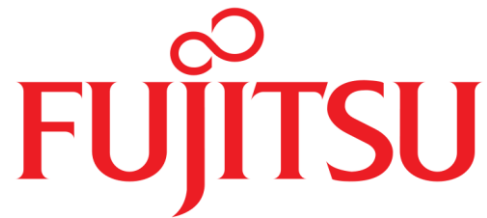


PRIMERGY RX2520 M4  
2U Rack Server



| Chapter | Folder      | Content   |
|---------|-------------|---|
|         | Cover       | List of content, Instructions for usage of this configurator, abbreviations |
|         | Description | System Description for easier understanding                                 |
| 1       | Base        | describes base unit of RX2520 M4  |
| 2       |             | describes rack mount kits and services                                      |
| 3       | CPU         | Order code and Information of E5-26xxv5 series processors                   |
| 4       | RAM         | DDR4 System memory (RAM) and memory modes                                   |
| 5       | GFX         | Graphics options  |
| 6       | HD_cage     | Drive cage options  |
| 7       | RAID        | SAS / RAID Controller and components  |
| 8       | ODD         | optical disk drives (DVD, DVD-rw, Blu ray)                                  |
| 9       | Backup      | LTO drives & RDX drive  |
| 10      | HD_SSD      | Storage drives - PCIe SSD - SAS/SATA SSD & HDD                              |
| 11      | LAN_FC_IB   | LAN Components  |
| 12      |             | Fibre Channel Controller  |
| 13      |             | Infiniband Controller   |
| 14      | PSU         | Power supply units, power cables, country specific opt.                     |
| 15      | USB_devices | Keyboards, Mice, USB devices  |
| 16      | others      | System Management, ATD, RS232 port, TPM module                              |

# 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, ...)

|   |
|---|
| <b>S26361-F4610-Exxx (example)</b>                                    |
| <b>S26361-F4610-Lxxx (example)</b>                                    |
| 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](http://ts.fujitsu.com/products/standard_servers/index.html)

(internet)

[https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy\\_config/Pages/default.aspx](https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx)

(extranet)

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

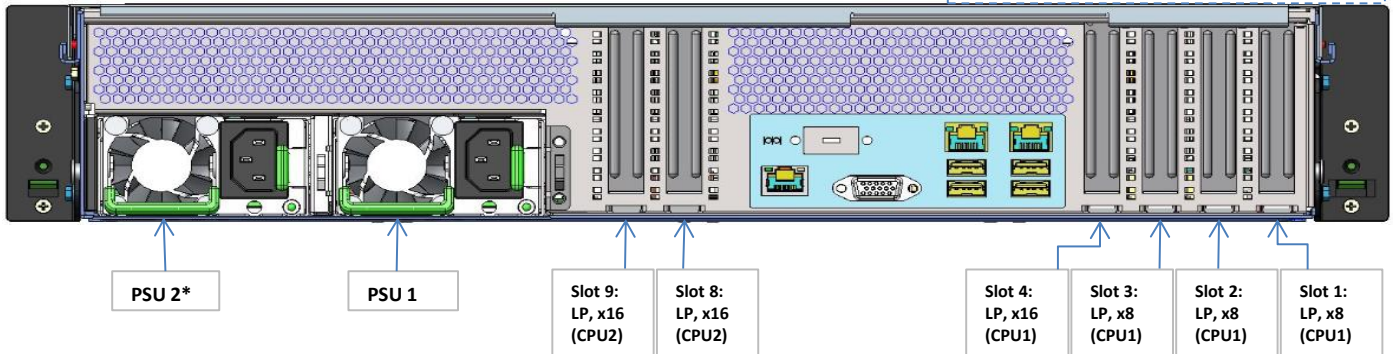


**PRIMERGY RX2520 M4 system board overview with fan modules and air guide**



**PRIMERGY RX2520 M4 rear view with PSUs, PCIe-slots, interfaces**

Slot 4: preferred slot for Retimer controller  
 Slot 2: preferred slot for 1<sup>st</sup> RAID controller  
 Slot 1: preferred slot for 2<sup>nd</sup> RAID controller



**PRIMERGY RX2520 M4 front views with drive bays, operation panel, ODD, backup options**

**3.5" hot-plug SAS/SATA**

**4x 3.5" HDDs**



**2.5" hot-plug SAS/SATA**

**8x 2.5" HDDs/SSDs**



**8x 3.5" HDDs**



**16x 2.5" HDDs/SSDs**



**12x 3.5" HDDs**



**24x 2.5" HDDs/SSDs**



! Pictures may include optional components.

**Chapter 1 - base unit**

**Start**

**Power supply units & cooling**

PRIMERGY RX2520 M4 offers bays for 2x (1x optional hot plug redundant) power supply units of 450W and 800W with up to 96% efficiency; It comes equipped with high performance processor heat pipes and -depending on selected configuration- up to 3 redundant, non-hot-plug fan modules (each fan module includes 2 fans).

**Server Management**

iRMC S5 (integrated Remote Management Controller) on-board with dedicated (or shared) 10/100/1000 Service LAN-port and integrated graphics controller. With the integrated onboard indicators and controls you can easily highlight failed components via LEDs. The LEDs can be displayed during service even without mains connection by simply pressing the "indicate CSS" button.

**Platform**

- Fujitsu Systemboard D3386 made in Germany based on Chipset Intel® C624
- > 2 Intel® UltraPath Interconnect (Intel® UPI) point-to-point links
- > Up to two Skylake-SP series CPUs
- > Onboard RAID 0/1 6Gbit/s available for up to 8x SATA drives

**Slots**

- Per default, 6 PCIe slots are on board - please refer to "Description" section
- > 4 PCIe slots low profile, 198 mm length with first CPU:
  - Slot 1: PCIe-Gen3 x8 (occupied in configurations with 2x RAID controllers; notched for installation of a x16 card)
  - Slot 2: PCIe-Gen3 x8 (occupied in configurations with 1x RAID controller; notched for installation of a x16 card)
  - Slot 3: PCIe-Gen3 x8 (notched for installation of a x16 card)
  - Slot 4: PCIe-Gen3 x16
- > 2 PCIe slots low profile, 198 mm length with second CPU:
  - Slot 8: PCIe-Gen3 x16 (occupied in configurations with 1x Retimer controller)
  - Slot 9: PCIe-Gen3 x16 (occupied in configurations with 2x Retimer controllers)

**System RAM**

- > 12x memory slots for max. 384GB DDR4-2666MHz RAM available (6x RDIMM modules per CPU).
- Memory speed depends on CPU and configuration, please refer to folder "CPU" and "RAM" for further details.

**LAN**

- > 2x 1Gb LAN onboard;

**Software**

- > Optional ServerView Suite software incl. ServerView Installation Manager, Server View Remote Management and tools.

**Connectivity**

**Interfaces at rear side**

- 1x optional RS-232-C (serial port, 9 pin)
- 2x LAN RJ45 (additional 2x RJ45 optionally available)
- 1x service LAN RJ45 (1 Gbit)
- 1x VGA (15 pins)
- 4x USB 3.0

**Interfaces at front**

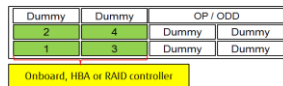
- 2x USB 3.0 (no USB wakeup)

**Interfaces internal**

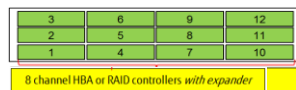
- 1x USB 2.0 for backup devices, 1x USB 3.0 (type A)
- 2x M.2 SATA/PCIe
- 1x connector for TPM, 1x microSD card slot

**Base units for 19" racks with 2 height units:**  
 Base units are excluding CPU, Memory and PSU.  
 For an orderable base unit 1x CPU = first CPU  
 and 1x Memory = first memory must be selected.

| Base units with 3.5" drive bays                        |                   |
|--|-------------------|
| <b>RX2520 M4 / 4x3.5"</b>                              | S26361-K1599-V304 |
| Expandable to 8x3.5"                                   |                   |
| ATD 40°C/45°C option                                   |                   |
| <b>RX2520 M4 / 12x3.5"</b>                             | S26361-K1599-V312 |
| Not expandable   |                   |
| Incl. SAS expander for 8-channel HBA / RAID controller |                   |
| ATD 40°C only / no 45°C option!                        |                   |

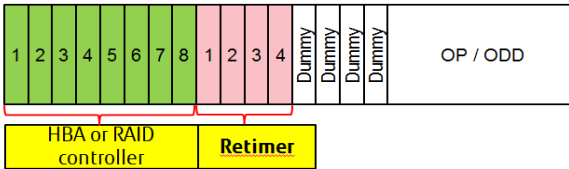
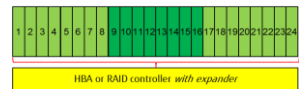


**Note:** Dummy: Dummy bay bezel OP/ODD: Cage for operation Panel,



| Base units with 2.5" drive bays  |                   |
|--|-------------------|
| <b>RX2520 M4 / 8x2.5"</b><br>Expandable to 16x-/24x2.5"<br><b>ATD 40°C/45°C option</b>   | S26361-K1599-V208 |
| <b>RX2520 M4 / 16x2.5"</b><br>Not expandable<br>Without SAS expander, for configuration with:<br>2x 8-channel HBA or RAID controllers (mirrored), or<br>16-channel PRAID EP540i<br><b>ATD 40°C/45°C option</b> | S26361-K1599-V217 |
| <b>RX2520 M4 / 24x2.5"</b><br>Not expandable<br>Incl. SAS expander for 8-channel HBA / RAID controller<br><b>ATD 40°C only / no 45°C option!</b>   | S26361-K1599-V224 |
| <b>RX2520 M4 / PCIe-SSD</b><br>8x2.5" SAS/SATA + 4xPCIe-SSD (2.5")<br>Requires 1x Retimer<br><b>No upgrade to 8x PCIe-SSD possible</b><br><b>ATD 40°C only / no 45°C option!</b>                               | S26361-K1599-V212 |

PRIMECENTER Rack



**Note:** \_\_\_\_\_ **Dummy:**  
Dummy bay bezel **OP/ODD:**  
Cage for operation Panel,  
optional optical disk drive and  
backup

## Chapter 2 - Rack architecture

### PRIMECENTER Rack

| Rack Architecture                       | E-code   | L-code                   | Remark            |   |
|---|--|--------------------------|-------------------|---|
| No RMK                                  | 1x Only with loose server order  | S26361-F2735-E111        | n/a               | no mounting in rack   |
| Rack Mount Kit F1<br>CMA QRL LV         | 1x RMK for server w/max. 2U, w/CMAAdapter  | S26361-F2735-E175        | S26361-F2735-L175 | precondition<br>for CMArm   |
| Bracket 1U for asymmetrical<br>rack     | 1x Mounting or enclose of RMK<br>in asym.rack incl.1U bracket                        | S26361-F4530-E11         | n/a               | for asymmetrical<br>rack  |
| Mounting of RMK in<br>symmetrical rack  | 1x Mounting or enclose of RMK in symmetrical<br>racks w/o support bracket            | S26361-F4530-E10         | n/a               | for symmetrical<br>rack   |
| Rack Mount Kit F1 LV                    | 1x For server max. 2 height units (U)<br>or max. 35 kg, w/o CMAAdapter               | S26361-F2735-<br>E176n/a | S26361-F2735-L176 | best choice for<br>3rd party racks<br><b>-E176 will be available<br/>from Sep.-18</b> |
| Rack Cable Arm 2U                       | 1x Cable mgmt. arm for 2U or higher  | S26361-F2735-E82         | S26361-F2735-L82  | RMK with<br>CMAAdapter needed   |
| Cable mgmt. lateral for<br>asym.racks   | 1x For server/storage subsyst.2U or higher   | S26361-F2735-E71         | S26361-F2735-L7   | occupies 1U above RMK   |
| Cable arm 2U PCR and 3rd<br>party racks | 1x To be mounted at right or left rack pillar<br>behind servers higher oder equal 2U | n/a                      | S26361-F2201-L20  | mounted above RMK<br>-F2735-L176  |
| Rack installation ex works              | 1x Rack will be delivered completely<br>premounted and tested ex factory             | SNP:SY-F1647E301-P       | n/a               | to be ordered 1x<br>per installed rack server   |
| Adapter angle                           | 1x For asymm. rack, 1U, up to 15kg   | n/a                      | S26361-F2735-L10  | needed for mounting<br>of RMK in asym. rack   |

A



## 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

>> With one processor LOM, IRMC and 12x DIMM slots are available

>> With two processors all 24x DIMM slots are available.

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

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

\* HT = Hyper Threading

| <b>Xeon Bronze 3100 - Basic (Shelf 1)</b>   |                   |                   |
|---|-------------------|-------------------|
| 64-bit Intel Xeon processor supporting DDR4 @ 2133MHz & QPI Bus @ 9.6 GT/s                      |                   |                   |
| Xeon Bronze 3104 6C nHT 1.7GHz 85W  | S26361-F4051-E104 | S26361-F4051-L104 |
| Xeon Bronze 3106 8C nHT 1.7GHz 85W  | S26361-F4051-E106 | S26361-F4051-L106 |
| <b>Xeon Silver 4100 - Standard (Shelf 2)</b>  |                   |                   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus 9.6 GT/s                  |                   |                   |
| Xeon Silver 4108 8C 1.8GHz 85W  | S26361-F4051-E108 | S26361-F4051-L108 |
| Xeon Silver 4110 8C 2.1GHz 85W  | S26361-F4051-E110 | S26361-F4051-L110 |
| Xeon Silver 4114 10C 2.2GHz 85W   | S26361-F4051-E114 | S26361-F4051-L114 |
| Xeon Silver 4116 12C 2.1GHz 85W   | S26361-F4051-E116 | S26361-F4051-L116 |
| <b>Xeon Silver 4100 - Frequency Optimized (Shelf 2)</b>   |                   |                   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 9.6 GT/s                |                   |                   |
| Xeon Silver 4112 4C 2.6GHz 85W  | S26361-F4051-E212 | S26361-F4051-L212 |
| <b>Xeon Gold 5100 - Advanced (Shelf 3)</b>  |                   |                   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & QPI Bus @ 10.4 GT/s               |                   |                   |
| Xeon Gold 5115 10C 2.4GHz 85W   | S26361-F4051-E115 | S26361-F4051-L115 |
| Xeon Gold 5118 12C 2.3GHz 105W  | S26361-F4051-E118 | S26361-F4051-L118 |
| Xeon Gold 5120 14C 2.2GHz 105W  | S26361-F4051-E120 | S26361-F4051-L120 |
| <b>Xeon Gold 5100 - Frequency Optimized (Shelf 3)</b>   |                   |                   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & QPI Bus @ 10.4 GT/s               |                   |                   |
| Xeon Gold 5122 4C 3.6GHz 105W   | S26361-F4051-E222 | S26361-F4051-L222 |
| <b>Cooler Kit (see comment above; for upgrade please use according kit to the selected CPU)</b> |                   |                   |
| Cooling Kit 2nd CPU   | S26361-F3849-E100 |                   |
| Cooler Kit for 2nd CPU - no ATD   |                   | S26361-F4051-L820 |
| Cooler Kit for 2nd CPU - ATD supported  |                   | S26361-F4051-L821 |

ATD 40°C / no 45°C option!

C

## Chapter 4 - DDR4 System memory

C

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

Mix of RDIMM and RDIMM 3DS is under investigation (currently not allowed).

Supported memory capacities per CPU:  
192GB DDR4 RDIMM (6x 32GB 2Rx4)

Supported memory capacities per System:  
384GB using RDIMM

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

|   |                                    |
|---|------------------------------------|
| <b>S26361-F3694-E10</b>   | Independent Mode Installation      |
| Independent Channel Mode allows all channels to be populated in any order. No specific Memory RAS features are defined  |                                    |
| Requires minimum 1 memory Module per CPU  |                                    |
| <b>S26361-F3694-E2</b>  | Performance Mode Installation      |
| BIOS Setup factory preinstalled for maximum Performance, six identical memory modules will be equipped in one memory bank to achieve highest memory performance. All six modules are active and full capacity can be used.                  |                                    |
| Multiple of 6 identical modules to be configured per CPU  |                                    |
| <b>S26361-F3694-E3</b>  | Mirrored Channel Mode Installation |
| BIOS Setup factory preinstalled to this mode. Six identical memory modules are always equipped in one memory bank to use the Mirrored channel Mode. Only three modules contain active data, the remain three modules contain mirrored data. |                                    |
| Multiple of 6 identical modules to be configured per CPU  |                                    |

| DDR4 rg x8 2666   |                          |                          |                      |
|---|--------------------------|--------------------------|----------------------|
| 8GB (1x8GB) 2Rx8 DDR4-2666 R ECC                                  | <b>S26361-F4026-E118</b> | <b>S26361-F4026-L118</b> | only special release |
| 16GB (1x16GB) 2Rx8 DDR4-2666 R ECC                                | <b>S26361-F4026-E116</b> | <b>S26361-F4026-L116</b> | only special release |
| DDR4 rg x4 2666   |                          |                          |                      |
| 8GB (1x8GB) 1Rx4 DDR4-2666 R ECC                                  | <b>S26361-F4026-E208</b> | <b>S26361-F4026-L208</b> | only special release |
| 16GB (1x16GB) 2Rx4 DDR4-2666 R ECC                                | <b>S26361-F4026-E226</b> | <b>S26361-F4026-L226</b> |                      |
| 16GB (1x16GB) 1Rx4 DDR4-2666 R ECC                                | <b>S26361-F4026-E216</b> | <b>S26361-F4026-L216</b> |                      |
| 32GB (1x32GB) 2Rx4 DDR4-2666 R ECC                                | <b>S26361-F4026-E232</b> | <b>S26361-F4026-L232</b> |                      |
| NVDIMM 2666 (will be launched in 2018; not POR for first release) |                          |                          |                      |
| 128GB (1x128GB) DDR4-2666 NV ECC                                  | TBD                      | TBD                      |                      |
| 256GB (1x256GB) DDR4-2666 NV ECC                                  | TBD                      | TBD                      |                      |
| 512GB (1x512GB) DDR4-2666 NV ECC                                  | TBD                      | TBD                      |                      |

D

Detailed information

| Mode                     | Configuration              | RDIMM | Use case, advantage                               |
|--------------------------|----------------------------|-------|---|
|                          |                            | x4    |   |
| SDDC (chipkill) support  | any                        | yes   | supports detecting multi-bit errors               |
| Independant channel mode | 1 or 2 Modules per Bank    | yes   | offers max. flexibility, upgradeability, capacity |
| Mirrored channel mode *) | 6 identical Modules / Bank | yes   | offers maximum security                           |
| Performance mode         | 6 identical Modules / Bank | yes   | offers maximum performance and capacity           |

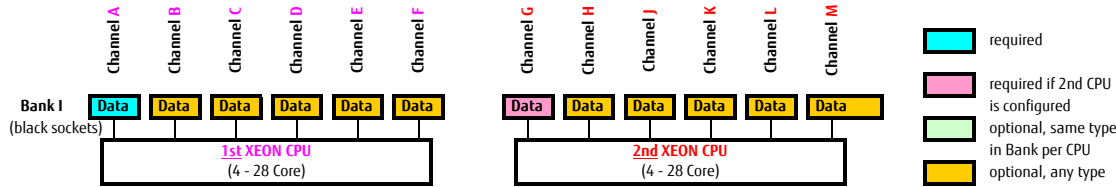
\*) For the delivery ex factory the system will be prepared with dedicated BIOS setting.

| Capacity               | Configuration       | RDIMM | Notes                       |
|------------------------|---------------------|-------|-----------------------------|
| Min. Memory per CPU    | 1 Module / CPU      | 1x8GB | with one CPU                |
| Max. Memory per CPU    | 6 Modules / CPU     | 192GB | with one CPU                |
| Max. Memory per System | 12 Modules / System | 384GB | if second CPU is configured |

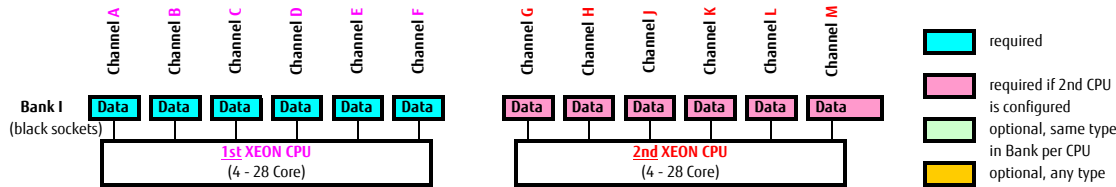
The memory sockets on the Systemboards are color coded

|               |               |                |              |
|---------------|---------------|----------------|--------------|
| <b>Bank I</b> | black sockets | <b>Bank II</b> | blue sockets |
|---------------|---------------|----------------|--------------|

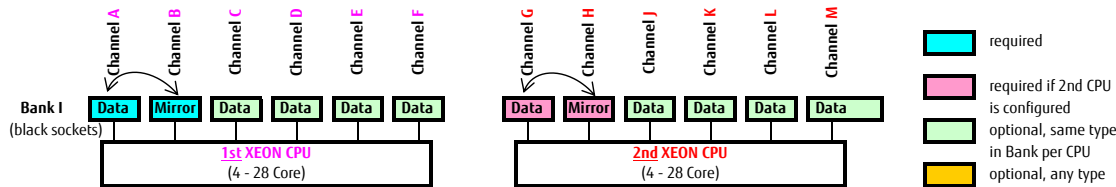
Independant channel mode



Performance Channel Mode

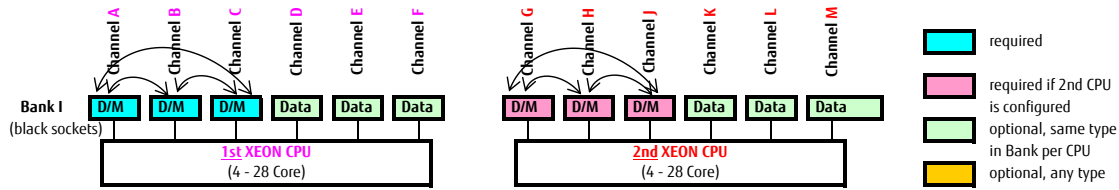


Mirror Channel Mode (2 DIMMS per CPU)



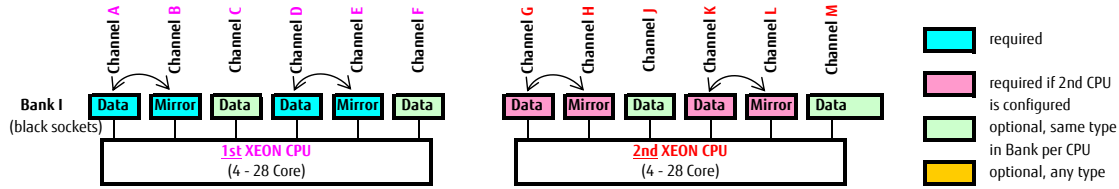
Mirrored Channel Mode (2 DIMMS per CPU) requires identical modules on channel A & B (1st CPU) or channel G & H (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 2 identical modules has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

**Mirror Channel Mode (3 DIMMS per CPU)**



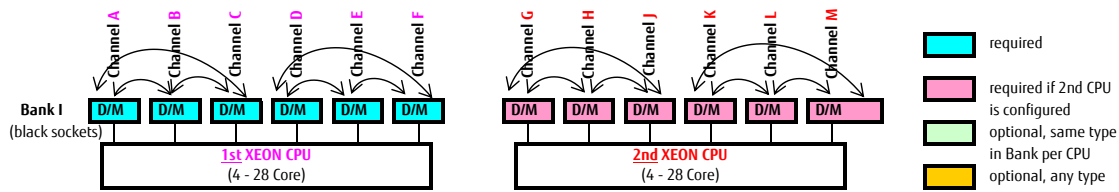
Mirrored Channel Mode (3 DIMMS per CPU) requires identical modules on channel A, B & C (1st CPU) or channel G, H & J (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 3 identical modules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

**Mirror Channel Mode (4 DIMMS per CPU)**



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

**Mirror Channel Mode (6 DIMMS per CPU)**



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

**Chapter 5 - Graphics options**

D

„on special release only!“

|  |
|--|
| S26361-F2748-E638  |
| S26361-F2748-L638  |
| PGRA CP NVS 1GB VGA PCIe x16   |
| NVIDIA NVS315 1024 MB PCIe-x16   |
| Connectors: 1x LFH 59, cable kit for 2x DVI or 2x VGA cable kits included                      |
| Dual head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS |
| occupies slot 3 (or 8)   |
| max. 1x per system   |

The high end optional NVIDIA NVS315 graphic card offers dual head operation and full 3D video support. The cables for either two times DVI-I or VGA connections are included.  
**Remote Video direction via iRMC must be disabled.**

**PY VGA card can be installed in slot 3 (CPU1) or slot 8 (CPU2)**

|  |
|--|
| S26361-F4066-E401  |
| S26361-F4066-L401  |
| PGRA CP NVIDIA Quadro P400   |
| NVIDIA Quadro  |
| 2GB PCIe 3.0 x16   |
| Connectors: 3x Mini-DP   |
| no cable kits included<br>cable must be ordered seperately                                       |
| Triple head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS |
| Low profile bracket  |
| occupies slot 3 (or 8)   |
| max. 1x per system   |

The high end optional NVIDIA Quadro graphic card offers triple head operation and fully 3D video support.  
**Remote Video direction via iRMC must be disabled.**  
Only one card per server is allowed.

**PY VGA card can be installed in slot 3 (CPU1) or slot 8 (CPU2)**

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

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

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

E

**Chapter 6 - Drive cage options**

F

PRIMERGY RX2520 M4 base units provide 3.5" and 2.5" HDD/SSD configurations as shown in "base" section and in the below overview. With HD drive cage options, the maximum amount of HDD-/SSD-drive bays can be increased after purchase of the system. A HD drive cage is a metal box providing bays for 3.5" HDDs, 2.5" HDDs/SSDs or PCIe-SSDs. Please select HD drive cage upgrade kits, depending on the preselected PRIMERGY RX2520 M4 base unit.

Each upgrade kit contains all relevant parts such as the metal cage, backplane, cables and mounting material. Refer to section "RAID" to select the required RAID configuration. Depending on the preselected drive bay configuration, PRIMERGY RX2520 M4 includes 1x 1.6" bay for backup drive and bay for slim 9.5mm optical disk drive. Corresponding options can be selected in sections "ODD" and "backup".

|  |   |  |
|--|---|--|
| <b>For 4x3.5" base unit (S26361-K1599-V304)</b>                                | <b>For 8x2.5" base unit (S26361-K1599-V208)</b>   | <b>For 8x2.5" base unit (S26361-K1599-V208)</b><br><b>To PCIe-SSD base unit (S26361-K1599-V212)</b>  |
| <b>Upgrade kit 8x3.5"</b> <b>S26361-F2495-E308</b><br><b>S26361-F2495-L308</b> | <b>Upgrade kit 16x2.5"</b> <b>S26361-F2495-E216</b><br><b>S26361-F2495-L216</b>   | <b>Upgrade kit 4xPCIe-SSD</b> <b>S26361-F2495-L284</b>   |
| Not further expandable<br>max. 1x per system                                   | Expandable to 24x2.5"<br>Including SAS Expander<br>max. 1x per system   | Not further expandable<br>Requires Retimer or EP5xx-series RAID controller<br>consuming PCIe slot 4<br>max. 1x per system  |
|  | <b>Upgrade kit 24x2.5"</b> <b>S26361-F2495-L224</b><br>For upgrade from 8x to 24x2.5"<br>Not further expandable<br>Including SAS Expander<br>max. 1x per system | <b>Upgrade kit 24x2.5"</b> <b>S26361-F2495-L234</b><br>For upgrade from 16x to 24x2.5"<br>Not further expandable<br>Including SAS Expander<br>max. 1x per system |

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

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

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**Chapter 7 - SAS / RAID Controller**

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

**onboard SATA controller with SW-RAID**

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

**internal HBA and RAID controller, no 2nd Level cache**

|   |          |                          |    |                                   |
|---|----------|--------------------------|----|-----------------------------------|
| <b>internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives</b>  |          |                          |    |                                   |
| <b>PRAID CP400i RAID Contr.</b>   | No Cache | RAID 0, 1, 1E, 10, 5, 50 | 2x | S26361-F3842-E1 S26361-F3842-L501 |
| <b>PSAS CP400i HBA SAS Contr.</b>   | No Cache | HBA + RAID 0, 1          | 2x | S26361-F3842-E2 S26361-F3842-L502 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008 |          |                          |    |                                   |

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

|  |                            |                                 |    |                                     |
|--|----------------------------|---------------------------------|----|-------------------------------------|
| <b>internal drive RAID / SAS, SATA controllers with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options</b>                     |                            |                                 |    |                                     |
| <b>PRAID EP400i RAID Contr.</b>  | 1GB Cache                  | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F5243-E11 S26361-F5243-L11   |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3108      |                            |                                 |    |                                     |
| optional Licence Activation Key, a free of charge test licence is available at PRIMERGY-PM, FastPath is included in Controller FW                      |                            |                                 |    |                                     |
| <b>RAID Advanced SW Option CacheCade</b> ®Broadcom: SSD-cache-based HDD acceleration   |                            |                                 | 2x | S26361-F5243-E670 S26361-F5243-L670 |
| optional Transportable Flash module (TFM) and Flash Backup Unit (FBU), both components required  |                            |                                 |    |                                     |
| <b>TFM module</b> for 1GB Cache  | NV-RAM & FBU control logic |                                 | 2x | S26361-F5243-E100 S26361-F5243-L100 |
| <b>FBU Option for PRAID EP4xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 25cm length |                            |                                 | 2x | S26361-F5243-E125 S26361-F5243-L115 |
| <b>PRAID EP420i RAID Contr.</b>  | 2GB Cache                  | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F5243-E12 S26361-F5243-L12   |
| <b>PRAID EP420i for SafeStore R. Contr.</b>  | 2GB Cache                  | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F5243-E14* S26361-F5243-L14* |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3108      |                            |                                 |    |                                     |
| optional Licence Activation Key, a free of charge test licence is available at PRIMERGY-PM, FastPath is included in Controller FW                      |                            |                                 |    |                                     |
| <b>RAID Advanced SW Option CacheCade</b> ®Broadcom: SSD-cache-based HDD acceleration   |                            |                                 | 2x | S26361-F5243-E670 S26361-F5243-L670 |
| optional TFM module and Flash Backup Unit (FBU), both components required  |                            |                                 |    |                                     |
| <b>TFM module</b> for 2GB Cache  | NV-RAM & FBU control logic |                                 | 2x | S26361-F5243-E200 S26361-F5243-L200 |
| <b>FBU Option for PRAID EP4xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length |                            |                                 | 2x | S26361-F5243-E155 S26361-F5243-L115 |

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

|  |           |                                 |    |                                     |
|--|-----------|---------------------------------|----|-------------------------------------|
| <b>internal drive RAID / SAS controllers for E91 and SAS, SATA HDD or SSD drives</b>   |           |                                 |    |                                     |
| <b>PRAID EP520i RAID Contr. LP</b>   | 2GB Cache | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F4042-E202 S26361-F4042-L502 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander<br><b>(NVMe support for EP520i on special release for this controller in this system)</b><br>includes Fastpath and SafeStore Advanced SW-Licence<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 |           |                                 |    |                                     |
| <b>PRAID EP540i RAID Contr. LP</b>   | 4GB Cache | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F4042-E204 S26361-F4042-L504 |
| <b>PRAID EP580i RAID Contr. LP</b>   | 8GB Cache | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 2x | S26361-F4042-E208 S26361-F4042-L508 |
| 16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, based on LSI SAS3516, supports up to 16 devices without expander or<br>(no NVMe support by PRAID EP5xxi in this system)<br>includes Fastpath and SafeStore Advanced SW-Licence<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516            |           |                                 |    |                                     |
| optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included   |           |                                 |    |                                     |
| <b>FBU Option for PRAID EP5xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length   |           |                                 | 2x | S26361-F4042-E155 S26361-F4042-L110 |

**maximum number of internal RAID + HBA (See also pictures on folder base / HDD cage):**  
standard config: max. 1

FBU can be combined with Advanced Thermal design up to 45 degree  
up to 2x FBU can be integrated per System

**Expander configurations:** Use PRAID EPxxxi for optimal performance,  
PRAID CP400i is not released for expander configurations

**Advanced SW options:**  
simultaneous operation of SafeStore or CacheCade + FastPath or is supported,  
simultaneous operation of Safestore + CacheCade is not supported  
\* It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality

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**external SAS controller**

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

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

|  |                            |                                 |    |                                     |
|--|----------------------------|---------------------------------|----|-------------------------------------|
| <b>RAID / SAS, SATA controllers for external drives with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options</b>                |                            |                                 |    |                                     |
| <b>PRAID EP420e RAID Contr. LP</b>   | 2GB Cache                  | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 4x | S26361-F3847-E202 S26361-F3847-L502 |
| <b>PRAID EP420e for SafeStore LP</b>   | 2GB Cache                  | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 4x | S26361-F3847-E204 S26361-F3847-L504 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 2x SFF8644 (external Mini-SAS HD)<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3108              |                            |                                 |    |                                     |
| optional Licence Activation Key, a free of charge test licence is available at PRIMERGY-PM, FastPath is included in Controller FW                      |                            |                                 |    |                                     |
| <b>RAID Advanced SW Option CacheCade</b> ®Broadcom: SSD-cache-based HDD acceleration   |                            |                                 | 4x | S26361-F5243-E670 S26361-F5243-L670 |
| optional TFM module and Flash Backup Unit (FBU), both components required  |                            |                                 |    |                                     |
| <b>TFM module</b> for 2GB Cache  | NV-RAM & FBU control logic |                                 | 2x | S26361-F5243-E200 S26361-F5243-L200 |
| <b>FBU Option for PRAID EP4xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length |                            |                                 | 2x | S26361-F5243-E155 S26361-F5243-L115 |

**external SAS, RAID controller with 2nd Level cache 4GB**

sales status VS35

|  |           |                                 |    |                                     |
|--|-----------|---------------------------------|----|-------------------------------------|
| <b>RAID / SAS, SATA controllers for external drives with Cache and opt. Flash Backup Unit</b>  |           |                                 |    |                                     |
| <b>PRAID EP540e RAID Contr. LP</b>   | 4GB Cache | RAID 0, 1, 1E, 10, 5, 50, 6, 60 | 4x | S26361-F4063-E204 S26361-F4063-L504 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 2x SFF8644 (external Mini-SAS HD)<br>includes Fastpath and SafeStore Advanced SW-Licence<br>requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 |           |                                 |    |                                     |
| optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included   |           |                                 |    |                                     |
| <b>FBU Option for PRAID EP5xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length   |           |                                 | 2x | S26361-F4042-E155 S26361-F4042-L110 |

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

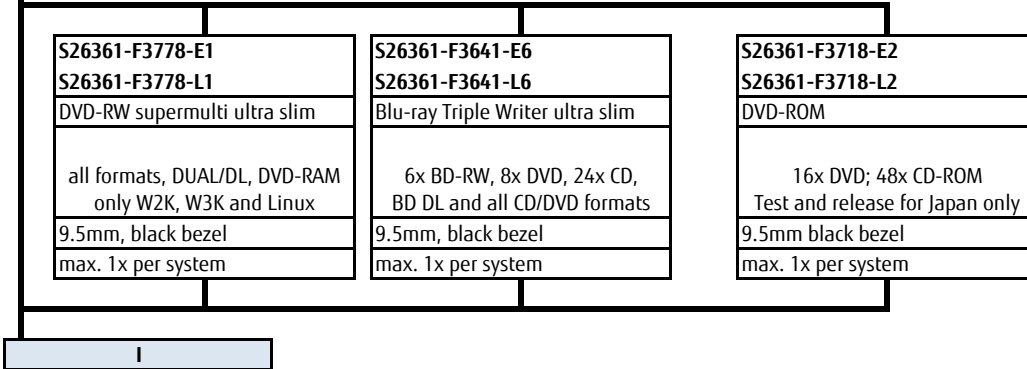
|   |          |            |    |                                     |
|---|----------|------------|----|-------------------------------------|
| <b>retimer controller for internal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)</b>  |          |            |    |                                     |
| <b>PPCI CP x16 retimer PTIM CP100i</b>  | No Cache | No HW-RAID | 1x | S26361-F4048-E201 S26361-F4048-L501 |
| No HW RAID, No Cache, simple route-through incl. Signal enhancement; device management by INTEL VMD<br>divides PCIe3.0 x16 lanes into 4x x4 lanes, supports up to 4x 2.5" PCIe-SSD SFF<br>requires 1x LP PCIe 3.0 x16 (int.) slot |          |            |    |                                     |

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**Chapter 8 - ODD optical disk drives**

The base units with 12x 3.5" or 24x 2.5" HDD do not offer 1x 9.5mm optical drive bay!

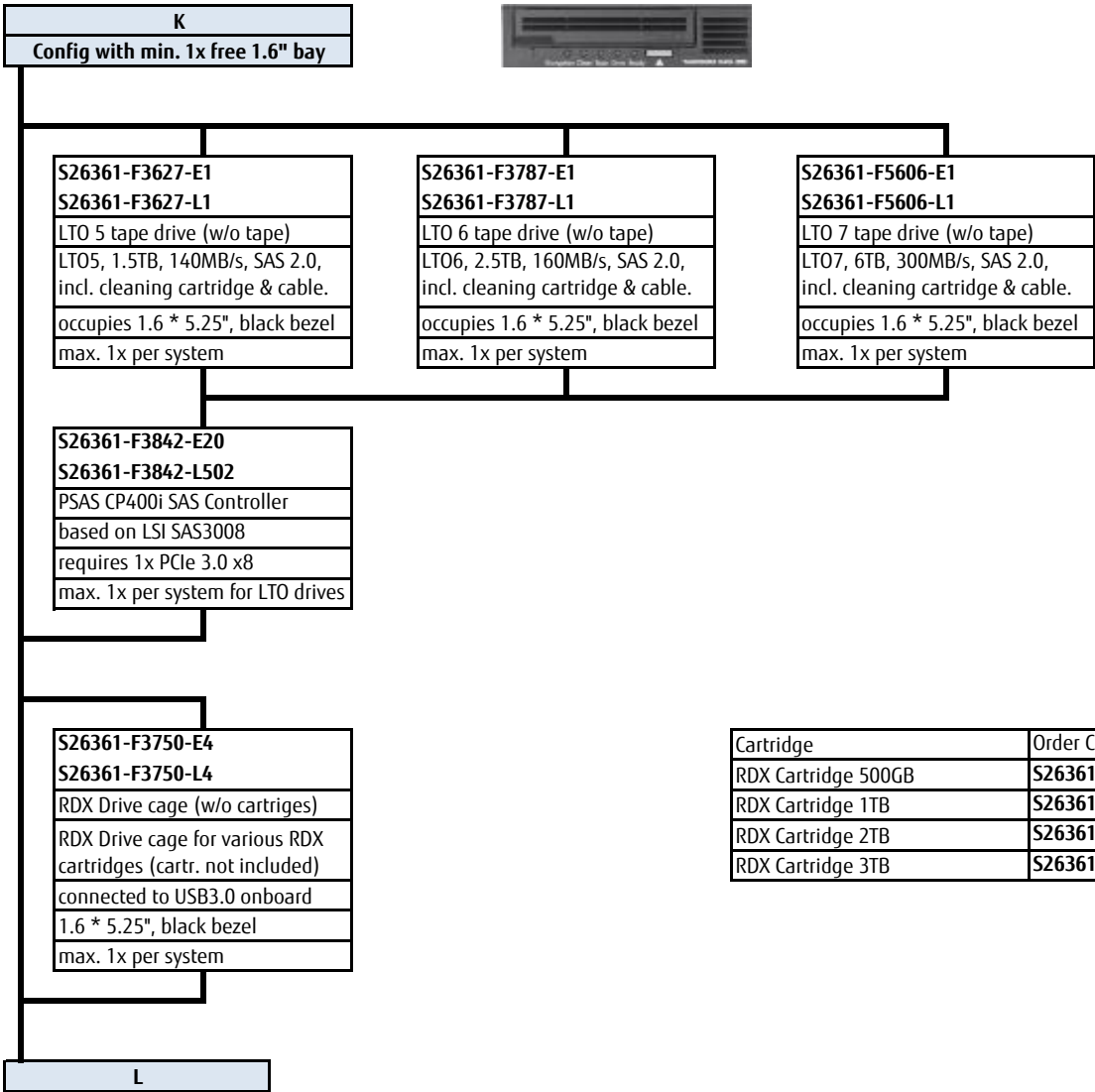
**H**  
Config with 1x 9.5mm bay





**Chapter 9 - backup drives**

RX2520 M4 offers 1.6" bay for accessible drive for basic units with 8x or 16x 2.5" HDD only!



| Cartridge           | Order Code        |
|---------------------|-------------------|
| RDX Cartridge 500GB | S26361-F3857-L500 |
| RDX Cartridge 1TB   | S26361-F3857-L600 |
| RDX Cartridge 2TB   | S26361-F3857-L700 |
| RDX Cartridge 3TB   | S26361-F3857-L800 |

**Chapter 10 - storage drives**

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 (=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.  
 512n & 512e HDDs can be mixed, but cannot be used in one logical RAID volume.  
 When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.  
<https://kb.vmware.com/kb/2145210>  
 DWPD: Drive Writes Per Day over 5 years.  
 SED (=Self Encrypting Drives) require either a RAID controller with @SafeStore (SED) support or an HBA and in addition a software instance, supporting SED Key Management.  
 It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality.  
**HDD Classes:**  
 Business-Critical (BC) -SATA=Nearline SATA Enterprise Drives / 7.2Krpm, SATA 6G.  
 Business-Critical (BC) -SAS=Nearline SAS Enterprise Drives / 7.2Krpm, SAS 12G .  
 Mission-Critical (MC) -SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.  
**Warranty:**  
 SSD and SATA DOM have a built-in Wear-Out indicator. In this case the warranty for such a component, as an exception to the system warranty, is restricted to the time period until the indicator reaches the exhaust level.

**2.5" (SFF) SATA SSD**

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

| Capacity | Formfactor | Interface  | Endurance       | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------------|------|-------------------|-------------------|
| 240GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use       | 3.6  | S26361-F5675-E240 | S26361-F5675-L240 |
| 480GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use       | 3.6  | S26361-F5675-E480 | S26361-F5675-L480 |
| 960GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use       | 3    | S26361-F5588-E960 | S26361-F5588-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use       | 3    | S26361-F5588-E192 | S26361-F5588-L192 |
| 3.84TB   | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 3.6  | S26361-F5588-E384 | S26361-F5588-L384 |

max. 28x - depending on base unit & configuration

**SSD SATA 2.5" Mixed Use S4600 (SFF)** Enterprise with hot plug/hot replace tray

| Capacity | Formfactor | Interface  | Endurance | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------|------|-------------------|-------------------|
| 240GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3.1  | S26361-F5694-E240 | S26361-F5694-L240 |
| 480GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3.3  | S26361-F5694-E480 | S26361-F5694-L480 |
| 960GB    | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3.0  | S26361-F5694-E960 | S26361-F5694-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3.0  | S26361-F5694-E192 | S26361-F5694-L192 |

max. 28x - depending on base unit & configuration

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

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

max. 28x - depending on base unit & configuration

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

| Capacity | Formfactor | Interface  | Endurance      | DWPD | order code E-part | order code L-part |
|----------|------------|------------|----------------|------|-------------------|-------------------|
| 240GB    | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1.4  | S26361-F5701-E240 | S26361-F5701-L240 |
| 480GB    | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5701-E480 | S26361-F5701-L480 |
| 960GB    | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5701-E960 | S26361-F5701-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5701-E192 | S26361-F5701-L192 |
| 3.84TB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1.0  | S26361-F5701-E384 | S26361-F5701-L384 |
| 7.68TB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0.5  | S26361-F5701-E768 | S26361-F5701-L768 |

max. 28x - depending on base unit & configuration

**2.5" (SFF) Hard drives**

**HDD SAS 2.5" 15K (SFF)** Enterprise Mission Critical with hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |
|----------|--------|------------|--------|-------------------|-------------------|
| 300GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5531-E530 | S26361-F5531-L530 |
| 450GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5531-E545 | S26361-F5531-L545 |
| 600GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5531-E560 | S26361-F5531-L560 |
| 900GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5531-E590 | S26361-F5531-L590 |

max. 28x - depending on base unit & configuration

**HDD SAS 2.5" 10K 512n (SFF)** Enterprise Mission Critical with hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |                   |
|----------|--------|------------|--------|-------------------|-------------------|-------------------|
| 300GB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5550-E130 | S26361-F5550-L130 |                   |
| 600GB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5550-E160 | S26361-F5550-L160 |                   |
| 900GB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5550-E190 | S26361-F5550-L190 |                   |
| 1.2TB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5550-E112 | S26361-F5550-L112 |                   |
| 300GB    | 10 000 | SAS 12Gb/s | 512n   | SED               | S26361-F5581-E130 | S26361-F5581-L130 |
| 600GB    | 10 000 | SAS 12Gb/s | 512n   | SED               | S26361-F5581-E160 | S26361-F5581-L160 |
| 1.2TB    | 10 000 | SAS 12Gb/s | 512n   | SED               | S26361-F5581-E112 | S26361-F5581-L112 |

max. 28x - depending on base unit & configuration

**HDD SAS 2.5" 10K 512e (SFF)** Enterprise Mission Critical with hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |                   |
|----------|--------|------------|--------|-------------------|-------------------|-------------------|
| 600GB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5543-E160 | S26361-F5543-L160 |                   |
| 900GB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5543-E190 | S26361-F5543-L190 |                   |
| 1.2TB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5543-E112 | S26361-F5543-L112 |                   |
| 1.8TB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5543-E118 | S26361-F5543-L118 |                   |
| 2.4TB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5543-E124 | S26361-F5543-L124 |                   |
| 1.8TB    | 10 000 | SAS 12Gb/s | 512e   | SED               | S26361-F5582-E118 | S26361-F5582-L118 |
| 2.4TB    | 10 000 | SAS 12Gb/s | 512e   | SED               | S26361-F5582-E124 | S26361-F5582-L124 |

max. 28x - depending on base unit & configuration

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**HDD SAS 2.5" 7.2K 512e** (SFF) Enterprise Business Critical with hot plug/hot replace tray

| Capacity | RPM   | Interface  | Sector | order code E-part | order code L-part |
|----------|-------|------------|--------|-------------------|-------------------|
| 1TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5573-E100 | S26361-F5573-L100 |
| 2TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5573-E200 | S26361-F5573-L200 |

max. 28x - depending on base unit & configuration

**HDD SATA 2.5" 7.2K 512n** (SFF) Enterprise Business Critical with hot plug/hot replace tray

| Capacity | RPM   | Interface  | Sector | order code E-part | order code L-part |
|----------|-------|------------|--------|-------------------|-------------------|
| 1TB      | 7 200 | SATA 6Gb/s | 512n   | S26361-F3956-E100 | S26361-F3956-L100 |
| 2TB      | 7 200 | SATA 6Gb/s | 512n   | S26361-F3956-E200 | S26361-F3956-L200 |

max. 28x - depending on base unit & configuration

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

**HDD SATA 2.5" 7.2K 512e** (SFF) Enterprise Business Critical with hot plug/hot replace tray

| Capacity | RPM   | Interface  | Sector | order code E-part | order code L-part |
|----------|-------|------------|--------|-------------------|-------------------|
| 1TB      | 7 200 | SATA 6Gb/s | 512e   | S26361-F3907-E100 | S26361-F3907-L100 |
| 2TB      | 7 200 | SATA 6Gb/s | 512e   | S26361-F3907-E200 | S26361-F3907-L200 |

max. 28x - depending on base unit & configuration

**3.5" (LFF) SATA SSD**

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

| Capacity | Formfactor | Interface  | Endurance       | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------------|------|-------------------|-------------------|
| 240GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use       | 3.6  | S26361-F5673-E240 | S26361-F5673-L240 |
| 480GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use       | 3.6  | S26361-F5673-E480 | S26361-F5673-L480 |
| 960GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use       | 3    | S26361-F5589-E960 | S26361-F5589-L960 |
| 1.92TB   | 3.5" (LFF) | SATA 6Gb/s | Mixed Use       | 3    | S26361-F5589-E192 | S26361-F5589-L192 |
| 3.84TB   | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 3.6  | S26361-F5589-E384 | S26361-F5589-L384 |

max. 12x - depending on base unit & configuration

**SSD SATA 3.5" Mixed Use S4600** (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

| Capacity | Formfactor | Interface  | Endurance | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------|------|-------------------|-------------------|
| 240GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use | 3.1  | S26361-F5692-E240 | S26361-F5692-L240 |
| 480GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use | 3.3  | S26361-F5692-E480 | S26361-F5692-L480 |
| 960GB    | 3.5" (LFF) | SATA 6Gb/s | Mixed Use | 3.0  | S26361-F5692-E960 | S26361-F5692-L960 |
| 1.92TB   | 3.5" (LFF) | SATA 6Gb/s | Mixed Use | 3.0  | S26361-F5692-E192 | S26361-F5692-L192 |

max. 12x - depending on base unit & configuration

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

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

max. 12x - depending on base unit & configuration

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

| Capacity | Formfactor | Interface  | Endurance      | DWPD | order code E-part | order code L-part |
|----------|------------|------------|----------------|------|-------------------|-------------------|
| 240GB    | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 1.4  | S26361-F5700-E240 | S26361-F5700-L240 |
| 480GB    | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5700-E480 | S26361-F5700-L480 |
| 960GB    | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5700-E960 | S26361-F5700-L960 |
| 1.92TB   | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 0.9  | S26361-F5700-E192 | S26361-F5700-L192 |
| 3.84TB   | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 1.0  | S26361-F5700-E384 | S26361-F5700-L384 |
| 7.68TB   | 3.5" (LFF) | SATA 6Gb/s | Read Intensive | 0.5  | S26361-F5700-E768 | S26361-F5700-L768 |

max. 12x - depending on base unit & configuration

**3.5" (LFF) Hard drives**

**HDD SAS 3.5" 15K** (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |
|----------|--------|------------|--------|-------------------|-------------------|
| 300GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5532-E530 | S26361-F5532-L530 |
| 450GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5532-E545 | S26361-F5532-L545 |
| 600GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5532-E560 | S26361-F5532-L560 |
| 900GB    | 15 000 | SAS 12Gb/s | 512n   | S26361-F5532-E590 | S26361-F5532-L590 |

max. 12x - depending on base unit & configuration

**HDD SAS 3.5" 10K 512n** (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |
|----------|--------|------------|--------|-------------------|-------------------|
| 300GB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5568-E130 | S26361-F5568-L130 |
| 600GB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5568-E160 | S26361-F5568-L160 |
| 1.2TB    | 10 000 | SAS 12Gb/s | 512n   | S26361-F5568-E112 | S26361-F5568-L112 |

max. 12x - depending on base unit & configuration

**HDD SAS 3.5" 10K 512e** (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray

| Capacity | RPM    | Interface  | Sector | order code E-part | order code L-part |
|----------|--------|------------|--------|-------------------|-------------------|
| 1.8TB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5569-E118 | S26361-F5569-L118 |
| 2.4TB    | 10 000 | SAS 12Gb/s | 512e   | S26361-F5569-E124 | S26361-F5569-L124 |

max. 12x - depending on base unit & configuration

K

**K**

**HDD SAS 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray**

| Capacity | RPM   | Interface  | Sector | order code E-part     | order code L-part |
|----------|-------|------------|--------|-----------------------|-------------------|
| 2TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5635-E200     | S26361-F5635-L200 |
| 4TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5635-E400     | S26361-F5635-L400 |
| 6TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5635-E600     | S26361-F5635-L600 |
| 8TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5635-E800     | S26361-F5635-L800 |
| 8TB      | 7 200 | SAS 12Gb/s | 512e   | S26361-F5571-E800     | S26361-F5571-L800 |
| 10TB     | 7 200 | SAS 12Gb/s | 512e   | S26361-F5571-E100     | S26361-F5571-L100 |
| 12TB     | 7 200 | SAS 12Gb/s | 512e   | S26361-F5571-E120     | S26361-F5571-L120 |
| 6TB      | 7 200 | SAS 12Gb/s | 512e   | SED S26361-F5584-E600 | S26361-F5584-L600 |
| 10TB     | 7 200 | SAS 12Gb/s | 512e   | SED S26361-F5624-E100 | S26361-F5624-L100 |
| 12TB     | 7 200 | SAS 12Gb/s | 512e   | SED S26361-F5624-E120 | S26361-F5624-L120 |

max. 12x - depending on base unit & configuration

**HDD SATA 3.5" 7.2K 512n (LFF) Enterprise Business Critical with hot plug/hot replace tray**

| Capacity | RPM   | Interface  | Sector | order code E-part | order code L-part |
|----------|-------|------------|--------|-------------------|-------------------|
| 1TB      | 7 200 | SATA 6Gb/s | 512n   | S26361-F5636-E100 | S26361-F5636-L100 |
| 2TB      | 7 200 | SATA 6Gb/s | 512n   | S26361-F5636-E200 | S26361-F5636-L200 |
| 4TB      | 7 200 | SATA 6Gb/s | 512n   | S26361-F5636-E400 | S26361-F5636-L400 |

max. 12x - depending on base unit & configuration

**HDD SATA 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray**

| Capacity | RPM   | Interface  | Sector | order code E-part | order code L-part |
|----------|-------|------------|--------|-------------------|-------------------|
| 6TB      | 7 200 | SATA 6Gb/s | 512e   | S26361-F5638-E600 | S26361-F5638-L600 |
| 8TB      | 7 200 | SATA 6Gb/s | 512e   | S26361-F5638-E800 | S26361-F5638-L800 |
| 8TB      | 7 200 | SATA 6Gb/s | 512e   | S26361-F3904-E800 | S26361-F3904-L800 |
| 10TB     | 7 200 | SATA 6Gb/s | 512e   | S26361-F3904-E100 | S26361-F3904-L100 |
| 12TB     | 7 200 | SATA 6Gb/s | 512e   | S26361-F3904-E120 | S26361-F3904-L120 |

max. 12x - depending on base unit & configuration

**M.2 SATA SSD**

**SSD SATA M.2 drive for booting, non hot-plug, for VMware ESXi**

| Capacity | Formfactor | Interface  | Category | order code E-part | order code L-part |
|----------|------------|------------|----------|-------------------|-------------------|
| 150GB    | M.2        | SATA 6Gb/s | Boot     | S26361-F5655-E150 | S26361-F5655-L150 |
| 240GB    | M.2        | SATA 6Gb/s | Boot     | S26361-F5707-E240 | S26361-F5707-L240 |

M.2 drive is designed for use as a VMware ESXi boot drive.  
2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.  
max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware ESXi is only supported.

M.2 drive for VMware ESXi and for other OSs cannot be mixed

**SSD SATA M.2 drive for booting, non hot-plug**

| Capacity | Formfactor | Interface  | DWPD | Category | order code E-part | order code L-part |
|----------|------------|------------|------|----------|-------------------|-------------------|
| 150GB    | M.2        | SATA 6Gb/s | 1.5  | Boot     | S26361-F5656-E150 | S26361-F5656-L150 |
| 240GB    | M.2        | SATA 6Gb/s | 1.4  | Boot     | S26361-F5706-E240 | S26361-F5706-L240 |
| 480GB    | M.2        | SATA 6Gb/s | 1.4  | Boot     | S26361-F5706-E480 | S26361-F5706-L480 |

M.2 drive is designed for use as a boot drive with the Endurance Spec. above.  
2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.  
max. 2x per Server; connector located on Motherboard (please see folder "description"). VMware is not supported.

**Dual M.2**

Dual microSD, PDUAL AP200 and M.2 drive cannot be mixed

**PDUAL AP200, dual M.2 for booting, non hot-plug**

| Capacity | Formfactor | Interface | Category | order code E-part | order code L-part |
|----------|------------|-----------|----------|-------------------|-------------------|
| n/a      | AIC        | PCIe      | Boot LP  | S26361-F4064-E201 | S26361-F4064-L501 |

PDUAL AP200 is a carrier card for 2x M.2 SATA modules, which is connected to the controller PSAS CP400i and offers RAID1 with 2x M.2 modules.  
"PDUAL AP200 + 2x M.2 modules + PSAS CP400i" is designed for use as a Hardware-mirrored (RAID1) boot device for Hypervisor, which cannot be supported by M.2 via the onboard chipset Software RAID.  
Supported RAID level: RAID1 only, Supported M.2 Modules: SSD SATA M.2 240GB (S26361-F5706-E240/L240 or S26361-F5707-E240/L240 for VMware ESXi), 2x M.2 modules (S26361-F5706-E240/L240 or S26361-F5707-E240/L240) and additional PSAS CP400i (S26361-F3842-E22/L502) need to be ordered separately. An existing PSAS CP400i for data drives cannot support simultaneously the M.2 Boot media with PDUAL AP200.  
A separate PSAS CP400i for PDUAL AP200 is required to support a separation for boot and data.  
max. 1x per Server

**Dual microSD**

Dual microSD and RDX Drive cage (S26361-F3750-E4) cannot be mixed

Dual microSD, PDUAL AP200 and M.2 drive cannot be mixed

**Dual microSD Enterprise for booting, non hot-plug, for VMware ESXi**

| Capacity | Formfactor | Interface | Category | order code E-part | order code L-part |
|----------|------------|-----------|----------|-------------------|-------------------|
| 64GB     | microSD    | USB       | Boot     | S26361-F4045-E64  | S26361-F4045-L64  |

Dual microSD is designed for use as a VMware ESXi boot drive. Only the standardly equipped microSD are supported.  
Dual microSD offers Hardware-mirrored (RAID1) flash boot device for VMware ESXi, which cannot be supported by M.2.  
vSAN can be booted in case ESXi host has 512 GB of memory or less. Even in case 512 GB or more, if vSAN is 6.5 or later, it can be booted by resizing the core dump partition on ESXi hosts. For more information, see the VMware knowledge base article at <http://kb.vmware.com/kb/2147881>.  
max. 1x per Server; connector located on Motherboard (please see folder "description"). VMware ESXi is only supported.

**2.5" (SFF) PCIe-SSD**

2.5" PCIe-SSDs require a RAID Controller or PCIe retimer card.  
RAID Controller : PRAID EPS20i/540i/580i  
PCIe retimer : PPCI CP x16 retimer

**PCIe-SSD 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray**  
based on Intel DC P4610 drives

| Capacity | Formfactor | Interface  | Endurance | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------|------|-------------------|-------------------|
| 1.6TB    | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 4.1  | S26361-F5737-E160 | S26361-F5737-L160 |
| 3.2TB    | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 3.7  | S26361-F5737-E320 | S26361-F5737-L320 |
| 6.4TB    | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 3.1  | S26361-F5737-E640 | S26361-F5737-L640 |

max. 4x

| PCIe-SSD 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray |            |            |           |      |  |                   |                   |
|---|------------|------------|-----------|------|--|-------------------|-------------------|
| Capacity  | Formfactor | Interface  | Endurance | DWPD |  | order code E-part | order code L-part |
| 1.6TB   | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 3.0  |  | S26361-F5648-E160 | S26361-F5648-L160 |
| 3.2TB   | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 3.1  |  | S26361-F5648-E320 | S26361-F5648-L320 |
| 6.4TB   | 2.5" (SFF) | PCIe3.0 x4 | Mixed Use | 3.2  |  | S26361-F5648-E640 | S26361-F5648-L640 |
| max. 4x   |            |            |           |      |  |                   |                   |

| PCIe-SSD 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray |            |            |                |      |  |                   |                   |
|--|------------|------------|----------------|------|--|-------------------|-------------------|
| based on Intel DC P4510 drives   |            |            |                |      |  |                   |                   |
| Capacity   | Formfactor | Interface  | Endurance      | DWPD |  | order code E-part | order code L-part |
| 1TB  | 2.5" (SFF) | PCIe3.0 x4 | Read Intensive | 1.0  |  | S26361-F5738-E100 | S26361-F5738-L100 |
| 2TB  | 2.5" (SFF) | PCIe3.0 x4 | Read Intensive | 0.7  |  | S26361-F5738-E200 | S26361-F5738-L200 |
| 4TB  | 2.5" (SFF) | PCIe3.0 x4 | Read Intensive | 0.8  |  | S26361-F5738-E400 | S26361-F5738-L400 |
| max. 4x  |            |            |                |      |  |                   |                   |

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

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prel. System configurator and order-information guide  
PRIMERGY RX2520 M4 Status 2016-05-17

**Chapter 11 - LAN Components**

Default: 2x RJ45 1GbE ports on systemboard

**1Gb Ethernet network components**

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

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

max. 4 Controller per system

**10/1Gb Ethernet network components**

**10GbE-T**

**10/1Gb Ethernet network adapters with RJ45 interface (10GbE-T)**

Dual speed support, auto-sense: supports 10Gbps and 1Gbps line rate per port.  
Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Intel adapters don't provide any. Emulex adapters are close to end of sales.

|                                |    |  |                   |                   |
|--------------------------------|----|--|-------------------|-------------------|
| PLAN EP QL41112 2x10GbE-T LP   | 2x | 2 port NIC with Universal RDMA, Cavium QL4112HLRJ  | S26361-F4068-E202 | S26361-F4068-L502 |
| PLAN EP QL41134 4x10GbE-T LP   | 2x | 4 port NIC with Universal RDMA, Cavium QL41134HLRJ | S26361-F4068-E204 | S26361-F4068-L504 |
| PLAN EP X550-T2 2x10GbE-T LP   | 4x | 2 port NIC, Intel X550-T2                          | S26361-F3948-E202 | S26361-F3948-L502 |
| PLAN EP X710-T4 4x10GbE-T LP   | 4x | 4 port NIC, Intel X710-T4                          | S26361-F3948-E204 | S26361-F3948-L504 |
| PLAN EP OCe14102 2x 10GbE-T LP | 2x | 2 port NIC, Emulex OCe14102                        | S26361-F5557-E201 | S26361-F5557-L501 |

max. 6 adapters per server system

**10G SFP+**

**10/1Gb Ethernet network adapters with SFP+ cage. Adapter ships with empty cages.**

Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port.  
Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.  
Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Intel adapters don't provide any.

For Converged Network Adapter features such as iSCSI, iSCSI Offload, FCoE please select the PCNA EP QL41262 from the Converged Ethernet network adapters section

|                                 |    |  |                   |                   |
|---------------------------------|----|--|-------------------|-------------------|
| PLAN EP QL41132 2x10Gb SFP+ LP  | 2x | 2 port NIC with Universal RDMA, Cavium QL41132HLCU | S26361-F4069-E202 | S26361-F4069-L502 |
| PLAN EP X710-DA2 2x10Gb SFP+ LP | 4x | 2 port NIC, Intel X710-DA2                         | S26361-F3640-E202 | S26361-F3640-L502 |
| PLAN EP X710-DA4 4x10Gb SFP+ LP | 2x | 4 port NIC, Intel X710-DA4                         | S26361-F3640-E204 | S26361-F3640-L504 |

**Optional, 10Gb SFP+ optical transceiver module, select one per cage**

|  |          |   |                    |                                      |
|--|----------|---|--------------------|--------------------------------------|
| SFP+ Optical Transceiver 10G Single Rate SR  | 2x .. 4x | LC, MMF / SR SFP+ module, up to 400m, Finisar | S26361-F3986-E3    | S26361-F3986-L3                      |
| SFP+ Optical Transceiver 10G Single Rate LR  | 2x .. 4x | LC, SMF / LR SFP+ module, up to 10km, Finisar | S26361-F3986-E4    | S26361-F3986-L4                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate SR | 2x .. 4x | LC, MMF / SR SFP+ module, up to 400m, Intel   | S26361-F3986-E5    | S26361-F3986-L5                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate LR | 2x .. 4x | LC, SMF / LR SFP+ module, up to 10km, Intel   | S26361-F3986-E6    | S26361-F3986-L6                      |
| *Virtual Connector* for Twinax cables        | 2x .. 4x | Enablement for System Architect               | V:TWX CONNECTOR-PY |                                      |
| SFP+ active Twinax Cable Fujitsu             | 2x .. 4x | Customized length. Best fitting length        | S26361-F3989-E600  | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade             | 2x .. 4x | selected at rack factory installation.        | S26361-F3873-E500  | of this page                         |

Max. 2x SFP+, DAC, or Twinax Cable per 2 port adapter. Max. 4x SFP+, DAC, or Twinax Cable per 4 port adapter.

max. 6 adapters per server system

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

Emulex adapters are close to end of sales.  
For Converged Network Adapter features such as iSCSI, iSCSI Offload, FCoE please select the PCNA EP0C14102 from the Converged Ethernet network adapters section.

|                            |    |                             |                   |                   |
|----------------------------|----|-----------------------------|-------------------|-------------------|
| PLAN EP OCe14102 2x10Gb LP | 4x | 2 port NIC, Emulex OCe14102 | S26361-F5536-E202 | S26361-F5536-L502 |
|----------------------------|----|-----------------------------|-------------------|-------------------|

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

|                                  |    |  |                    |                                      |
|----------------------------------|----|--|--------------------|--------------------------------------|
| PCNA SFP+ MMF Modul OCe14102     | 8x | MMF / SR SFP+ module, up to 400m, Emulex                                       | S26361-F5250-E110  | S26361-F5250-E110                    |
| Twinax Anschlussplatz Primergy   | 8x | virtual connector for twinax cables  | V:TWX CONNECTOR-PY |                                      |
| SFP+ active Twinax Cable Fujitsu | 8x | customized cable length  | S26361-F3989-E600  | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade | 8x | (best fitting cable length is defined during rack installation at the factory) | S26361-F3873-E500  | of this page                         |

max. 2x SFP+ or Twinax Cable per controller

max. 4 Controller per system

**10Gb Converged Ethernet network components**

**25Gb Converged Ethernet network components**

**10G SFP+**

**25G SFP28**

**10/25Gb Converged Ethernet network adapters with SFP+/SFP28 cages. Adapter ships with empty cages.**

10G: Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port.  
Dual rate 10G/1G transceivers will work at 10G line rate only.  
25G: Each cage consumes 1x optical SFP28 transceiver per port, or 1x 25G DAC cable per port.  
25G transceivers will work at 25G line rate only.

iSCSI and iSCSI Offload support will not be included in the initial hardware release. If you wish to get support for FCoE please submit a Release Request with the desired PRIMERGY server system configuration SAR/XLSX file attachment as described in the process.

|   |    |   |                   |                   |
|---|----|---|-------------------|-------------------|
| PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP | 2x | 2 port CNA with FCoE, iSCSI Offload, Universal RDMA, Cavium QL41262HLCU | S26361-F4070-E202 | S26361-F4070-L502 |
|---|----|---|-------------------|-------------------|

**Optional, 10Gb SFP+ optical transceiver module, one per cage or port**

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

Max. 2x SFP+, DAC, or Twinax Cable per adapter

**Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.**

|   |    |   |                   |                   |
|---|----|---|-------------------|-------------------|
| SFP28 Optical Transceiver 25G SR MMA2P00-AS LC  | 2x | MMF / SR SFP28 module, Mellanox. Max reach supported 100m | S26361-F4054-E701 | S26361-F4054-L701 |
| SFP28 Optical Transceiver 25G SR E25GSFP28SR LC | 2x | MMF / SR SFP28 module, Intel. Max reach supported 30m     | S26361-F4055-E701 | S26361-F4055-L701 |

|   |    |   |                        |
|---|----|---|------------------------|
| "Virtual Connector" for DAG/AOC cables                | 2x | Enablement for System Architect   | V:DAG/AOC-CONNECTOR-25 |
| 25G DAC - Brocade                                     | 2x | DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                        |
| 25G DAC - Cisco                                       | 2x |   |                        |
| 25G DAC - Intel                                       | 2x |   |                        |
| 25G AOC - Brocade                                     | 2x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                        |
| 25G AOC - Cisco                                       | 2x |   |                        |
| 25G AOC - Intel                                       | 2x |   |                        |
| <i>Max. 2x SFP28, 25G DAC, or 25G AOC per adapter</i> |    |   |                        |
| max. 2x adapters per system                           |    |   |                        |

|   |    |  |                                     |
|---|----|--|-------------------------------------|
| <b>10Gb Ethernet controller with SFP+ interface (for SFP+ modules or twinax cables, Emulex)</b>   |    |  |                                     |
| PCNA EP OCe14102 2x 10Gb LP   | 4x | 2 port CNA with FCoE & RDMA, Emulex  | S26361-F5250-E201 S26361-F5250-L501 |
| <b>optional 10Gb SFP+ module with LC connector for Emulex controller, each cage consumes one.</b> |    |  |                                     |
| PCNA SFP+ MMF Modul OCe14102  | 2x | MMF / SR SFP+ module, up to 400m, Emulex                                       | 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  | S26361-F3989-E600                   |
| SFP+ active Twinax Cable Brocade  | 2x | (best fitting cable length is defined during rack installation at the factory) | S26361-F3873-E500                   |
| <i>Max. 2x SFP+ or Twinax Cable per controller</i>  |    |  |                                     |
| max. 4 Controller per system  |    |  |                                     |

25/10Gb Ethernet network components

10G SFP+ 25G SFP28

| 25/10Gb Ethernet network adapter with 2x SFP28 cages (requires twinax cables or optical transceiver SFP28 or SFP+ modules)                                 |    |   |                        |                                      |
|--|----|---|------------------------|--------------------------------------|
| Dual speed support, auto-sense - supports 25Gbps and 10Gbps line rate per-port. Your choice of optical transceiver decides about the actual line rate.     |    |   |                        |                                      |
| Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Mellanox adapters provide RoCE RDMA only. Intel adapters don't provide any. |    |   |                        |                                      |
| PLAN EP QL41212 25Gb 2p SFP28 LP   | 2x | 2 port NIC with Universal RDMA: iWARP & RoCE, Cavium QL41212                              | S26361-F4056-E202      | S26361-F4056-L502                    |
| PLAN EP MCX4-LX 25Gb 2p SFP28 LP   | 2x | 2 port NIC with RDMA: RoCE, Mellanox ConnectX4-LX   | S26361-F4054-E202      | S26361-F4054-L502                    |
| PLAN EP XXV710-DA2 2x25Gb LP   | 2x | 2 Port NIC, Intel XXV710-DA2  | S26361-F4055-E202      | S26361-F4055-L502                    |
| <b>Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.</b>  |    |   |                        |                                      |
| SFP28 Optical Transceiver 25G SR MMA2P00-AS LC   | 2x | MMF / SR SFP28 module, Mellanox. Max reach supported 100m                                 | S26361-F4054-E701      | S26361-F4054-L701                    |
| SFP28 Optical Transceiver 25G SR E25GSFP28SR LC  | 2x | MMF / SR SFP28 module, Intel. Max reach supported 30m                                     | S26361-F4055-E701      | S26361-F4055-L701                    |
| *Virtual Connector* for DAC/AOC cables   | 2x | Enablement for System Architect   | V-DAC/AOC-CONNECTOR-25 |                                      |
| 25G DAC - Brocade  | 2x | DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                        |                                      |
| 25G DAC - Cisco  | 2x |   |                        |                                      |
| 25G DAC - Intel  | 2x |   |                        |                                      |
| 25G AOC - Brocade  | 2x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                        |                                      |
| 25G AOC - Cisco  | 2x |   |                        |                                      |
| 25G AOC - Intel  | 2x |   |                        |                                      |
| Max. 2x SFP28, 25G DAC, or 25G AOC per adapter   |    |   |                        |                                      |
| <b>Optional, 10Gb SFP+ optical transceiver module, each cage consumes one.</b>   |    |   |                        |                                      |
| SFP+ Optical Transceiver 10G Single Rate SR  | 2x | LC, MMF / SR SFP+ module, up to 400m, Finisar   | S26361-F3986-E3        | S26361-F3986-L3                      |
| SFP+ Optical Transceiver 10G Single Rate LR  | 2x | LC, SMF / LR SFP+ module, up to 10km, Finisar   | S26361-F3986-E4        | S26361-F3986-L4                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate SR   | 2x | LC, MMF / SR SFP+ module, up to 400m, Intel   | S26361-F3986-E5        | S26361-F3986-L5                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate LR   | 2x | LC, SMF / LR SFP+ module, up to 10km, Intel   | S26361-F3986-E6        | S26361-F3986-L6                      |
| *Virtual Connector* for Twinax cables  | 2x | Enablement for System Architect   | V-TWX CONNECTOR-PY     |                                      |
| SFP+ active Twinax Cable Fujitsu   | 2x | Customized length. Best fitting length  | S26361-F3989-E600      | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade   | 2x | selected at rack factory installation.  | S26361-F3873-E500      |                                      |
| Max. 2x SFP+, DAC, or Twinax Cable per adapter   |    |   |                        |                                      |
| max. 6x adapters per system  |    |   |                        |                                      |

| 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.                         |    |  |                    |                                      |
| <b>Note: This is not the most current product. The successor product is PLAN EP QL41212.</b>            |    |  |                    |                                      |
| PLAN EP QL45212 2x25Gb LP   | 2x | Dual Port NIC, RoCE RDMA, WS2016, Qlogic   | S26361-F5622-E202  | S26361-F5622-L502                    |
| <b>optional 25G DAC</b>   |    |  |                    |                                      |
| max. 2x 25G DAC per controller  |    |  |                    |                                      |
| <b>optional 10Gb SFP+ module with LC connector for Fujitsu / Intel / Qlogic based controller</b>        |    |  |                    |                                      |
| SFP+ Transceiver Module MMF 10GbE LC  | 4x | MMF / SR SFP+ module, up to 400m   | S26361-F3986-E3    | S26361-F3986-L3                      |
| SFP+ Transceiver Module SMF 10GbE LC  | 4x | SMF / LR SFP+ module, up to 10km   | S26361-F3986-E4    | S26361-F3986-L4                      |
| Twinax Anschlussplatz Primergy  | 4x | virtual connector for twinax cables  | V-TWX CONNECTOR-PY |                                      |
| SFP+ active Twinax Cable Fujitsu  | 4x | customized cable length (best fitting cable length is defined during rack installation at the factory) | S26361-F3989-E600  | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade  | 4x |  | S26361-F3873-E500  |                                      |
| max. 2x SFP+ or Twinax Cable per controller   |    |  |                    |                                      |
| max. 2 Controller per system  |    |  |                    |                                      |



40/10Gb Ethernet network components

| 40Gb Ethernet controller with QSFP cage (requires DAC, AOC cables or optical transceiver QSFP modules) |    |   |                        |                   |
|--|----|---|------------------------|-------------------|
| Supports 40Gbps line rate per-port   |    |   |                        |                   |
| PLAN EP MCX4-EN 40Gb 2p QSFP LP  | 2x | Dual Port NIC, RoCE RDMA, Mellanox                        | S26361-F4053-E202      | S26361-F4053-L502 |
| Optional, 40Gb QSFP Optical Transceiver module with MPO connector for PLAN EP MCX4-EN 40Gb 2p QSFP     |    |   |                        |                   |
| QSFP 40G SR4 MPO 850nm 30m MC2210411-SR4L  | 2x | MMF / SR4L QSFP module, Mellanox. Max reach supported 30m | S26361-F4053-E701      | S26361-F4053-L701 |
| QSFP 40G SR4 MPO 850nm 150m MC2210411-SR4  | 2x | MMF / SR4 QSFP module, Mellanox. Max reach supported 150m | S26361-F4053-E702      | S26361-F4053-L702 |
| *Virtual Connector* for DAC/AOC cables   | 2x | Enablement for System Architect                           | V:DAC/AOC-CONNECTOR-40 |                   |
| 40G DAC - Cisco  | 2x | test only and purchase from switch vendors                |                        |                   |
| 40G DAC - Mellanox   | 2x | test only and purchase from switch vendors                |                        |                   |
| 40G AOC - Cisco  | 2x | test only and purchase from switch vendors                |                        |                   |
| 40G AOC - Mellanox   | 2x | test only and purchase from switch vendors                |                        |                   |
| <i>max. 2x QSFP or DAC, AOC per PLAN EP MCX4-EN 40Gb 2p QSFP</i>                                       |    |   |                        |                   |
| max. 2x PLAN EP MCX4-EN 40Gb 2p QSFP   |    |   |                        |                   |

100Gb Ethernet network components

| 100Gb Ethernet controller with 1x QSFP28 cage (requires twinax cables or optical transceiver QSFP28 modules) |    |   |                         |                   |
|--|----|---|-------------------------|-------------------|
| Supports 100Gbps line rate   |    |   |                         |                   |
| PLAN EP QL45611 100Gb 1p QSFP28 LP   | 2x | Single Port NIC, RoCE RDMA,                                 | S26361-F4057-E201       | S26361-F4057-L501 |
| PLAN EP MCX4-EN 100Gb 1p QSFP28 LP   | 2x | Single Port NIC, RoCE RDMA,                                 | S26361-F4052-E201       | S26361-F4052-L501 |
| Optional, 100Gb QSFP28 Optical Transceiver module with MPO connector. Each cage consumes one.                |    |   |                         |                   |
| QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D   | 1x | MMF / SR4 QSFP28 module, Mellanox. Max reach supported 100m | S26361-F4052-E701       | S26361-F4052-L701 |
| QSFP28 100G PSM4 1310nm 500m MMS1C10-CM  | 1x | MMF / SR QSFP28 module, Mellanox. Max reach supported 500m  | S26361-F4052-E801       | S26361-F4052-L801 |
| *Virtual Connector* for DAC/AOC cables   | 1x | Enablement for System Architect                             | V:DAC/AOC-CONNECTOR-100 |                   |
| 100G DAC - Cisco   | 1x | test only and purchase from switch vendors                  |                         |                   |
| 100G DAC - Mellanox  | 1x | test only and purchase from switch vendors                  |                         |                   |
| 100G AOC - Cisco   | 1x | test only and purchase from switch vendors                  |                         |                   |
| 100G AOC - Mellanox  | 1x | test only and purchase from switch vendors                  |                         |                   |
| <i>Max. 1x QSFP28 or DAC/AOC Cable per adapter</i>   |    |   |                         |                   |
| max. 4x adapters   |    |   |                         |                   |

Q

System configurator and order-information guide  
PRIMERGY RX2520 M4 Status 2016-03-31

Q

**Network cables for later upgrade**

| Fujitsu active SFP+ Twinax 10Gb cable |                   |
|---------------------------------------|-------------------|
| SFP+ active Twinax Cable Fujitsu 2m   | S26361-F3989-L102 |
| SFP+ active Twinax Cable Fujitsu 5m   | S26361-F3989-L105 |
| SFP+ active Twinax Cable Fujitsu 10m  | S26361-F3989-L110 |

| Brocade active SFP+ Twinax 10Gb cable |                   |
|---------------------------------------|-------------------|
| SFP+ active Twinax Cable Brocade 1m   | S26361-F3873-L501 |
| SFP+ active Twinax Cable Brocade 3m   | S26361-F3873-L503 |
| SFP+ active Twinax Cable Brocade 5m   | S26361-F3873-L505 |

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**Chapter 12 - Fibre Channel Controller**

K

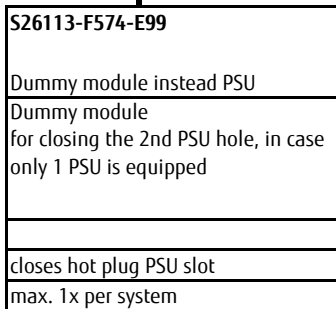
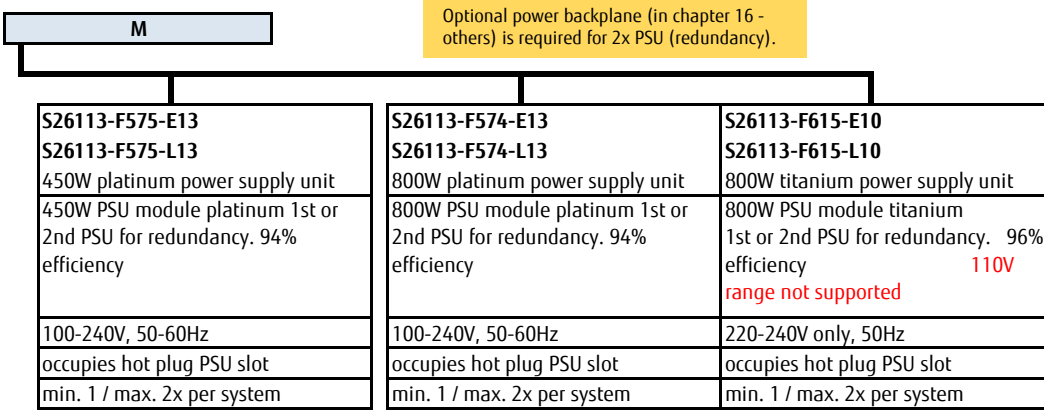
| 32Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)                       |    |                                      |                   |                   |  |
|---|----|--------------------------------------|-------------------|-------------------|--|
| These components ship with optical transceiver modules equipped for all ports. Supported line rates: 32, 16, and 8Gbps. |    |                                      |                   |                   |  |
| PFC EP LPe32000 1x 32Gb LP  | 2x | 1 port, low profile, Broadcom/Emulex | S26361-F4044-E201 | S26361-F4044-L501 |  |
| PFC EP LPe32002 2x 32Gb LP  | 2x | 2 port, low profile, Broadcom/Emulex | S26361-F4044-E202 | S26361-F4044-L502 |  |
| PFC EP OLE2740 1x 32Gb LP   | 3x | 1 port, low profile, Cavium/Ologic   | S26361-F4043-E201 | S26361-F4043-L501 |  |
| PFC EP OLE2742 2x 32Gb LP   | 3x | 2 port, low profile, Cavium/Ologic   | S26361-F4043-E202 | S26361-F4043-L502 |  |
| 16Gb Fibre Channel controller generation 6 with LC interface for 50µm optical cables (OM3 or OM4)                       |    |                                      |                   |                   |  |
| These components ship with optical transceiver modules equipped for all ports. Supported line rates: 16, 8, and 4Gbps.  |    |                                      |                   |                   |  |
| PFC EP LPe31000 1x 16Gb LP  | 3x | 1 port, low profile, Broadcom/Emulex | S26361-F5596-E201 | S26361-F5596-L501 |  |
| PFC EP LPe31002 2x 16Gb LP  | 3x | 2 port, low profile, Broadcom/Emulex | S26361-F5596-E202 | S26361-F5596-L502 |  |
| PFC EP OLE2690 1x 16Gb LP   | 3x | 1 port, low profile, Cavium/Ologic   | S26361-F5580-E201 | S26361-F5580-L501 |  |
| PFC EP OLE2692 2x 16Gb LP   | 3x | 2 port, low profile, Cavium/Ologic   | S26361-F5580-E202 | S26361-F5580-L502 |  |
| max. 6 Controller per system (mixed configurations are supported)   |    |                                      |                   |                   |  |

**Chapter 13 - Infiniband Controllers**

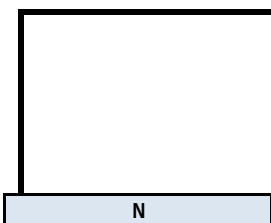
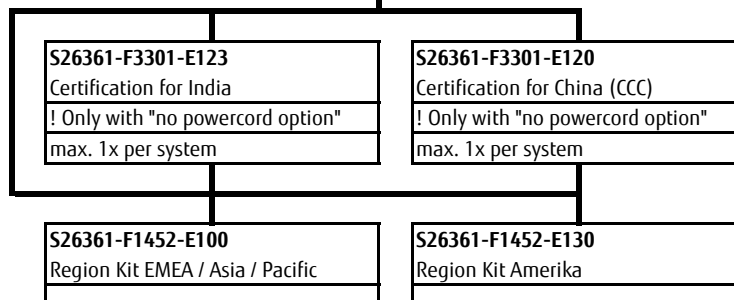
Infiniband and Omni Path controller will be released by Project Released.

L

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



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



Chapter 15 - Accessories

Q

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

**USB sticks (FOR PROJECTS ONLY) - no standard release**

|  |                   |
|--|-------------------|
| ADATA USB 3.0 Flash Stick UE700 - 32GB | S26391-F6048-L332 |
| ADATA USB 3.0 Flash Stick UE700 - 64GB | S26391-F6048-L364 |



**USB Optical Disc Drive**

|  |                  |
|--|------------------|
| External Ultra Slim Portable DVD Writer (Hitachi-LG) | S26341-F103-L142 |
|--|------------------|



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**Chapter 16 - others**

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|   |
|---|
| <b>S26361-F3699-E20</b>                           |
| <b>S26361-F3699-L20</b>                           |
| Redundant power supply                            |
| Power backplane for redundant power supply units. |
| Contains power backplane, cables.                 |
| max. 1x per system                                |

|   |
|---|
| <b>S26361-F1790-E243</b>  |
| <b>S26361-F1790-L244</b>  |
| iRMC <b>SS</b> advanced pack  |
| integrated remote Management controller activation key for graphical console redirection and remote media redirection |
| max. 1x per system  |

|  |
|--|
| <b>S26361-F1790-E311</b>                                   |
| <b>embedded Lifecycle Management (eLCM)</b>                |
| Server Online Update                                       |
| OS driver Update   |
| Hardware firmware update                                   |
| Server Offline Update                                      |
| Hardware update via Update Manager Express                 |
| PrimeCollect   |
| Autonomous creation of Primecollect archives               |
| Creation and use of PrimeCollect archives over AIS connect |
| Custom Image (Jukebox function)                            |
| Automatic and manual download of CD and DVD Images         |
| Automatic and manual start of CD and DVD Images            |
| max. 1x per system   |

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

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

|   |
|---|
| <b>S26361-F3776-E440</b>  |
| 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  |

|   |
|---|
| <b>S26361-F3776-E445</b>  |
| 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  |

|                          |
|--------------------------|
| <b>S26361-F3552-E100</b> |
| <b>S26361-F3552-L100</b> |
| TPM 2.0 Module SPI       |
| max. 1x per system       |

|                          |
|--------------------------|
| <b>S26361-F3552-E101</b> |
| TPM 1.2 Module SPI       |
| max. 1x per system       |

|                                      |
|--------------------------------------|
| <b>S26361-F3120-E50</b>              |
| <b>S26361-F3120-L50</b>              |
| Serial Port                          |
| for a RS-232-C Serial Port interface |
| max. 1x per system                   |

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#### 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<br>[dd.mm.yyyy] | Folder / order code / description         | Name              | What has been changed / comment                      |
|--------------------------------|---|-------------------|--|
| 03.02.2017                     | PRIMERGY RX2520 M4 configurator           | Michail Maridakis | First draft issued                                   |
| 07.02.2017                     | RAM                                       | Fabian Seil       | Update   |
| 10.02.2017                     | RAID folder update                        | Johannes Linne    | Update   |
| 10.02.2017                     | HD_SSD                                    | Tatsuya Sudou     | Updated  |
| 14.02.2017                     | RAM                                       | Fabian Seil       | Update   |
| 14.02.2017                     | FC, LAN                                   | Ulrich Lösch      | Aligned to Component PAPs                            |
| 14.02.2017                     | LOM                                       | Ulrich Lösch      | Aligned to PAP: No Dynamic LoM interface cards       |
| 14.02.2017                     | RAM                                       | Klaus-Dieter Ruf  | Descriptions updated                                 |
| 20.02.2017                     | FC, LAN                                   | Ulrich Lösch      | Correction: FH components deleted                    |
| 07.03.2017                     | correct: S26361-F3847-E202, -E204         | Johannes Linne    | Update, changed from E502 / E504 (wrong)             |
| 08.03.2017                     | CPU                                       | Fabian Seil       | order codes and specifications added                 |
| 16.03.2017                     | RAM                                       | Fabian Seil       | Mirrored Channel Mode updated                        |
| 22.03.2017                     | HD_SSD                                    | Tatsuya Sudou     | Updated  |
| 28.03.2017                     | PRAID EP520i, 540i, 580i                  | Fabian Seil       | CacheCade deleted                                    |
| 30.03.2017                     | S26361-F5243-E14/L14                      | Fabian Seil       | comment added  |
| 30.03.2017                     | S26361-F3849-E100                         | Fabian Seil       | cooling kit added                                    |
| 04.04.2017                     | RAM                                       | Fabian Seil       | Mirrored Channel Mode text modified                  |
| 05.04.2017                     | RAM                                       | Fabian Seil       | info-text updated                                    |
| 06.04.2017                     | LAN                                       | Ulrich Lösch      | Deleted: PCNA EP OCec14102 2x 10Gb DMF LP. No        |
| 12.04.2017                     | eLCM                                      | M.Maridakis       | Added in "Others" sheet                              |
| 27.04.2017                     | USB Devices                               | M.Maridakis       | New ext. ODD added                                   |
| 27.04.2017                     | PLAN EP QL45212                           | U.Lösch           | Update   |
| 09.05.2017                     | S26361-F3552-E101                         | Fabian Seil       | added  |
| 09.05.2017                     | RAM                                       | Fabian Seil       | new order codes added                                |
| 10.05.2017                     | GFX                                       | Sasaki Takayuki   | Updated  |
| 11.05.2017                     | IB  | Hayashi,Shinho    | Special release ⇒ Project Release                    |
| 16.05.2017                     | S26361-F4026-E464/L464                    | Fabian Seil       | added  |
| 16.05.2017                     | HD_SSD / 2.5" (SFF) PCIe-SSD              | Tatsuya Sudou     | added  |
| 17.05.2017                     | S26361-F4026-E464/L464                    | Fabian Seil       | deleted  |
| 06.06.2017                     | HD_SSD / Note                             | Tatsuya Sudou     | updated  |
| 08.06.2017                     | S26361-F3845-E201                         | Johannes Linne    | changed from 2x to 3x PSAS CP400e                    |
| 08.06.2017                     | CPU                                       | Fabian Seil       | order codes of loose components added                |
| 13.06.2017                     | RAID                                      | Fabian Seil       | descriptions of FBU options changed                  |
| 29.06.2017                     | RAID                                      | Fabian Seil       | FBU Update   |
| 07.07.2017                     | RAID: S26361-F5243-E155                   | Johannes Linne    | FBU Update: change to 55cm FBU length                |
| 10.07.2017                     | others                                    | Sven Pilz         | Adjusted ATD order codes                             |
| 12.07.2017                     | RAID                                      | Fabian Seil       | info-text added                                      |
| 20.07.2017                     | HD_SSD / S26361-F5648-* / PCIe SSD        | Tatsuya Sudou     | codes modified / DWPD corrected                      |
| 20.07.2017                     | LAN                                       | Ulrich Lösch      | Added: 10GbE Ethernet Adapter X710-DA4 4-Port, Intel |
| 24.07.2017                     | HD_SSD / F5673/F5675-* / F5531/F5532-E590 | Tatsuya Sudou     | added / F5588/F5589-E240/E480 removed                |
| 02.08.2017                     | Base units / HD-cages                     | M.Maridakis       | Added *-F2495-E308/-E216, deleted *-K1599-V308/-     |
| 02.08.2017                     | LAN                                       | Ulrich Lösch      | Added: PLAN EP MCX4-Lx/EN 25/40/100GbE               |
| 08.08.2017                     | HD_SSD / S26361-F5650-*                   | Tatsuya Sudou     | removed  |
| 01.09.2017                     | PSU 1200W                                 | Robert Brunnbauer | removed  |
| 01.09.2017                     | PCIe SSD                                  | Robert Brunnbauer | max 4x   |
| 01.09.2017                     | Retimer                                   | Robert Brunnbauer | max 1x   |
| 05.09.2017                     | HD_SSD / Note                             | Tatsuya Sudou     | removed for 2.5" 7.2K/15K HDD / added for M.2 drive  |
| 18.10.2017                     | S26361-K1599-V312 -V224 -V212             | Robert Brunnbauer | ATD 40°C only / no 45°C option!                      |
| 19.10.2017                     | HD_SSD / S26361-F4045-E64                 | Tatsuya Sudou     | added  |
| 20.10.2017                     | LAN_FC_IB                                 | Atsushi Iwata     | removed all IB and Omni Path. released by Project    |
| 24.10.2017                     | LAN                                       | Ulrich Lösch      | Added: 25GbE Ethernet Adapter and SFPs, Intel        |
| 25.10.2017                     | RAID                                      | Anna Spörl        | note in Z59551 changed                               |
| 13.11.2017                     | HD_SSD                                    | Tatsuya Sudou     | note for Dual microSD and DWPD for PCIe-SSD modified |
| 12.01.2018                     | S26361-F5243-E155                         | Johannes Linne    | FBU cable must be 55cm                               |
| 15.01.2018                     | HD_SSD / F5694/F5692-* / F5543/F5582      | Tatsuya Sudou     | /F5569-E124 / F5571/F5624/F3904-E120 added           |
| 15.01.2018                     | HD_SSD / exclusions for                   | Tatsuya Sudou     | 8/10TB HDDs and PSAS CP400i/PRAID EP540i modified    |
| 16.01.2018                     | RAID controller section                   | Tatsuya Sudou     | FBU and ATD comment adjusted                         |
| 13.02.2018                     | LAN                                       | Ulrich Lösch      | PLAN EP QL41212 & QL45611 added                      |
| 02.03.2018                     | HD_SSD / S26361-F5701/F5700/F5706-*       | Tatsuya Sudou     | added  |
| 21.03.2018                     | FC  | Ulrich Lösch      | QLE274X max = 3, up from 2                           |
| 21.03.2018                     | LAN                                       | Ulrich Lösch      | SFP28 S26361-F4055-E/L701 added for PLAN EP          |
| 19.04.2018                     | RAID w/o NVMe                             | Robert Brunnbauer | No NVMe support with PRAID EP 5x0i in RX2520 M4      |
| 19.04.2018                     | LAN                                       | Ulrich Lösch      | Added: PLAN EP X710-T4 4x10GBASE-T                   |
| 17.05.2018                     | HD_SSD / F4064-*                          | Yuichi Sugiyama   | added the Dual M.2                                   |

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| 18.05.2018 | Rack Mount Kit                          | Kouji Takahashi | added the comment of S26361-F2735-E176  |
| 23.05.2018 | HD_SSD // Dual M.2                      | Yuichi Sugiyama | revised the description for VMware  |
| 24.05.2018 | RAID                                    | Johannes Linne  | reformatting comments etc.  |
| 25.06.2018 | HD_SSD / S26361-F5707-* / M.2 for       | Yuichi Sugiyama | added   |
| 29.06.2018 | RAID                                    | Johannes Linne  | added PRAID EP540e (VS35), changed FBU cable length to 55mm for all PRAID EPxxx |
| 04.07.2018 | RAID                                    | Johannes Linne  | edited PTIM CP1001 & order code   |
| 11.07.2017 | GFX                                     | Sasaki Takayuki | Updated   |
| 01.08.2018 | HD_SSD / Dual M.2                       | Tatsuya Sudou   | Notes updated   |
| 23.08.2018 | LAN / S26361-F4068-E202, L502           | Ulrich Lösch    | Added: PLAN EP QL41112 2x10GBASE-T LP   |
| 23.08.2018 | LAN / S26361-F4068-E204, L504           | Ulrich Lösch    | Added: PLAN EP QL41134 4x10GBASE-T LP   |
| 23.08.2018 | LAN / S26361-F4069-E202, L502           | Ulrich Lösch    | Added: PLAN EP QL41132 2x10Gb SFP+ LP   |
| 23.08.2018 | LAN / S26361-F4070-E202, L502           | Ulrich Lösch    | Added: PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP                                  |
| 23.08.2018 | LAN                                     | Ulrich Lösch    | Cosmetic changes: 25G Ethernet section  |
| 30.08.2018 | LAN                                     | Ulrich Lösch    | LAN / Typo max 2 --> 2 / 4 / 6  |
| 18.09.2018 | GFX                                     | Takayuki Sasaki | Modify Graphic Card - Options in "GFX" tab.<br>- add "DP- DVI/D" adapter        |
| 11.10.2018 | HD_SSD / S26361-F5588/F5589-E384/L384   | Yuichi Sugiyama | Added: SSD SATA 2.5" & 3.5" Mixed-Use 3.84TB                                    |
| 12.10.2018 | HD_SSD / S26361-F5588/F5589-E384/L384   | Yuichi Sugiyama | Cleared the highlight of the cells as yellow                                    |
| 26.10.2018 | HD_SSD / HD_SSD / exclusions for 8/10TB | Yuichi Sugiyama | removed   |
| 29.10.2018 | HD_SSD / S26361-F5635/F5638-E800/L800   | Yuichi Sugiyama | added   |
| 13.02.2019 | HD_SSD / S26361-F3907-* / added the     | Yuichi Sugiyama | added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID                       |
| 02.07.2019 | HD_SSD / S26361-F5737/F5738-* / added   | Yuichi Sugiyama | added PCIe-SSD 2.5"   |
| 26.07.2019 | HD_SSD / S26361-F5737/F5738-* / updated | Yuichi Sugiyama | removed the description as "as soon as available"                               |
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