3rd party racks. Not with CMA!

S26361-F4530-E11
S26361-F2735-L10
Bracket 1U in asymmetrical racks

S26361-F4530-E10
Mounting of RMK in symmetrical racks (no support brackets needed)

S26361-F1647-E302
Installation ex factory in a PRIMECENTER Rack
Fujitsu will deliver the PRIMERGY RX2560 mounted in a Rack System and all wired connections are tested with PRIMECENTER M1 16U, 24U, 42U rack - Systems and components will be delivered installed in the rack
Only together with a PC M1 rack (S26361-K827-Vxxx)
max. 1x per System

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.

S26361-F1492-E210
S26361-F1492-L210
Full height riser card kit
Offers 1x FH Gen 3 PCIe slots: 1* x16 for full height PCIe cards with max. 167mm lenght
will be inserted instead of Slot 3 and Slot 4.
! Low profile riser card for slot 3 and 4 will not be delivered with base unit if configured.
will be inserted into Slot 4 PCIe 3.0 x16
max. 1x per system

! 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.

A

Chapter 3 - CPU

A

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")

CPUs for 1 or 2-socket configuration

Xeon E5-26xx v3 series (R) Basic		
64-bit Intel Xeon processor supporting DDR4 @ 1.600MHz & QPI Bus @ 6.4 GT/s		
Xeon E5-2603v3 6C/6T 1.60GHz 15MB 6.4GT/s 1600MHz 85W	**S26361-F3849-E103**	**S26361-F3849-L303**
Xeon E5-2609v3 6C/6T 1.90GHz 15MB 6.4GT/s 1600MHz 85W	**S26361-F3849-E109**	**S26361-F3849-L309**
Xeon E5-26xx v3 series (R) Standard		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus 8.0 GT/s		
Xeon E5-2620v3 6C/12T 2.40GHz 15MB 8.0GT/s 1866MHz 85W	**S26361-F3849-E120**	**S26361-F3849-L320**
Xeon E5-2630v3 8C/16T 2.40GHz 20MB 8.0GT/s 1866MHz 85W	**S26361-F3849-E130**	**S26361-F3849-L330**
Xeon E5-2640v3 8C/16T 2.60GHz 20MB 8.0GT/s 1866MHz 90W	**S26361-F3849-E140**	**S26361-F3849-L340**
Xeon E5-26xx v3 series (R) Advanced		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s		
Xeon E5-2650v3 10C/20T 2.30GHz 25MB 9.6GT/s 2133MHz 105W	**S26361-F3849-E150**	**S26361-F3849-L350**
Xeon E5-2680v3 12C/24T 2.50GHz 30MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E180**	**S26361-F3849-L180**
Xeon E5-26xx v3 series (R) Frequency optimized		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus @ 8.0 GT/s		
Xeon E5-2623v3 4C/8T 3.00GHz 10MB 8.0GT/s 1866MHz 105W	**S26361-F3849-E123**	**S26361-F3849-L323**

special release only

* HT = Hyper Threading

CPUs for 2-socket only configuration

Xeon E5-26xx v3 series (R) Advanced -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2660v3 10C/20T 2.60GHz 25MB 9.6GT/s 2133MHz 105W	**S26361-F3849-E160**
Xeon E5-2670v3 12C/24T 2.30GHz 30MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E170**
Xeon E5-2680v3 12C/24T 2.50GHz 30MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E180**
Xeon E5-2690v3 12C/24T 2.60GHz 30MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E190**
Xeon E5-26xx v3 series (R) Frequency optimized -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2637v3 4C/8T 3.50GHz 15MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E137**
Xeon E5-2643v3 6C/12T 3.40GHz 20MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E143**
Xeon E5-2667v3 8C/16T 3.20GHz 20MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E167**
Xeon E5-2600v3 (R) High Core Count -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2683v3 14C/28T 2.00GHz 35MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E183**
Xeon E5-2695v3 14C/28T 2.30GHz 35MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E195**
Xeon E5-2697v3 14C/28T 2.60GHz 35MB 9.6GT/s 2133MHz 145W	**S26361-F3849-E197**
Xeon E5-2698v3 16C/32T 2.30GHz 40MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E198**
Xeon E5-2699v3 18C/36T 2.30GHz 45MB 9.6GT/s 2133MHz 145W	**S26361-F3849-E199**
Xeon E5-2600v3 (R) Low Power -- Dual processor only	
64-bit Intel Xeon processor supporting HT*	
Xeon E5-2630Lv3 8C/16T 1.80GHz 20MB 8.0GT/s 1866MHz 55W	**S26361-F3849-E131**
Xeon E5-2650Lv3 12C/24T 1.80GHz 30MB 9.6GT/s 2133MHz 65W	**S26361-F3849-E151**

S26361-F3849-E100	Contains 4x fans and cooling equipment to support the 2nd CPU in RX2530 .
Cooling Kit 2nd CPU	

B1

B2

B1 B2

Xeon E5-26xx v3 series (R) Basic	
64-bit Intel Xeon processor supporting DDR4 @ 1.600MHz & QPI Bus @ 6.4 GT/s	
Xeon E5-2603v3 6C/6T 1.60GHz 15MB 6.4GT/s 1600MHz 85W	**S26361-F3849-E103**
Xeon E5-2609v3 6C/6T 1.90GHz 15MB 6.4GT/s 1600MHz 85W	**S26361-F3849-E109**
Xeon E5-26xx v3 series (R) Standard	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus 8.0 GT/s	
Xeon E5-2620v3 6C/12T 2.40GHz 15MB 8.0GT/s 1866MHz 85W	**S26361-F3849-E120**
Xeon E5-2630v3 8C/16T 2.40GHz 20MB 8.0GT/s 1866MHz 85W	**S26361-F3849-E130**
Xeon E5-2640v3 8C/16T 2.60GHz 20MB 8.0GT/s 1866MHz 90W	**S26361-F3849-E140**
Xeon E5-26xx v3 series (R) Advanced	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2650v3 10C/20T 2.30GHz 25MB 9.6GT/s 2133MHz 105W	**S26361-F3849-E150**
Xeon E5-26xx v3 series (R) Frequency optimized	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 1866 MHz & QPI Bus @ 8.0 GT/s	
Xeon E5-2623v3 4C/8T 3.00GHz 10MB 8.0GT/s 1866MHz 105W	**S26361-F3849-E123**
Xeon E5-26xx v3 series (R) Advanced -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2660v3 10C/20T 2.60GHz 25MB 9.6GT/s 2133MHz 105W	**S26361-F3849-E160**
Xeon E5-2670v3 12C/24T 2.30GHz 30MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E170**
Xeon E5-2680v3 12C/24T 2.50GHz 30MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E180**
Xeon E5-2690v3 12C/24T 2.60GHz 30MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E190**
Xeon E5-26xx v3 series (R) Frequency optimized -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2637v3 4C/8T 3.50GHz 15MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E137**
Xeon E5-2643v3 6C/12T 3.40GHz 20MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E143**
Xeon E5-2667v3 8C/16T 3.20GHz 20MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E167**
Xeon E5-2600v3 (R) High Core Count -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2133 MHz & QPI Bus @ 9.6 GT/s	
Xeon E5-2683v3 14C/28T 2.00GHz 35MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E183**
Xeon E5-2695v3 14C/28T 2.30GHz 35MB 9.6GT/s 2133MHz 120W	**S26361-F3849-E195**
Xeon E5-2697v3 14C/28T 2.60GHz 35MB 9.6GT/s 2133MHz 145W	**S26361-F3849-E197**
Xeon E5-2698v3 16C/32T 2.30GHz 40MB 9.6GT/s 2133MHz 135W	**S26361-F3849-E198**
Xeon E5-2699v3 18C/36T 2.30GHz 45MB 9.6GT/s 2133MHz 145W	**S26361-F3849-E199**
Xeon E5-2600v3 (R) Low Power -- Dual processor only	
64-bit Intel Xeon processor supporting HT*, DDR4 1866/2133 MHz,QPI @ 8.0, 9.6 GT/s	
Xeon E5-2630Lv3 8C/16T 1.80GHz 20MB 8.0GT/s 1866MHz 55W	**S26361-F3849-E131**
Xeon E5-2650Lv3 12C/24T 1.80GHz 30MB 9.6GT/s 2133MHz 65W	**S26361-F3849-E151**

C

Chapter 4 - DDR4 System memory

C

The Systemboard of RX2530 M1, D3279, offers 24 DDR4 slots with up to 2.133MHz.
- 768GB DDR4 LRDIMM (12x 64GB 4R per CPU)
- 384GB DDR4 RDIMM (12x 32GB 2R per CPU)

The memory area is divided into 4 channels per CPU with 3 slots each
- up to 2.133 MHz with 1DPC R-DIMM (depending on CPU*)
- up to 2.133 MHz with 2DPC LR-DIMM (depending on CPU*)
- up to 1.866 MHz with 2DPC (depending on CPU*)
- 1.600 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 2.133MHz, 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	Perfomance 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	32GB	4R	64GB	4R
1DPC							24GB		48GB	
2DPC	8GB		24GB		48GB		56GB		112GB	
3DPC	16GB		40GB		80GB		88GB		176GB	

Registered Memory (RDIMM) with SDDC (chipkill) and ECC support			
8GB (1x8GB) 1Rx4 DDR4-2133 R ECC	single rank	**S26361-F3843-E514**	**S26361-F3843-L514**
16GB (1x16GB) 2Rx4 DDR4-2133 R ECC	Dual rank	**S26361-F3843-E516**	**S26361-F3843-L516**
32GB (1x32GB) 2Rx4 DDR4-2133 R ECC	Dual rank	**S26361-F3843-E517**	**S26361-F3843-L517**
Registered Memory (RDIMM) without SDDC and ECC support			
8GB (1x8GB) 2Rx8 DDR4-2133 R ECC	Dual rank	**S26361-F3843-E515**	**S26361-F3843-L515**
Load Reduced Memory (LRDIMM) with SDDC (chipkill) and ECC support			
32GB (1x32GB) 4Rx4 DDR4-2133 LR ECC	Quad rank	**S26361-F3844-E517**	**S26361-F3844-L517**
64GB (1x64GB) 4Rx4 DDR4-2133 LR ECC	Quad rank	**S26361-F3844-E518**	**S26361-F3844-L518**

D

Detailed infomation

Mode	Configuration	RDIMM	RDIMM LRDIMM	Use case, advantage
		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	1x32GB	with one CPU
Max. Memory per CPU	12 Modules / CPU	12x32GB	12x64GB	with one CPU
Max. Memory per System	24 Modules / System	768GB	1536GB	if second CPU is configured

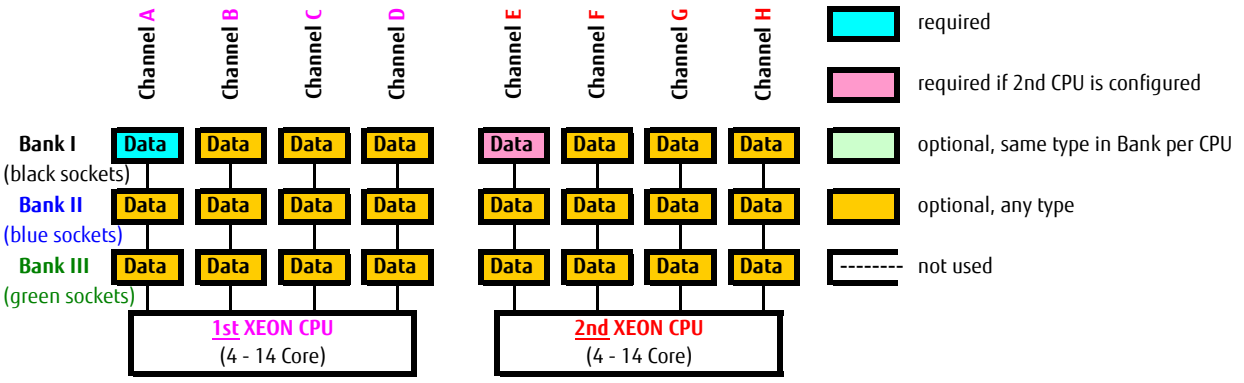
Max. DDR4 memory speed depends on the memory configuration (DIMM per channel) and the type of CPU. The memory channel with the lowest speed defines the speed of all CPU channels in the system

Mem. Speed provided by CPU	Maximum memory-bus speed [MHz]					
Type of Memory	RDIMM 2133MHz			LRDIMM 2133MHz		
Voltage setting (BIOS)	1.2V					
CPU type \ Dimm per channel	1 DPC*	2 DPC	3 DPC	1 DPC	2 DPC	3 DPC
CPU with 2133MHz DDR4 Bus	2.133	2.133	1.600	2.133	2.133	1.600
CPU with 1866MHz DDR4 Bus	1.866	1.866	1.600	1.866	1.866	1.600
CPU with 1600MHz DDR4 Bus	1.600	1.600	1.600	1.600	1.600	1.600

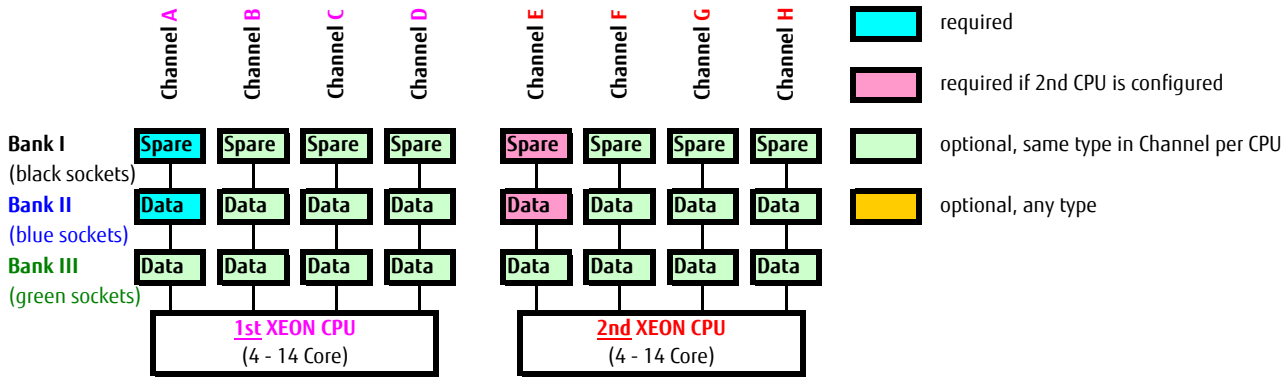
The memory sockets on the Systemboards are color coded

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

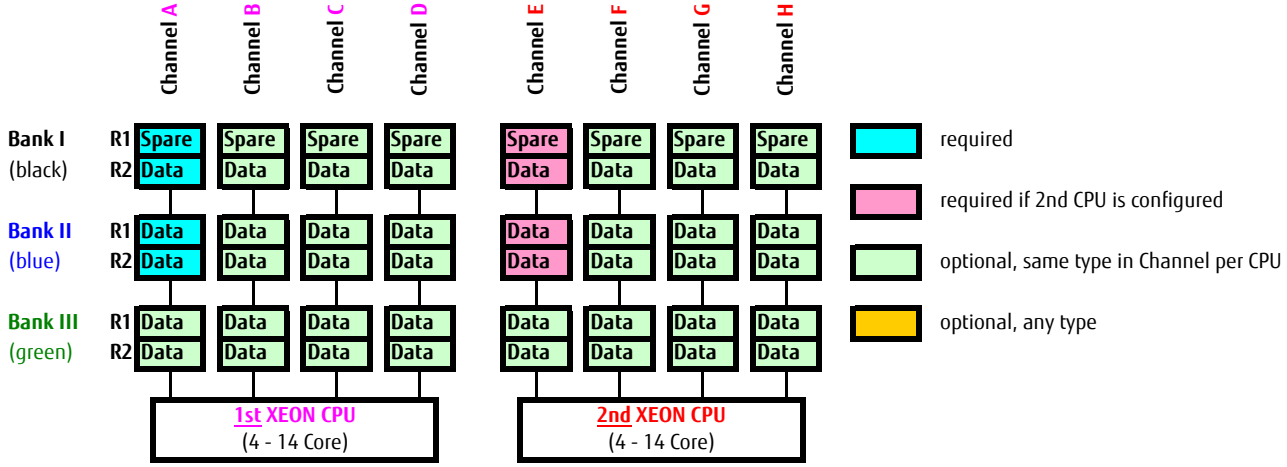
Independant channel mode



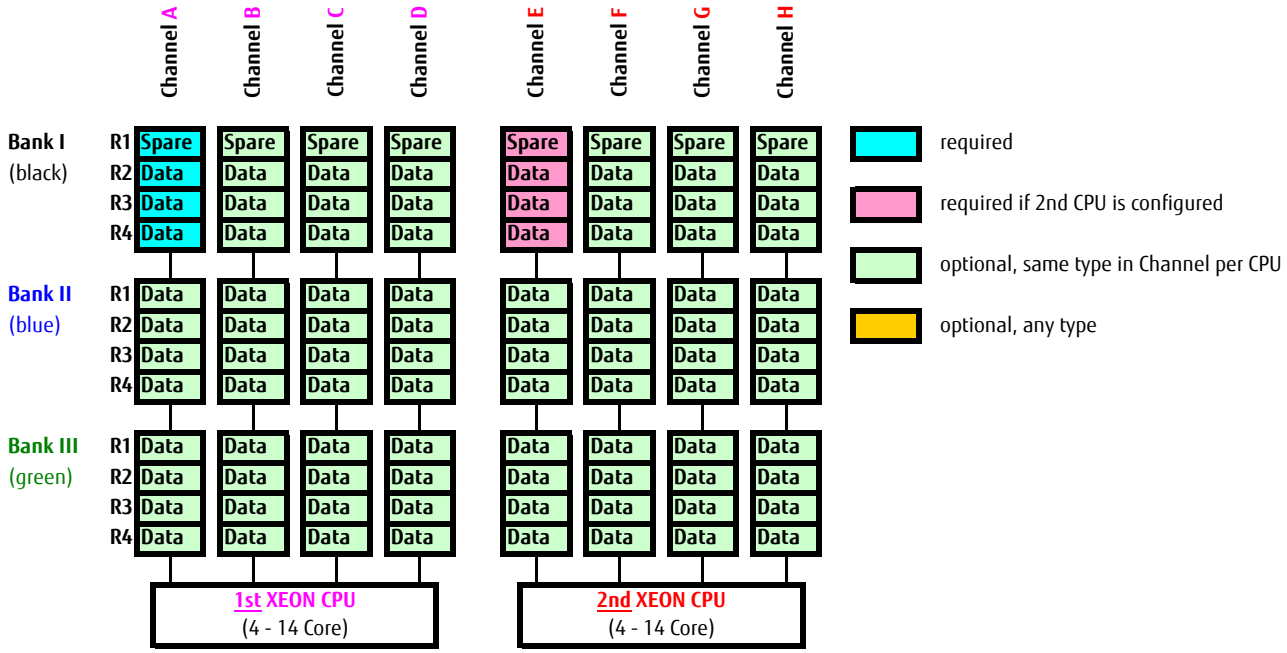
Rank sparing mode --- 1-Rank Memory modules (R-DIMM)



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

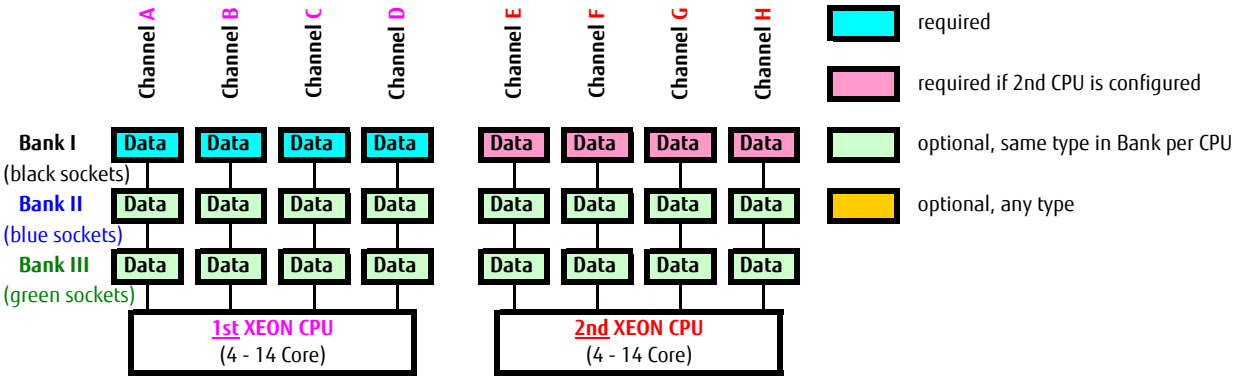


Rank sparing mode --- 4-Rank Memory modules (LR-DIMM)

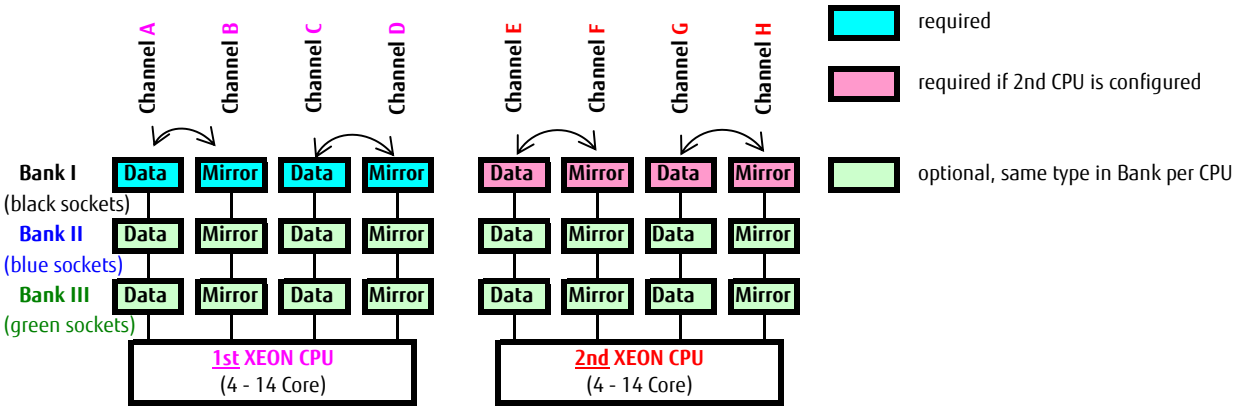


Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel. The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Popu-lation rule for Rank sparing 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

D

S26361-F1420-E131 **S26361-F1420-L131**
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
for base unit S26361-K1492-V101 or -V301 only
max. 1x per system

E

Chapter 7 - SAS / RAID Controller

F

S26361-F3842-E2 **S26361-F3842-L502**
PSAS CP400i SAS Contr.
based on LSI SAS3008
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD
No Cache
RAID 0, 1
requires 1x FH PCIe 3.0 x8
max. 1x for HDD/SSD

S26361-F3842-E1 **S26361-F3842-L501**
PRAID CP400i RAID Contr.
based on LSI SAS3008
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD
No Cache
RAID 0, 1, 1E, 10, 5, 50
requires 1x FH PCIe 3.0 x8
max. 1x per system

S26361-F5243-E1 **S26361-F5243-L1**
PRAID EP400i RAID Contr.
based on LSI SAS3108
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD
1GB Cache, opt. TFM, FBU
RAID 0, 1, 1E, 10, 5, 50, 6, 60
requires 1x FH PCIe 3.0 x8
max. 1x per system

S26361-F5243-E2 **S26361-F5243-L2**
PRAID EP420i RAID Contr.
based on LSI SAS3108
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD
2GB Cache, opt. TFM, FBU
RAID 0, 1, 1E, 10, 5, 50, 6, 60
requires 1x FH PCIe 3.0 x8
max. 1x per system

S26361-F5243-E100 **S26361-F5243-L100**
TFM module for 1GB Cache
NV-RAM & FBU control logic
max. 1x per controller

S26361-F5243-E200 **S26361-F5243-L200**
TFM module for 2GB Cache
NV-RAM & FBU control logic
max. 1x per controller

The FBU cannot be combined with Advanced Thermal design

S26361-F5243-E125 **S26361-F5243-L110**
Flash Backup Unit (FBU)
Supercap securing the power supply of the RAID controller in case of power failure including cable with 25cm lenght
for 3,5" base V101
max. 1x per controller

S26361-F5243-E170 **S26361-F5243-L110**
Flash Backup Unit (FBU)
Supercap securing the power supply of the RAID controller in case of power failure including cable with 70cm lenght
for 2,5" base V301, V501
max. 1x per controller

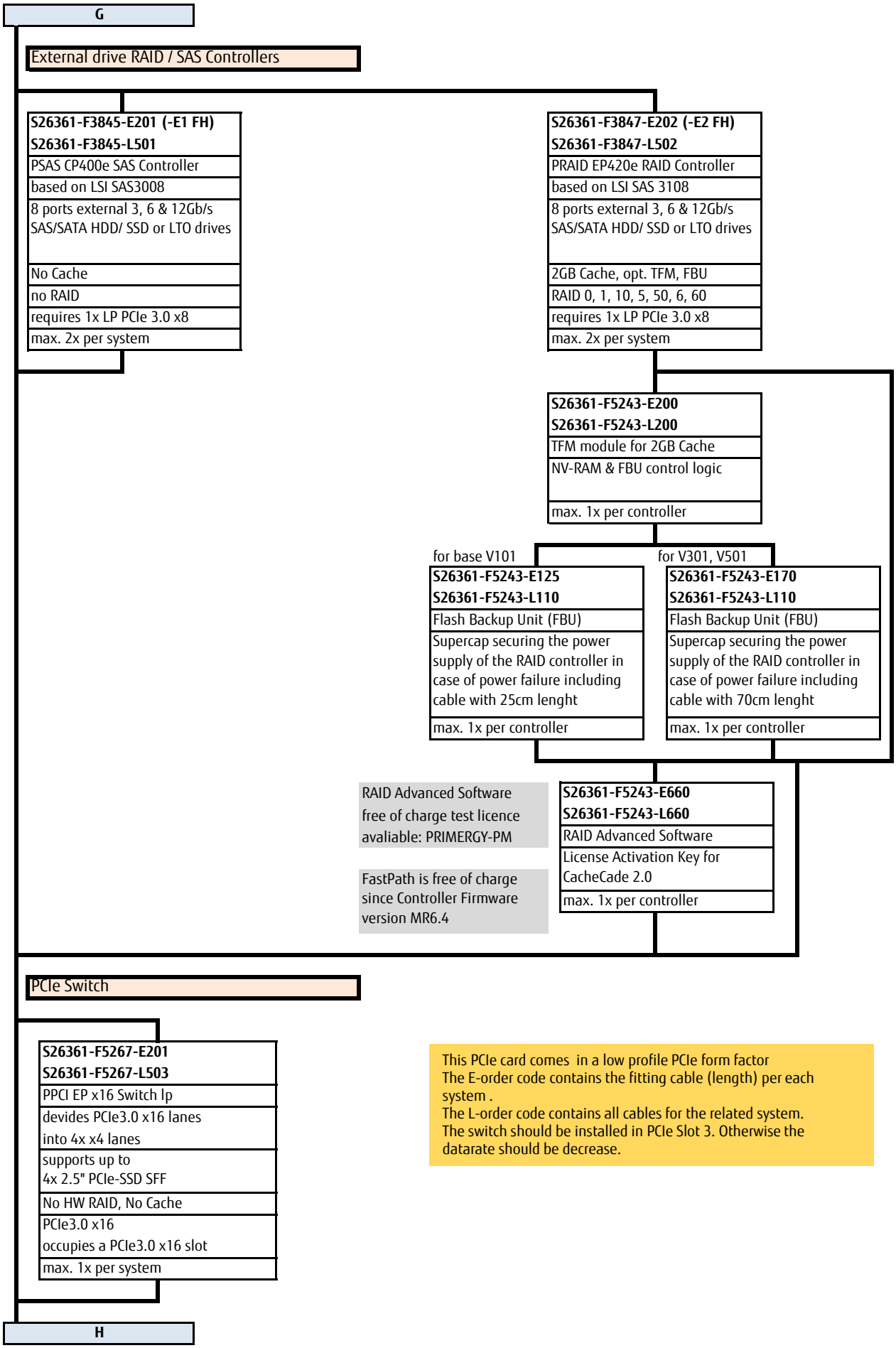
RAID Advanced Software free of charge test licence avaliable: PRIMERGY-PM

FastPath is free of charge since Controller Firmware version MR6.4

S26361-F5243-E660 **S26361-F5243-L660**
RAID Advanced Software
License Activation Key for CacheCade 2.0
max. 1x per controller

! The SAS 3.0 cable kit (S26361-F1537-L200) is only required for later upgrades and just if the onboard SATA 6G RAID Controller (which has a SAS2.0 connector) was originally selected. **! Orders ex factory always come with the right cable**
S26361-F1537-L200
SAS3.0 cable kit
contains the following cables: T26139-Y4040-V9, 540mm connects to the left 4x2,5" rectangular backplane T26139-Y4040-V11, 700mm connects to the right 4x2,5" L-shaped backplane T26139-Y4040-V21, connects to the 4x3,5" backplane
required for laer upgrade from onboard SATA 6G controller to dedicated SAS 3.0 Controller

G


G
External drive RAID / SAS Controllers
S26361-F3845-E201 (-E1 FH)
S26361-F3845-L501
PSAS CP400e SAS Controller
based on LSI SAS3008
8 ports external 3, 6 & 12Gb/s SAS/SATA HDD/ SSD or LTO drives
No Cache
no RAID
requires 1x LP PCIe 3.0 x8
max. 2x per system
S26361-F3847-E202 (-E2 FH)
S26361-F3847-L502
PRAID EP420e RAID Controller
based on LSI SAS 3108
8 ports external 3, 6 & 12Gb/s SAS/SATA HDD/ SSD or LTO drives
2GB Cache, opt. TFM, FBU
RAID 0, 1, 10, 5, 50, 6, 60
requires 1x LP PCIe 3.0 x8
max. 2x per system
S26361-F5243-E200
S26361-F5243-L200
TFM module for 2GB Cache
NV-RAM & FBU control logic
max. 1x per controller
for base V101
S26361-F5243-E125
S26361-F5243-L110
Flash Backup Unit (FBU)
Supercap securing the power supply of the RAID controller in case of power failure including cable with 25cm lenght
max. 1x per controller
for V301, V501
S26361-F5243-E170
S26361-F5243-L110
Flash Backup Unit (FBU)
Supercap securing the power supply of the RAID controller in case of power failure including cable with 70cm lenght
max. 1x per controller
RAID Advanced Software free of charge test licence avaliable: PRIMERGY-PM
FastPath is free of charge since Controller Firmware version MR6.4
S26361-F5243-E660
S26361-F5243-L660
RAID Advanced Software
License Activation Key for CacheCade 2.0
max. 1x per controller
PCIe Switch
S26361-F5267-E201
S26361-F5267-L503
PPCI EP x16 Switch lp
devides PCIe3.0 x16 lanes into 4x x4 lanes
supports up to 4x 2.5" PCIe-SSD SFF
No HW RAID, No Cache
PCIe3.0 x16 occupies a PCIe3.0 x16 slot
max. 1x per system
This PCIe card comes in a low profile PCIe form factor
The E-order code contains the fitting cable (length) per each system .
The L-order code contains all cables for the related system.
The switch should be installed in PCIe Slot 3. Otherwise the datarate should be decrease.
H

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

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

I

Chapter 10 - storage drives

I

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.
SATA drives can be connected to the onboard Controller (max. 8x),
SAS drives require a dedicated SAS / RAID Controller
Hard Disk Sector Format
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.
SATA DOM: VMware is not supported.

2.5" PCIe-SSD, SSD and SATADOM

2.5" PCIe-SSD's require the PCIe switch S26361-F5267-E201/-L503

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

capacity	*Formfactor*	*Interface*	*read*	*write*	*latency*	*Endurance*	*dwpd (5y)*	*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**

only possible in RX2530 M1 with "up to 10x HDD/SSD", S26361-K1492-V501; max. 4x PCIe-SSD per system.

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

capacity	*Formfactor*	*Interface*	*read*	*write*	*latency*	*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
200GB	2.5" (SFF)	12GBit/s				mainstream	10	**S26361-F5298-E200**	**S26361-F5298-L200**
400GB	2.5" (SFF)	12GBit/s				mainstream	10	**S26361-F5298-E400**	**S26361-F5298-L400**
800GB	2.5" (SFF)	12GBit/s				mainstream	10	**S26361-F5298-E800**	**S26361-F5298-L800**
1.6TB	2.5" (SFF)	12GBit/s				mainstream	10	**S26361-F5298-E160**	**S26361-F5298-L160**

max. 10x - depending on base unit & configuration

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

capacity	*Formfactor*	*Interface*				*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
100GB	2.5" (SFF)	6GBit/s				mainstream	10	**S26361-F3821-E100**	**S26361-F3821-L100**
400GB	2.5" (SFF)	6GBit/s				mainstream	10	**S26361-F3821-E400**	**S26361-F3821-L400**
800GB	2.5" (SFF)	6GBit/s				mainstream	10	**S26361-F3821-E800**	**S26361-F3821-L800**

max. 10x - depending on base unit & configuration

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

capacity	*Formfactor*	*Interface*				*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
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. 10x - depending on base unit & configuration

SATA DOM Non volatile storage drive for booting

capacity	*FF*	*Interface*			*Endurance*	*order code E-part*	*order code L-part*
32GB	DOM	6GBit/s			86 TBW (Seq. write)	**S26361-F5522-E32**	**S26361-F5522-L32**
64GB	DOM	6GBit/s			172 TBW (Seq. write)	**S26361-F5522-E64**	**S26361-F5522-L64**
128GB	DOM	6GBit/s			345 TBW (Seq. write)	**S26361-F5522-E128**	**S26361-F5522-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.

J

J

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*
500GB	7.200	6GBit/s	64MB	512n					**S26361-F3817-E500**	***)**
1.0TB	7.200	6GBit/s	64MB	512n					**S26361-F3817-E100**	***)**

*) L-part support by special release request only (depending on base unit revision)

For mixed use of SAS-HDD with BC-SAS / BC-SATA-HDD the HDD population order fixed in the user manual must be followed!

max. 2/4x or 8x - depending on base unit & configuration

512e HDDs as soon as available

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	6GBit/s	64MB	512n					**S26361-F3818-E130**	**S26361-F3818-L130**
600GB	10.000	6GBit/s	64MB	512n					**S26361-F3818-E160**	**S26361-F3818-L160**
900GB	10.000	6GBit/s	64MB	512n					**S26361-F3818-E190**	**S26361-F3818-L190**
1.2TB	10.000	6GBit/s	64MB	512n					**S26361-F3818-E112**	**S26361-F3818-L112**
300GB	10.000	12GBit/s	128MB	512n					**S26361-F5550-E130**	**S26361-F5550-L130**
600GB	10.000	12GBit/s	128MB	512n					**S26361-F5550-E160**	**S26361-F5550-L160**
900GB	10.000	12GBit/s	128MB	512n					**S26361-F5550-E190**	**S26361-F5550-L190**
1.2TB	10.000	12GBit/s	128MB	512n					**S26361-F5550-E112**	**S26361-F5550-L112**
450GB	10.000	12GBit/s	128MB	512e					**S26361-F5543-E145**	**S26361-F5543-L145**
600GB	10.000	12GBit/s	128MB	512e					**S26361-F5543-E160**	**S26361-F5543-L160**
900GB	10.000	12GBit/s	128MB	512e					**S26361-F5543-E190**	**S26361-F5543-L190**
1.2TB	10.000	12GBit/s	128MB	512e					**S26361-F5543-E112**	**S26361-F5543-L112**
1.8TB	10.000	12GBit/s	128MB	512e					**S26361-F5543-E118**	**S26361-F5543-L118**

max. 10x - depending on base unit & configuration. No Vmware support for 512e HDDs.

600GB as soon as available

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					**S26361-F3818-E514**	**S26361-F3818-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. 10x - depending on base unit & configuration

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*
250GB	7.200	6GBit/s	64MB	512n					**S26361-F3816-E250**	***)**
500GB	7.200	6GBit/s	64MB	512n					**S26361-F3816-E500**	***)**
1.0TB	7.200	6GBit/s	64MB	512n					**S26361-F3816-E100**	***)**

*) L-part support by special release request only (depending on base unit revision)

For mixed use of SAS-HDD with BC-SAS / BC-SATA-HDD the HDD population order fixed in the user manual must be followed!

max. 2/4x or 8x - depending on base unit & configuration

K

K

3.5" (LFF) Hard drives

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

capacity	*Formfactor*	*SAS 12G*				*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
200GB	3.5" (LFF)	SAS 3.0				mainstream	10	**S26361-F5320-E200**	**S26361-F5320-L200**
400GB	3.5" (LFF)	SAS 3.0				mainstream	10	**S26361-F5320-E400**	**S26361-F5320-L400**
800GB	3.5" (LFF)	SAS 3.0				mainstream	10	**S26361-F5320-E800**	**S26361-F5320-L800**
1.6TB	3.5" (LFF)	SAS 3.0				mainstream	10	**S26361-F5320-E160**	**S26361-F5320-L160**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

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

capacity	*Formfactor*	*SATA 6G*				*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
100GB	3.5" (LFF)	6GBit/s				mainstream	10	**S26361-F5289-E100**	**S26361-F5289-L100**
200GB	3.5" (LFF)	6GBit/s				mainstream	10	**S26361-F5289-E200**	**S26361-F5289-L200**
400GB	3.5" (LFF)	6GBit/s				mainstream	10	**S26361-F5289-E400**	**S26361-F5289-L400**
800GB	3.5" (LFF)	6GBit/s				mainstream	10	**S26361-F5289-E800**	**S26361-F5289-L800**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

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

capacity	*Formfactor*	*SATA 6G*				*Endurance*	*dwpd (5y)*	*order code E-part*	*order code L-part*
120GB	3.5" (LFF)	6GBit/s				read intensive	0.3	**S26361-F5530-E120**	**S26361-F5530-L120**
240GB	3.5" (LFF)	6GBit/s				read intensive	0.3	**S26361-F5530-E240**	**S26361-F5530-L240**
480GB	3.5" (LFF)	6GBit/s				read intensive	0.3	**S26361-F5530-E480**	**S26361-F5530-L480**
800GB	3.5" (LFF)	6GBit/s				read intensive	0.3	**S26361-F5530-E800**	**S26361-F5530-L800**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

HDD SAS 3.5" 10K (LFF) Enterprise 2.5" HDD performance with 3.5" hot plug/hot replace tray

capacity	*RPM*	*SAS*	*Cache*	*sector*					*order code E-part*	*order code L-part*
300GB	10.000	12GBit/s	128MB	512n	as soon as available				**S26361-F5568-E130**	**S26361-F5568-L130**
600GB	10.000	12GBit/s	128MB	512n	as soon as available				**S26361-F5568-E160**	**S26361-F5568-L160**
1.2TB	10.000	12GBit/s	128MB	512n	as soon as available				**S26361-F5568-E112**	**S26361-F5568-L112**
1.8TB	10.000	12GBit/s	128MB	512e	as soon as available				**S26361-F5569-E118**	**S26361-F5569-L118**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

HDD SAS 3.5" 15K (LFF) Enterprise performance with hot plug/hot replace tray

capacity	*RPM*	*SAS*	*Cache*	*sector*					*order code E-part*	*order code L-part*
300GB	15.000	12GBit/s	128MB	512n					**S26361-F5532-E530**	**S26361-F5532-L530**
450GB	15.000	12GBit/s	128MB	512n					**S26361-F5532-E545**	**S26361-F5532-L545**
600GB	15.000	12GBit/s	128MB	512n					**S26361-F5532-E560**	**S26361-F5532-L560**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

HDD SAS 3.5" 7.2K (LFF) business critical with hot plug/hot replace tray

capacity	*RPM*	*SAS 6G*	*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**
3TB	7.200	6GBit/s	32MB	512n					**S26361-F3820-E300**	**S26361-F3820-L300**
4TB	7.200	6GBit/s	32MB	512n					**S26361-F3820-E400**	**S26361-F3820-L400**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

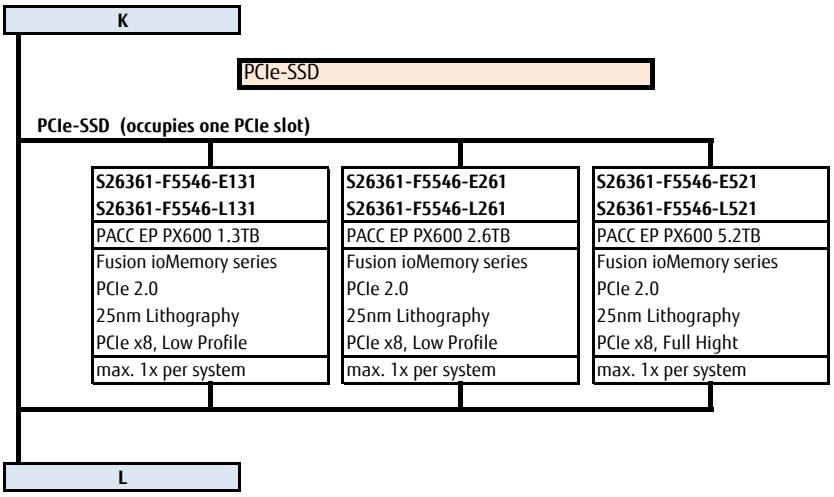
512e HDDs as soon as available

HDD SATA 3.5" 7.2K (LFF) business critical with hot plug/hot replace tray. No Vmware support for 512e HDDs.

capacity	*RPM*	*S-ATA*	*Cache*	*sector*					*order code E-part*	*order code L-part*
1TB	7.200	6GBit/s	64MB	512n					**S26361-F3815-E100**	**S26361-F3815-L100**
2TB	7.200	6GBit/s	64MB	512n					**S26361-F3815-E200**	**S26361-F3815-L200**
3TB	7.200	6GBit/s	64MB	512n					**S26361-F3815-E300**	**S26361-F3815-L300**
4TB	7.200	6GBit/s	64MB	512n					**S26361-F3815-E400**	**S26361-F3815-L400**
2TB	7.200	6GBit/s		512e					**S26361-Fxxxx-E200**	**S26361-Fxxxx-L200**
4TB	7.200	6GBit/s		512e					**S26361-Fxxxx-E400**	**S26361-Fxxxx-L400**
6TB	7.200	6GBit/s	128MB	512e					**S26361-F3904-E600**	**S26361-F3904-L600**

only possible in RX2530 M1 base unit with up to 4x3.5" HDD (S26361-K1492-V101) max. 4x HDD

K


K
PCIe-SSD
PCIe-SSD (occupies one PCIe slot)
S26361-F5546-E131
S26361-F5546-L131
PACC EP PX600 1.3TB
Fusion ioMemory series
PCIe 2.0
25nm Lithography
PCIe x8, Low Profile
max. 1x per system
S26361-F5546-E261
S26361-F5546-L261
PACC EP PX600 2.6TB
Fusion ioMemory series
PCIe 2.0
25nm Lithography
PCIe x8, Low Profile
max. 1x per system
S26361-F5546-E521
S26361-F5546-L521
PACC EP PX600 5.2TB
Fusion ioMemory series
PCIe 2.0
25nm Lithography
PCIe x8, Full Hight
max. 1x per system
L

Chapter 11 - LAN Components

L

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-E210	S26361-F5302-L210
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	S26361-F4610-L502
PLAN CP 2x1Gbit Cu Intel I350-T4 LP	3x	4 port, Intel	S26361-F4610-E204	S26361-F4610-L504
max. 3 Controller per system				

10Gb Ethernet network components

10Gb Ethernet controller with RJ45 interface (10GBASE-T)				
Eth Ctrl 2x10GBase-T PCIe x8 X540-T2 LP	2x	2 port NIC, Intel	S26361-F3752-E202	S26361-F3752-L502
PLAN EP OCe14102 2x 10GBase-T LP	2x	2 port NIC with RDMA, Emulex	S26361-F5557-E201	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+	2x	2 port NIC, Intel 82599 based	S26361-F3629-E202	S26361-F3629-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 botton 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 LP	2x	2 port NIC with RDMA, Emulex	S26361-F5536-E202	S26361-F5536-L502
PCNA EP OCe14102 2x 10Gb LP	2x	2 port CNA with FCoE & RDMA, Emulex	S26361-F5250-E201	S26361-F5250-L501
PCNA EP OCe14102 2x 10Gb DMF LP	1x	2 port CNA with DMF for PAN, Emulex	S26361-F5250-E210	S26361-F5250-L510
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 botton 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				

special release only; max 1 controller — as soon as available

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	S26361-F5539-L501
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	tbd	
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 botton of this page
QSFP+ aktives Twinax Kabel Brocade	1x		S26361-F5317-E40	
rmax. 1x QSFP+ or Twinax Cable per controller				
max. 2 Controller per system				

as soon as available

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**

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 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**

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**

Cisco passive SFP+ Twinax 10Gb Ethernet	
SFP+ passive Twinax Cable Cisco 1m	**S26361-F4571-L101**
SFP+ passive Twinax Cable Cisco 3m	**S26361-F4571-L103**
SFP+ passive Twinax Cable Cisco 5m	**S26361-F4571-L105**
SFP+ active Twinax Cable Cisco 7m	**S26361-F4571-L107**
SFP+ active Twinax Cable Cisco 10m	**S26361-F4571-L110**

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

Max. 3x FC Controller per System (configuration of different Controllers possible)

S26361-F3631-E201 **S26361-F3631-L201**
FC Ctrl 8Gb/s 1 ch. QLE2560 MMF LC
Qlogic QLE2560 1 channel 8Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen2 x8 low profile bracket
max. 3x per system

S26361-F3631-E202 **S26361-F3631-L202**
FC Ctrl 8Gb/s 2 ch. QLE2562 MMF LC
Qlogic QLE2562 2 channel 8Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen2 x8 low profile bracket
max. 3x per system

S26361-F3961-E201 **S26361-F3961-L201**
FC Ctrl 8Gb/s 1 ch. LPe1250 MMF LC
Emulex LPe1250 1 channel 8Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen2 x8 low profile bracket
max. 3x per system

S26361-F3961-E202 **S26361-F3961-L202**
FC Ctrl 8Gb/s 1 ch. LPe12002 MMF
Emulex LPe12002 2 channel 8Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen2 x8 low profile bracket
max. 3x per system

S26361-F5313-E201 **S26361-F5313-L501**
PFC EP QLE2570 1x 16Gb
Qlogic QLE2570 1 channel 16Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen3 x8 low profile bracket
max. 3x per system

S26361-F5313-E202 **S26361-F5313-L502**
PFC EP QLE2572 2x 16Gb
Qlogic QLE2572 2 channel 16Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen3 x8 low profile bracket
max. 3x per system

S26361-F4994-E201 **S26361-F4994-L501**
PFC EP LPe16000 1x 16Gb
Emulex LPe16000 1 channel 16Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen3 x8 low profile bracket
max. 3x per system

S26361-F4994-E202 **S26361-F4994-L502**
PFC EP LPe16002 2x 16Gb
Emulex LPe16002 2 channel 16Gbit/s FC Controller
LC Interface for 50µm Fibre
PCIe Gen3 x8 low profile bracket
max. 3x per system

Chapter 13 - Infiniband Controllers

S26361-F4475-E122/E222 **S26361-F4475-L122/L222**
PIB EP QLE7340e/ 7342e
Intel IB HCA 1x/2x 40Gb PCIe Gen2 (5GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen2 x8 low profile Card, 170mm
max. 2x per system

S26361-F4475-E103/E203 **S26361-F4475-L103/L203**
IB HCA 40Gb 1 / 2channel QDR
40GBit 1 / 2channel Infiniband Controller QDR technology (8.0GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen3 x8 low profile Card, 170mm
max. 2x per system

S26361-F4533-E102/E202 **S26361-F4533-L102/L202**
IB HCA 56Gb 1 / 2channel FDR
56GBit 1 / 2channel Infiniband Controller FDR technology (8.0GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen3 x8 low profile Card, 170mm
max. 2x per system

S26361-F3996-E203
Intel IB Cu Cable 40Gb
QSFP, 3m
max. 1/ 2x per Controller

S26361-F3996-E210
Intel IB FO Cable 40Gb
QSFP, 10m
max. 1/ 2x per Controller

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

S26361-F3996-L561
QSFP, 1m
S26361-F3996-L563
QSFP, 3m

M

Max. 2x IB Controller per System (configuration of different Controllers possible)

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

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S26113-F575-E13 **S26113-F575-L13** 450W platinum power supply unit	**S26113-F574-E13** **S26113-F574-L13** 800W platinum power supply unit	**S26113-F615-E10** **S26113-F615-L10** 800W titanium power supply unit	**S26113-F574-E99** Dummy module instead PSU
450W PSU module platinum 1st or 2nd PSU for redundancy. 94% efficiency	800W PSU module platinum 1st or 2nd PSU for redundancy. 94% efficiency	800W PSU module titanium 1st or 2nd PSU for redundancy. 96% efficiency 110V range not supported	Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped
100-240V, 50-60Hz	100-240V, 50-60Hz	220-240V only, 50Hz	
occupies hot plug PSU slot	occupies hot plug PSU slot	occupies hot plug PSU slot	closes hot plug PSU slot
min. 1 / max. 2x per system	min. 1 / max. 2x per system	min. 1 / max. 2x per system	max. 1x per system

Power cord option for Rack Server, 4m, grey (1x per PSU)	
T26139-Y1968-E100	Powercord for rack, IEC 320 C14 connector
T26139-Y1742-E10	USA, Canada, 1.8m, grey
T26139-Y3850-E10	no power cord

S26361-F3301-E123 Certification for India	**S26361-F3301-E120** Certification for China (CCC)
! Only with "no powercord option"	! Only with "no powercord option"
max. 1x per system	max. 1x per system

S26361-F1452-E100 Region Kit EMEA / Asia / Pacific	**S26361-F1452-E130** Region Kit Amerika

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Chapter 15 - Accessories

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http://www.fujitsu.com/de/products/computing/peripheral/accessories/

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 Mouse:		
Mouse M510 Grey	**S26381-K457-E101**	**S26381-K457-L101**
Laser Mouse USB/PS2 Combo	**S26381-K430-E100**	**S26381-K430-L100**
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**
external optical drives: very low request --> no standard offer		

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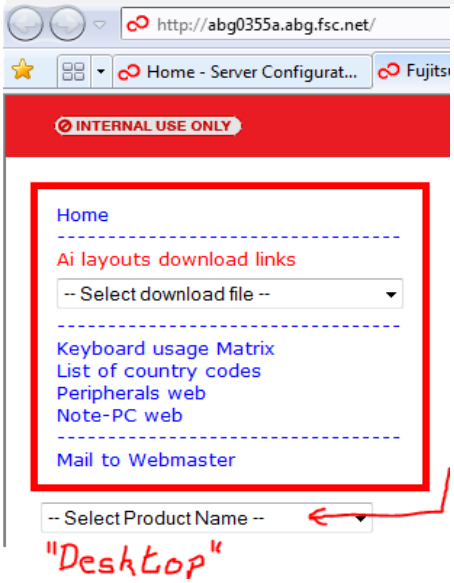
Please find the layout of all Fujitsu keyboards here: http://abg0355a.abg.fsc.net/
Please choose @ "select Product Name" --> "Desktop layouts"



Chapter 16 - others

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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

S26113-F3776-E101
Cool-safe ® Advanced Thermal design
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

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

S26361-F3552-E6 **S26361-F3552-L6**
TPM Module
TPM 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

You would like to add some customer specific solutions?

made4you

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

Group	Description	order code	Status LLC
Base unit	RX2530 M1 4x2.5 LLC Rack Server	S26361-K1492-V302	agreed
Base unit	RX2530 M1 with 10x 2,5 Zoll HDD Bays	S26361-K1492-V501	NO
Base unit	RX2530 M1 with 4x 3,5 Zoll HDD Bays	S26361-K1492-V101	NO
CPU	Intel Xeon E5-2609v3 6C/6T 1.90 GHz	S26361-F3849-E109	agreed
CPU	Intel Xeon E5-2620v3 6C/12T 2.40 GHz	S26361-F3849-E120	agreed
CPU	Intel Xeon E5-2640v3 8C/16T 2.60 GHz	S26361-F3849-E140	agreed
CPU	Intel Xeon E5-2660v3 10C/20T 2.60 GHz	S26361-F3849-E160	NO
CPU	Intel Xeon E5-2667v3 8C/16T 3.20 GHz	S26361-F3849-E167	NO
CPU	Intel Xeon E5-2670v3 12C/24T 2.30 GHz	S26361-F3849-E170	NO
CPU	Intel Xeon E5-2680v3 12C/24T 2.50 GHz	S26361-F3849-E180	agreed
CPU	Intel Xeon E5-2695v3 14C/28T 2.30 GHz	S26361-F3849-E195	agreed
CPU	Intel Xeon E5-2697v3 14C/28T 2.60 GHz	S26361-F3849-E197	NO
CPU	Intel Xeon E5-2698v3 16C/32T 2.30 GHz	S26361-F3849-E198	NO
CPU	Kühllösung für 2te CPU	S26361-F3849-E100	agreed
CPU	Xeon E5-2609v3 6C/6T 1.90GHz 15MB 6.4GT/s 1600MHz 85W	S26361-F3849-E109	agreed
FC	FC Ctrl 8Gb/s 2 Kanal LPe12002 MMF LC LP	S26361-F3961-E202	agreed
FC	PFC EP LPe16002 LP	S26361-F4994-E202	agreed
GFX	Front VGA	S26361-F1420-E130	agreed
HDD	2.5" PCIe-SSD 1.6TB, MLC	S26361-F5534-E161	NO
HDD	2.5" PCIe-SSD 2TB, MLC	S26361-F5534-E201	NO
HDD	HD SAS 12G 1.2TB 10K HOT PL 2.5" EP	S26361-FXXXX-E112	agreed
HDD	HD SAS 12G 300GB 15K HOT PL 2.5' EP	S26361-F5531-E530	agreed
HDD	HD SAS 12G 600GB 15K HOT PL 2.5' EP	S26361-F5531-E560	agreed
HDD	HD SAS 12G 900GB 10K HOT PL 2.5" EP	S26361-FXXXX-E190	agreed
HDD	HD SAS 12G 900GB 15K HOT PL 2.5" EP		agreed
HDD	SSD SATA 6G 120GB ReadIntensive 3.5' H-P	S26361-F5530-E120	open
HDD	SSD SAS 12G 400GB High Endurance 2.5" H-P EP		agreed
HDD	SSD SAS 12G 400GB Main 2.5" H-P EP	S26361-F5298-E400	agreed
HDD	SSD SAS 12G 800GB High endurance 2.5" H-P EP		NO
HDD	SSD SAS 12G 800GB Main 2.5" H-P EP	S26361-F5298-E800	agreed
LAN	Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+ lp	S26361-F3629-E202	agreed
LAN	LAN Dummy	S26361-F5302-E100	agreed
LAN	PCNA EP OCe14102 2x 10Gb LP	S26361-F5250-E201	agreed
LAN	PLAN CP 2x1Gbit Cu Intel I350-T2 LP	S26361-F4610-E202	agreed
LAN	PLAN CP 2x1Gbit Cu Intel I350-T24 LP	S26361-F4610-E204	agreed
LAN	PLAN EM 2x10Gb SFP interface card	S26361-F5302-E211	agreed
LAN	PLAN EM 2x1Gb T OCl14000-LOM interface	S26361-F5302-E201	agreed
ODD	DVD-RW supermulti ultraslim SATA	S26361-F3778-E1	agreed
others	Cool-safe® Advanced Thermal Design	S26361-F3776-E101	agreed
PSU	Leitung Netzanschluss Rack, 4m, grau	T26139-Y1968-E100	agreed
PSU	Modular PSU 450W platinum hp	S26113-F575-E13	agreed
PSU	Modulare SV 800W platinum hp	S26113-F574-E13	agreed
PSU	Power cable Rack, 4m, grey	T26139-Y1968-E100	agreed
PSU	Stromversorgung Blende	S26113-F574-E99	agreed
Rack	Einbau in symmetrische Racks	S26361-F4530-E10	agreed
Rack	Rack Mount Kit F1 CMA QRL LV	S26361-F2735-E400	agreed
Rack	Rack Mount Kit F1 Slim Line	S26361-F2735-E401	agreed
Rack	Tragewinkel 1HE in asymmetrische Racks	S26361-F4530-E11	agreed
Rack	Rack Cable Arm 1U	S26361-F2735-E81	agreed
RAID	PRAID CP400i	S26361-F3842-E1	agreed
RAID	PRAID EP420i	S26361-F5243-E2	agreed
RAID	RAID Ctrl FBU Option mit 70cm Kabel	S26361-F5243-E170	agreed
RAID	TFM Modul für FBU auf PRAID EP420i	S26361-F5243-E200	agreed
RAM	4 GB (1x4 GB) DDR4-2133 R ECC		NO
RAM	8GB (1x8GB) 1Rx4 DDR4-2133 R ECC	S26361-F3843-E514	NO
RAM	16GB (1x16GB) 2Rx4 DDR4-2133 R ECC	S26361-F3843-E516	agreed
RAM	16GB (1x16GB) 2Rx4 DDR4-2133 R ECC	S26361-F3843-E516	agreed
RAM	32GB (1x32GB) 4Rx4 DDR4-2133 LR ECC	S26361-F3844-E517	agreed
RAM	Performance Mode Installation	S26361-F3694-E2	agreed
Region	Region-Kit APAC/EMEA/Indien	S26361-F1452-E100	agreed
TPM	TPM Module	S26361-F3552-E6	agreed
PCIe switch	PPCI EP x16 Switch	S26361-F5267-E201	NO
SMM	iRMC S4 advanced pack	S26361-F1790-E243	freeze in 2018

Date of change [dd.mm.yyyy]	Folder / order code / description	Name	What has been changed / comment
26.08.2015	S26361-F556*-*	Özcan Karakas	added 3.5" SAS 10K HDDs
26.08.2015	S26361-F5539-E201	Freise	added Emulex Single Port 40Gb CNA
26.08.2015	S26361-F5557-E201	Freise	added Emulex Dual Port 10GBASE-T NIC
19.08.2015	S26361-F5243-E125	Linne	added again FBU with 25cm cable for V101
07.08.2015	S26361-F1537-L200	Linne	changed Comments for L-Part for SAS3 Cable Kit
21.07.2015	RAID	Anja Ertl	RAID controller updated
21.07.2015	S26361-F5550-E*/L*	Özcan Karakas	Added 2.5" HDD SAS 12G 10K 512n
16.07.2015	LLC	Özcan Karakas	LLC options updated S26361-F5531-E530
24.06.2015	LLC	Robert Brunnb.	LLC options updated
22.06.2015	S26361-F3844-E518	Anja Ertl	available later removed
29.05.2015	S26361-F3816-L*	Özcan Karakas	L - order codes as special release added.
29.05.2015	S26361-F3817-L*	Özcan Karakas	L - order codes as special release added.
29.05.2015	S26361-F3904-E600/L600	Özcan Karakas	HDD 3.5" SATA 6G 7.2Krpm 512e 6TB added.
13.03.2015	LAN, new 10Gbit/s cloud card	Peter Freise	Emulex Cloud card (S26361-F5250-E210) added
17.02.2015	RAID -- PCIe switch /// GFX	Martin Keil	new L-code: S26361-F5267-L503 (PCIe Switch incl cables), changed order code E131 for Front VGA
17.02.2015	CPU	Klaus-Dieter Ruf	S26361-F3849-L180 on special release only
16.02.2015	RAID/ others	Martin Keil	restriction added " FBU & Atd cannot be combined.
28.01.2015	LLC - long life cycle	Martin Keil	folder "LLC" - long lifecycle added
22.01.2015	LAN	Martin Keil	max.# of 10Gbit PCIe cards reduced to 2x (before: 3x)
22.01.2015	base unit (Rack)	Martin Keil	rack components added / corrected
20.01.2015	RAID	Martin Keil	L-code for SAS3.0 cable kit added
07.01.2015	First Release		