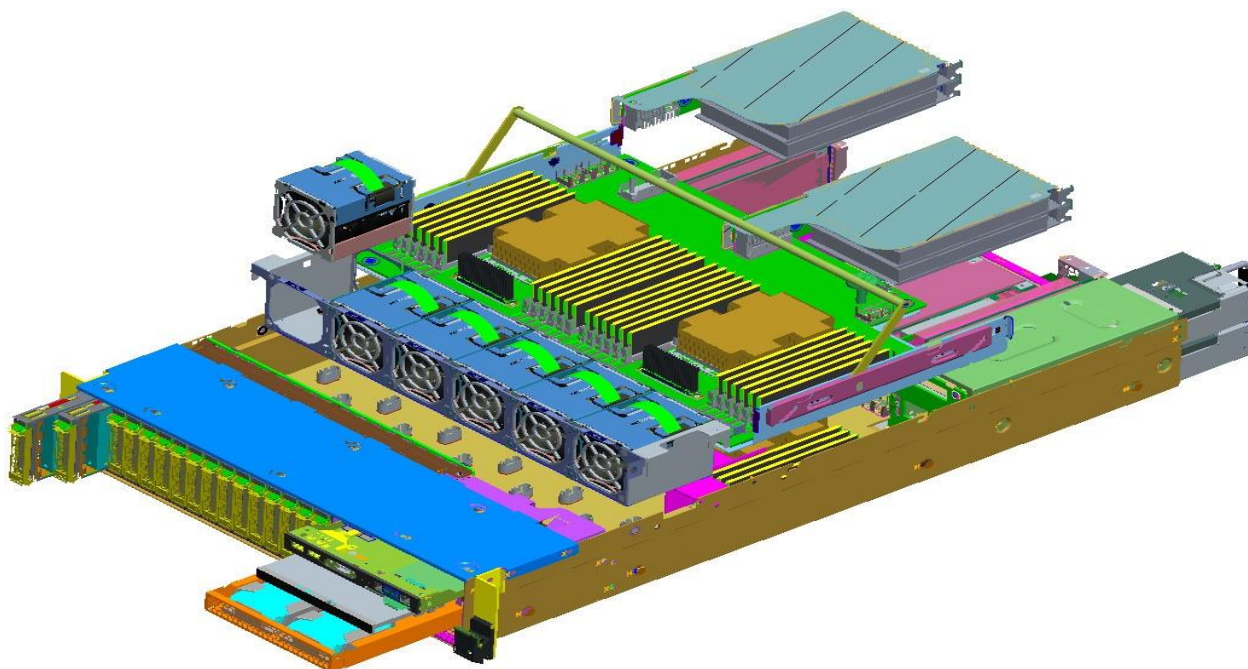
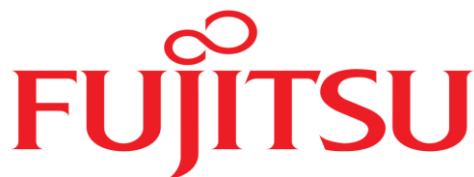


PRIMERGY RX4770 M5  
4-way / 2U Rack Server

| Chapter | Folder      | Content                                 |
|---------|-------------|---|
| 1       | Base        | Base Unit                               |
| 2       | Rack        | Rack Architecture                       |
| 3       | CPU         | CPU                                     |
| 4       | RAM         | DDR4 System memory                      |
| 5       | RAID        | SAS / RAID Controller                   |
| 6       | ODD         | Optical Disk Drives                     |
| 7       | HDD         | Hard Disk Drives                        |
| 8       | SSD         | Solid State Drives                      |
| 9       | LAN         | LAN Components                          |
| 10      | FC          | Fibre Channel Controller                |
| 11      | IB          | Infiniband Controllers                  |
| 12      | OMNI        | OMNI Path Controllers                   |
| 13      | PSU         | Power supply unit, power cable          |
| 14      | Energy Star | Energy Star restrictions                |
| 15      | USB         | iRMC, eLCM, Cool-safe, TPM, Region Kits |
| 16      | Others      | Accessories                             |

## Instructions

This document contains basic product and configuration information that supports you in more complicated configurations. In any case we recommend to use the PC-/SystemArchitect to make sure, that you configure a valid system.

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

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

## Chapter xx - description of chapter

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

|  |
|--|
| <b>S26361-F4610-E2</b>   |
| <b>S26361-F4610-L3</b>   |
| PLAN 2x1Gb Ethern. Controller  |
| i350-T2 chip (based on Intel Powerville)<br>offers 2x1Gb RJ45 connectors |
| PCIe Gen2 x4 full height card  |
| max. 6x per system   |

<-- order code E-part (bold) --

<-- order code L-part (bold)

<-- "name" of this part

<--description of this part, in same cases as well description of content

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

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

### For further information see:

Link to datasheet:

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

[http://ts.fujitsu.com/products/standard\\_servers/index.html](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)

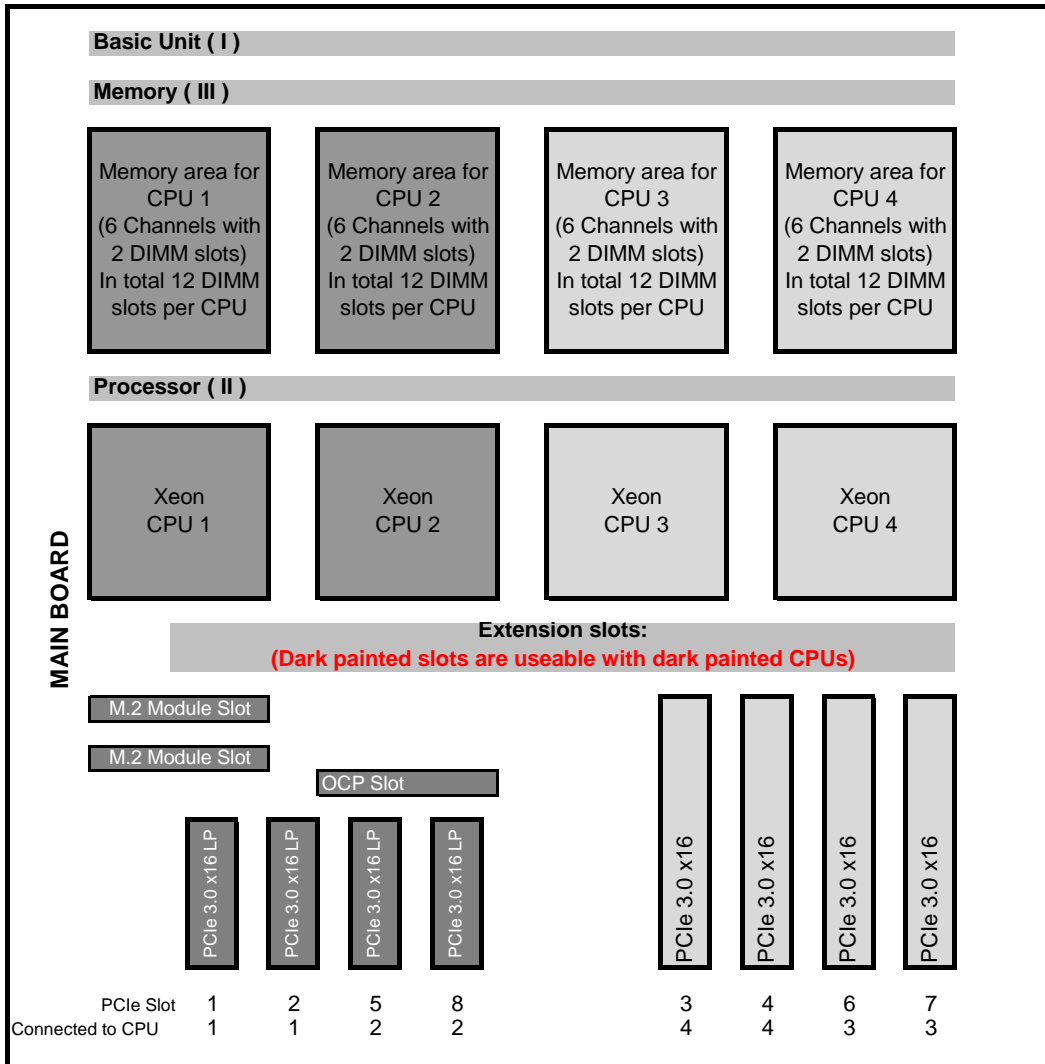
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Fujitsu is providing the content of this document with very high accuracy. In case you identify a mistake, we would kindly encourage you to inform us. We kindly ask for understanding, that errors still may occur and that Fujitsu may change this document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

## Abbreviations

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

Configuration diagram PRIMERGY RX4770 M5



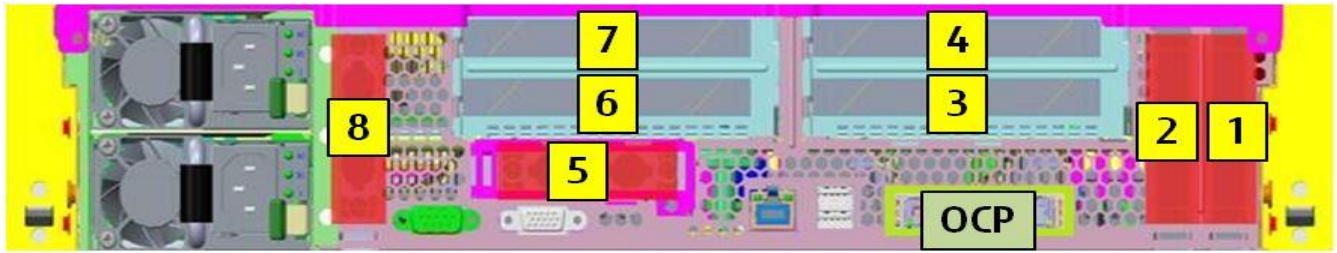
**PCIe slot restrictions on high TDP CPUs used in Performance base unit:**

If CPUs > 165W TDP are in use PCI slot 1 & 2 cannot be equipped with PCI cards (needed for improved air flow)  
 This configuration is also reduced if on slot 3 and 6 a PCI card with 75W is in use!  
 Only 2 PCI slots out of 4 (4, 5, 7, 8) are available then.

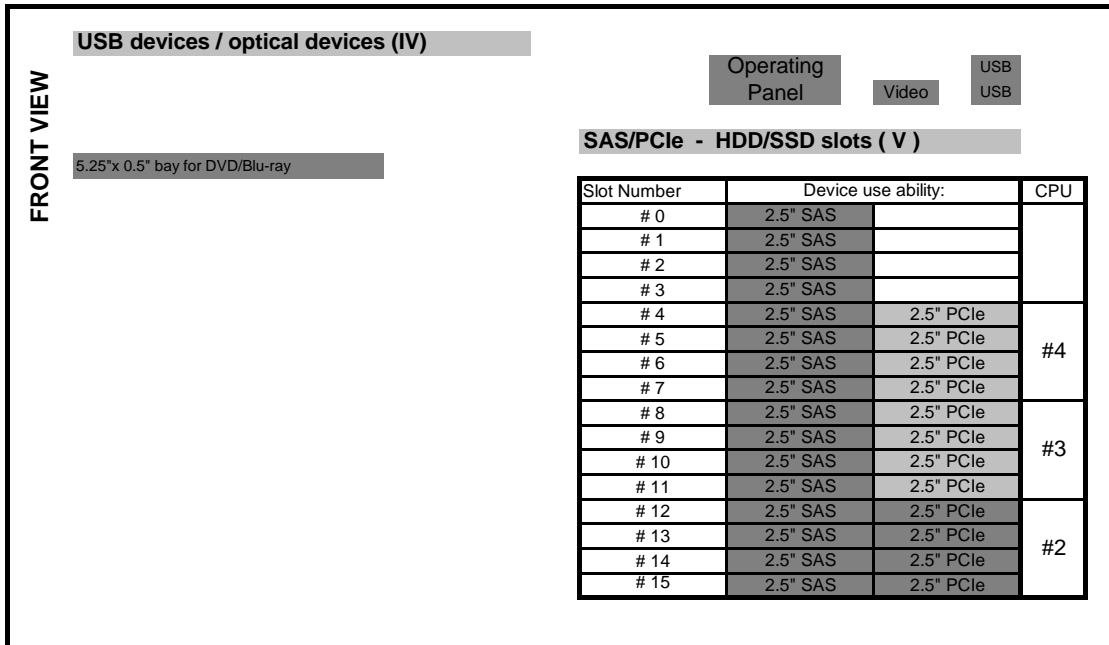
**PCIe slot restrictions while using liquid cooled base unit:**

While using liquid cooled base unit PCI slot 5, 6 & 7 are occupied.

RX4770 M5 Back view



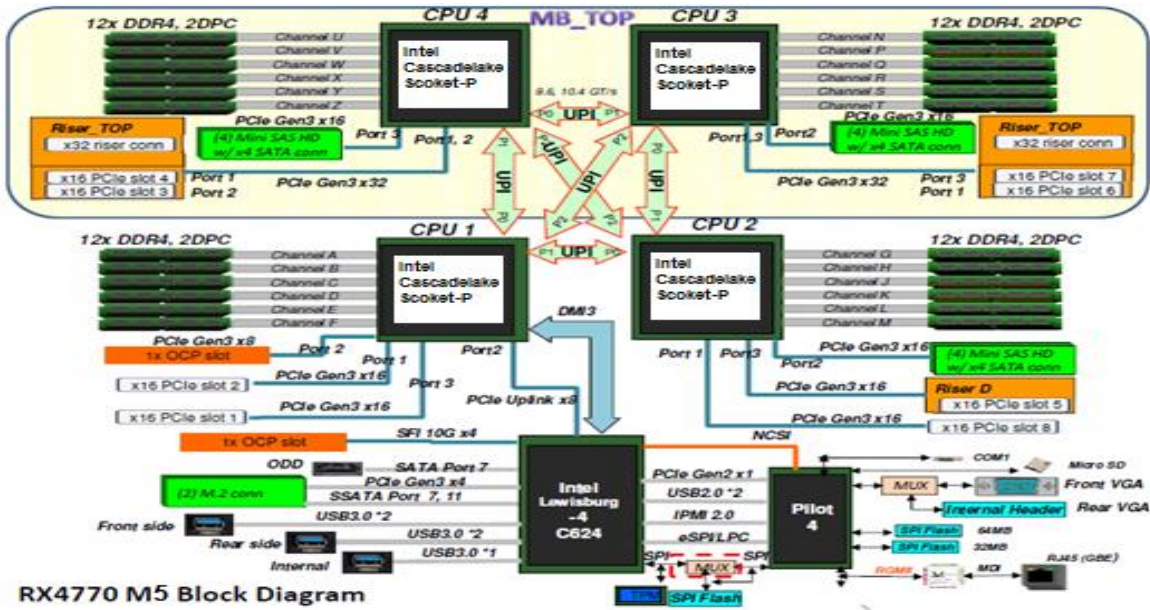
Configuration diagram PRIMERGY RX4770 M5



Key:  Light colored slots are use able with Light colored CPUs  
 Dark colored slots are use able with dark colored CPUs

| min. components for RX4770 M5               | #  |
|---|----|
| Base Unit (includes 2x PSU)                 | 1x |
| Processor                                   | 2x |
| .....Memory Mode installation               | 2x |
| DDR4 DIMM Order (according CPUs installed)  | 2x |
| Region kit APAC/EMEA/India or other         | 1x |
| iRMC S5 advanced pack (recommended)         | 1x |
| Dynamic LoM OCP PHY interface (recommended) | 1x |

RX4770 M5 Architecture



RX4770 M5 Block Diagram

**RX4770 M5 Processor Information's and Rules**

Two CPU must be configured as minimum, maximum 4 CPU's are possible too.  
 Memory area defined to not use CPU slots are not use able too.  
 Only 2 CPU or 4 CPU configurations are allowed, only same version, no mix!  
 Later upgrading to a 4 processor system is also possible, but may require adding Memory modules.

**Chapter 1 - Base Unit**

**Start**

**Base Unit, System Boards and Chipsets**

The two Rack Units hight Base Unit includes by default:

- Base Mother boards with 2 CPU slots and 24 DIMM slots and Top Motherboard with additional 2 CPU slots and 24 DIMM slots. Intel C624 Chipset.
- Two direct attached hot plug (redundant and DPF) power supply units of 1600W each, with up to 96% efficiency.
- Place for 3 FBU for Raid Controller connection.
- One SAS expander module to support all hot plug SAS/SATA devices.
- Device Backplane for up to 16 SAS devices or up to 12 PCIe devices (a PCIe device occupies a SAS device slot and vice versa)
- Eight PCI slots (PCIe 3.0 with 16 lanes each) inclusive necessary riser cards.
- One slot for SATA ODD.
- All FANs.
- Front panel.
- All necessary cables for SAS device slots, PCIe device slots, and so on.

**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 highlight easily failed components via LEDs. The LEDs can be displayed during service even without mains connection by simply pressing the "indicate CSS" button.

**Platform**

Fujitsu Systemboard D3753 based on Intel® C624 chipset  
> 3 serial UPI links Universal Path Interconnect  
> Up to four Xeon Bronze, Silver, Gold and Platinum x1xx series CPUs

**Slots:**

- Within 2 CPU populated
  - OCP slot for LoM / LAN board are active.
  - 4x PCIe card slots are on Board active.
  - 16x 2.5" SAS device slots and/or 4x PCIe 2.5" device slots are active.  
(SAS Expander module for SAS device slots #9 up to #16 are defaultly included in Base Unit!)
- Within 4 CPU populated
  - 8x PCIe card slots are on Board active.
  - 16x 2.5" SAS device slots and/or 12x PCIe 2.5" device slots are active.

Please see schematics in "description" too.

Internal SAS RAID Controller (- supports modular RAID functions) @ to first CPU

All PCIe card Slot are PCIe-Gen3 x16

**System RAM up to DDR4 2933 MT/s**

12x DDR4 DIMM slots each CPU, connected by 6 Memory Channels each 2 DIMMs.  
Each Memory Line can be populated by 2 DIMMs or by 1 DIMM plus 1 AEP Flash DIMM  
48 memory slots for max. 6TB DDR4 RAM available (12 slots per CPU). Usage of up to 24 AEP Flash DIMMs possible which allows higher total memory capacity.  
Memory speed depends on CPU and configuration.

**LAN**

LAN on Motherboard based on OCP card.  
Different OCP cards are available (Copper or optic, 1 or 10 Gbit, 2 port or 4 port).

**Software**

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

**Connectivity**

|  |   |
|--|---|
| <p><u>Interfaces at rear side</u></p> <ul style="list-style-type: none"> <li>- 1 service LAN RJ45 (1 Gbit)</li> <li>- 1 service serial COM</li> <li>- 1x VGA (15 pins)</li> <li>- 2x USB 3.0 on, no USB wakeup</li> <li>- LoM with OCP card (optional)</li> </ul> <p><u>Interfaces at front</u></p> <ul style="list-style-type: none"> <li>- 2x USB 3.0 no USB wakeup</li> <li>- 1x VGA (15 pins)</li> </ul> | <p><u>Interfaces internal</u></p> <ul style="list-style-type: none"> <li>- 2x internal M.2 connectors (SATA &amp; PCIe)</li> <li>- 1x SATA for OOD device</li> <li>- 1x USB 3.0 for ROC device (BU100)</li> <li>- 1x TPM module</li> <li>- 1x Micro SD</li> </ul> |
|--|---|

**S26361-K1657-V200**

RX4770 M5 Rack based Server with 16x SFF bays

- Rack base unit with D3753-Cx systemboard
- 2 System Boards (Bottom and Top)
- 1 bay for OCP card ( LoM/LAN )
- up to 16 SFF bays for SAS/SATA HDD's/SSD's  
thereof up to 12 SFF bays for PCIe SSD's
- 1 bay (0,5" height) for optical disc drives
- 2 Power supply units
- w/o Power cord for rack mounting (ICE 320 C14->C13 plug)
- no Rack- mounting kit included

**S26361-K1657-V300**

RX4770 M5 Rack based Server with 8x SFF bays Performance

- Rack base unit with D3753-Cx systemboard
- 2 System Boards (Bottom and Top)
- 1 bay for OCP card ( LoM/LAN )
- up to 8 SFF bays for SAS/SATA HDD's/SSD's / PCIe SSD
- 1 bay (0,5" height) for optical disc drives
- 2 Power supply units
- w/o Power cord for rack mounting (ICE 320 C14->C13 plug)
- no Rack- mounting kit included



Performance base unit always requires four CPUs.  
Doing so 6x PCIe card slots and 8x PCIe or SAS/SATA 2.5" device slots are available.

A



**Chapter 2 - Rack Architecture**

**A**

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

**B**



Chapter 3 - CPU

B

There are 4 processor sockets available. Please configure 2 or 4 Processors (step of 1 & 3 is not released).  
 >> All processors have to be the same type.  
 >> With **two** processors LOM, iRMC, 4x PCIe 2.5" device, 4x PCIe card slots and 24x DIMM slots are available  
 >> With **four** processors all 48x DIMM slots, 8x PCIe card slots and 12x PCIe 2.5" device slots are available.  
 >> **Performance base unit always requires four CPUs. 6x PCIe card slots and 8x PCIe 2.5" device slots are available**  
 >> To configure 3rd and 4th CPU an additional cooler kit is required.  
 >> Each empty CPU slot have to be filled up with a CPU Dummy!

| Base Units                           |                    |
|--------------------------------------|--------------------|
| Standard (-V200)                     | E-Star restriction |
| Liquid Cooled (-V2-Performance (-V30 |                    |
|                                      |                    |

| Xeon Gold 5200 - Advanced AEP enabled(Shelf 3)                                    |                   |                   |   |   |   |
|---|-------------------|-------------------|---|---|---|
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Gold 5215 10C 2.5GHz 85W   | S26361-F4082-E215 | S26361-F4082-L215 | X | X |   |
| Xeon Gold 5217 8C 3.0GHz 115W   | S26361-F4082-E217 | S26361-F4082-L217 | X | X |   |
| Xeon Gold 5218 16C 2.3GHz 125W  | S26361-F4082-E218 | S26361-F4082-L218 | X | X |   |
| Xeon Gold 5220 18C 2.2GHz 125W  | S26361-F4082-E220 | S26361-F4082-L220 | X | X |   |
| Xeon Gold 5200 - Advanced AEP enabled (Shelf 3)                                   |                   |                   |   |   |   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Gold 5222 4C 3.8GHz 105W   | S26361-F4082-E222 | S26361-F4082-L222 | X | X | X |
| Xeon Gold 5200 - Search Optimized (Shelf 3)                                       |                   |                   |   |   |   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Gold 5220S 18C 2.6GHz 125W   | S26361-F4082-E221 | S26361-F4082-L221 | X | X |   |
| Xeon Gold 6200 - Advanced AEP enabled (Shelf 4)                                   |                   |                   |   |   |   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Gold 6226 12C 2.8GHz 125W  | S26361-F4082-E326 | S26361-F4082-L326 | X | X |   |
| Xeon Gold 6230 20C 2.1GHz 125W  | S26361-F4082-E330 | S26361-F4082-L330 | X | X |   |
| Xeon Gold 6234 8C 3.4GHz 130W   | S26361-F4082-E334 | S26361-F4082-L334 | X | X |   |
| Xeon Gold 6238 22C 2.1GHz 140W  | S26361-F4082-E338 | S26361-F4082-L338 | X | X |   |
| Xeon Gold 6240 18C 2.6GHz 150W  | S26361-F4082-E340 | S26361-F4082-L340 | X | X |   |
| Xeon Gold 6242 16C 2.8GHz 150W  | S26361-F4082-E342 | S26361-F4082-L342 | X | X |   |
| Xeon Gold 6244 8C 3.6GHz 150W   | S26361-F4082-E344 | S26361-F4082-L344 | X | X |   |
| Xeon Gold 6246 12C 3.3GHz 165W  | S26361-F4082-E346 | S26361-F4082-L346 | X | X |   |
| Xeon Gold 6248 20C 2.5GHz 150W  | S26361-F4082-E348 | S26361-F4082-L348 | X | X |   |
| Xeon Gold 6252 24C 2.1GHz 150W  | S26361-F4082-E352 | S26361-F4082-L352 | X | X |   |
| Xeon Gold 6254 18C 3.1GHz 200W  | S26361-F4082-E354 | S26361-F4082-L354 |   | X | X |
| Xeon Gold 6200 - VM Density Optimized (Shelf 4)                                   |                   |                   |   |   |   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Gold 6222V 20C 1.8GHz 115W   | S26361-F4082-E322 | S26361-F4082-L322 | X | X |   |
| Xeon Gold 6262V 24C 1.9GHz 135W   | S26361-F4082-E362 | S26361-F4082-L362 | X | X |   |
| Xeon Platinum 8200 Advanced AEP enabled (Shelf 5)                                 |                   |                   |   |   |   |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s |                   |                   |   |   |   |
| Xeon Platinum 8253 16C 2.2GHz 125W  | S26361-F4082-E353 | S26361-F4082-L353 | X | X |   |
| Xeon Platinum 8256 4C 3.8GHz 105W   | S26361-F4082-E356 | S26361-F4082-L356 | X | X | X |
| Xeon Platinum 8260 24C 2.4GHz 165W  | S26361-F4082-E360 | S26361-F4082-L360 | X | X |   |
| Xeon Platinum 8268 24C 2.9GHz 205W  | S26361-F4082-E368 | S26361-F4082-L368 |   | X | X |
| Xeon Platinum 8270 26C 2.6GHz 205W  | S26361-F4082-E370 | S26361-F4082-L370 |   | X | X |
| Xeon Platinum 8276 28C 2.3GHz 165W  | S26361-F4082-E376 | S26361-F4082-L376 | X | X |   |
| Xeon Platinum 8280 28C 2.7GHz 205W  | S26361-F4082-E380 | S26361-F4082-L380 |   | X | X |

B1

|  |                   |                   |     |
|--|-------------------|-------------------|-----|
| <b>B1</b>  |                   |                   |     |
| <b>Xeon Gold 5200L - Advanced (Shelf 3; 4.5TB p. Socket)</b>   |                   |                   |     |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s                    |                   |                   |     |
| Xeon Platinum 5215L 10C 2.5GHz 85W   | S26361-F4082-E515 | S26361-F4082-L515 | X X |
| <b>Xeon Gold 6200L - Advanced (Shelf 4; 4.5TB p. Socket)</b>   |                   |                   |     |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s                    |                   |                   |     |
| Xeon Gold 6238L 22C 2.1GHz 140W  | S26361-F4082-E538 | S26361-F4082-L538 | X X |
| Xeon Gold 6240L 18C 2.6GHz 150W  | S26361-F4082-E540 | S26361-F4082-L540 | X X |
| <b>Xeon Platinum 8200L - Advanced (4.5TB p. Socket)</b>  |                   |                   |     |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s                    |                   |                   |     |
| Xeon Platinum 8260L 24C 2.4GHz 165W  | S26361-F4082-E560 | S26361-F4082-L560 | X X |
| Xeon Platinum 8276L 28C 2.3GHz 165W  | S26361-F4082-E576 | S26361-F4082-L576 | X X |
| Xeon Platinum 8280L 28C 2.7GHz 205W  | S26361-F4082-E580 | S26361-F4082-L580 | X X |
| <b>Xeon Gold 6200Y - Speed Select (Shelf 4)</b>  |                   |                   |     |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s                    |                   |                   |     |
| Xeon Gold 6240Y 8/14/18C 2.6GHz 150W   | S26361-F4082-E640 | S26361-F4082-L640 | X X |
| <b>Xeon Platinum 8200Y - Speed Select (Shelf 5)</b>  |                   |                   |     |
| 64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s                    |                   |                   |     |
| Xeon Platinum 8260Y 16/20/24C 2.4GHz 165W  | S26361-F4082-E660 | S26361-F4082-L660 | X X |
| <b>Cooler Kit (see comment above; please order for every additional CPU 1 additional cooler kit)</b> |                   |                   |     |
| Cooler Kit for 3rd/4th CPUs  | S26361-F4051-E4   |                   |     |
| Cooler Upgrade Kit for loose delivery CPU  |                   | S26361-F4051-L870 |     |
| <b>C</b>   |                   |                   |     |

**Chapter 4 - DDR4 System memory**

**C**

Each CPU offers 12 Slots for DDR4 Memory Modules organised in 2 Banks and 6 Channels with 2 Memory Controllers (3 Channels each).  
 If you need more than 24 Slots you have to configure the 3rd and 4th CPU.  
 Depending on the amount of memory configured you can decide between 3 basic modes of operation (see explanation below).

There are different kinds of DDR4 Memory Modules available: RDIMM x4, RDIMM x8, LRDIMM.  
 Mix of these different kind of memories is not allowed.  
 In addition DCPMM (Data Center Persistent Memory) is available and can be mixed with all kind of memory modules.

Supported memory capacities per CPU:  
 768 GB DDR4 RDIMM (12x 64GB 2Rx4)  
 1.536 GB DDR4 LRDIMM (12x 128GB 4Rx4) **(CPU type with "M" at the end is required)**  
 960 GB with 6x DDR4 32 GB & 6x DCPMM 128 GB **(Standard CPU with type Gold or type Platinum is required; exception is the Xeon Silver 4215 & 4215R SKU)**

**If DCPMM 128 GB is combined with 64 GB or 128 GB Memory module CPU type with "M" at the end is required!**  
 1.920 GB with 6x DDR4 64 GB & 6x DCPMM 256 GB **(CPU type with "M" at the end is required)**  
**If DCPMM 256 GB is combined with 128 GB Memory module CPU type with "L" at the end is required!**  
 3.840 GB with 6x DDR4 128 GB & 6x DCPMM 512 GB **(CPU type with "L" at the end is required)**

Supported memory capacities per System:  
 3.072 GB using RDIMM  
 6.144 GB using LRDIMM technology with 128GB per module  
 15.360 GB using LRDIMM technology with 128GB per module and 512 GB DCPMM

The memory speed is independent from the configuration (1DPC or 2DPC) but restricted by the CPU SKU (max. 2.933 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-E1</b>   | Rank Sparing Mode Installation     |
| BIOS Setup factory preinstalled to this mode. One Rank is spare of other ranks on the same channel. Spare Rank is not shown in System Memory. For effective capacity within a channel, please have a look below.   |                                    |
| <b>Not supported with DCPMM modules! Only one DIMM type is allowed.</b>  |                                    |
| Requires minimum 2x 1R/2R or 1x 4R/8R modules per CPU  |                                    |
| <b>S26361-F3694-E3</b>   | Mirrored Channel Mode Installation |
| BIOS preconfiguration for Mirror mode. Two or three identical memory modules are always equipped at one memory controller to use the mirrored channel mode. Half of the modules contain active data, the remaining modules contain mirrored data. See details below. |                                    |
| <b>Not supported with DCPMM modules! Only one DIMM type is allowed.</b>  |                                    |
| Multiple of 6 identical modules to be configured per CPU   |                                    |



| Resulting memory capacity / Rank Sparing Mode, 1 Channel populated |          |    |      |    |          |    |      |    |        |    |       |    |       |    |
|--|----------|----|------|----|----------|----|------|----|--------|----|-------|----|-------|----|
|  | RDIMM x8 |    |      |    | RDIMM x4 |    |      |    | LRDIMM |    |       |    |       |    |
|  | 8GB      | 1R | 16GB | 2R | 16GB     | 1R | 32GB | 2R | 64GB   | 2R | 64GB  | 4R | 128GB | 4R |
| 1DPC   | 8GB      |    |      |    | 16GB     |    |      |    | 48GB   |    |       |    | 96GB  |    |
| 2DPC   | 8GB      |    | 24GB |    | 16GB     |    | 48GB |    | 96GB   |    | 112GB |    | 224GB |    |



Apparently 3DS-DIMMs don't behave like 4Rx4 modules but as 2Rx4; same situation for 8Rx4 organized modules (=> 2Rx4).  
 Result is, that in rank-sparing mode the memory loss is half of one module capacity. This is shown in table above.

| DDR4 rg 2933 xRx8                  |                          |                          |
|------------------------------------|--------------------------|--------------------------|
| 8GB (1x8GB) 1Rx8 DDR4-2933 R ECC   | <b>S26361-F4083-E108</b> | <b>S26361-F4083-L108</b> |
| 16GB (1x16GB) 2Rx8 DDR4-2933 R ECC | <b>S26361-F4083-E116</b> | <b>S26361-F4083-L116</b> |

| DDR4 rg 2933 xRx4                  |                          |                          |
|------------------------------------|--------------------------|--------------------------|
| 16GB (1x16GB) 1Rx4 DDR4-2933 R ECC | <b>S26361-F4083-E316</b> | <b>S26361-F4083-L316</b> |
| 32GB (1x32GB) 2Rx4 DDR4-2933 R ECC | <b>S26361-F4083-E332</b> | <b>S26361-F4083-L332</b> |
| 64GB (1x64GB) 2Rx4 DDR4-2933 R ECC | <b>S26361-F4083-E364</b> | <b>S26361-F4083-L364</b> |

| DDR4 lr 2933                          |                          |                          |
|---------------------------------------|--------------------------|--------------------------|
| 64GB (1x64GB) 4Rx4 DDR4-2933 LR ECC   | <b>S26361-F4083-E464</b> | <b>S26361-F4083-L464</b> |
| 128GB (1x128GB) 4Rx4 DDR4-2933 LR ECC | <b>S26361-F4083-E428</b> | <b>S26361-F4083-L428</b> |

**C1**

**DCPMM configuration section (128 GB Modules)**

C1



**Only one type of DCPMM is allowed per system!**  
**Only one DCPMM package and one Memory package is allowed per CPU!**  
**Every CPU has to have the same DCPMM & Memory configuration!**  
**Liquid cooling base unit does not support DCPMM**

| DCPMM 128GB 2666 (Apache Pass) |                   |                   |
|--------------------------------|-------------------|-------------------|
| 128GB (1x128GB) DCPMM-2666     | S26361-F4083-E501 | S26361-F4083-L501 |

| Available Memory Packages            |                   |  |
|--------------------------------------|-------------------|--|
| 192GB (6x32GB) 2Rx4 DDR4-2933 R ECC  | S26361-F4083-E333 |  |
| 384GB (6x64GB) 4Rx4 DDR4-2933 LR ECC | S26361-F4083-E465 |  |

| DCPMM 128GB 2666 (Apache Pass) |                   |  |
|--------------------------------|-------------------|--|
| 256GB (2x128GB) DCPMM-2666     | S26361-F4083-E521 |  |
| 512GB (4x128GB) DCPMM-2666     | S26361-F4083-E541 |  |
| 768GB (6x128GB) DCPMM-2666     | S26361-F4083-E561 |  |

| Available Memory Packages            |                   |  |
|--------------------------------------|-------------------|--|
| 96GB (6x16GB) 1Rx4 DDR4-2933 R ECC   | S26361-F4083-E317 |  |
| 192GB (6x32GB) 2Rx4 DDR4-2933 R ECC  | S26361-F4083-E333 |  |
| 384GB (6x64GB) 4Rx4 DDR4-2933 LR ECC | S26361-F4083-E465 |  |

| DCPMM 128GB 2666 (Apache Pass) |                   |  |
|--------------------------------|-------------------|--|
| 768GB (6x128GB) DCPMM-2666     | S26361-F4083-E561 |  |

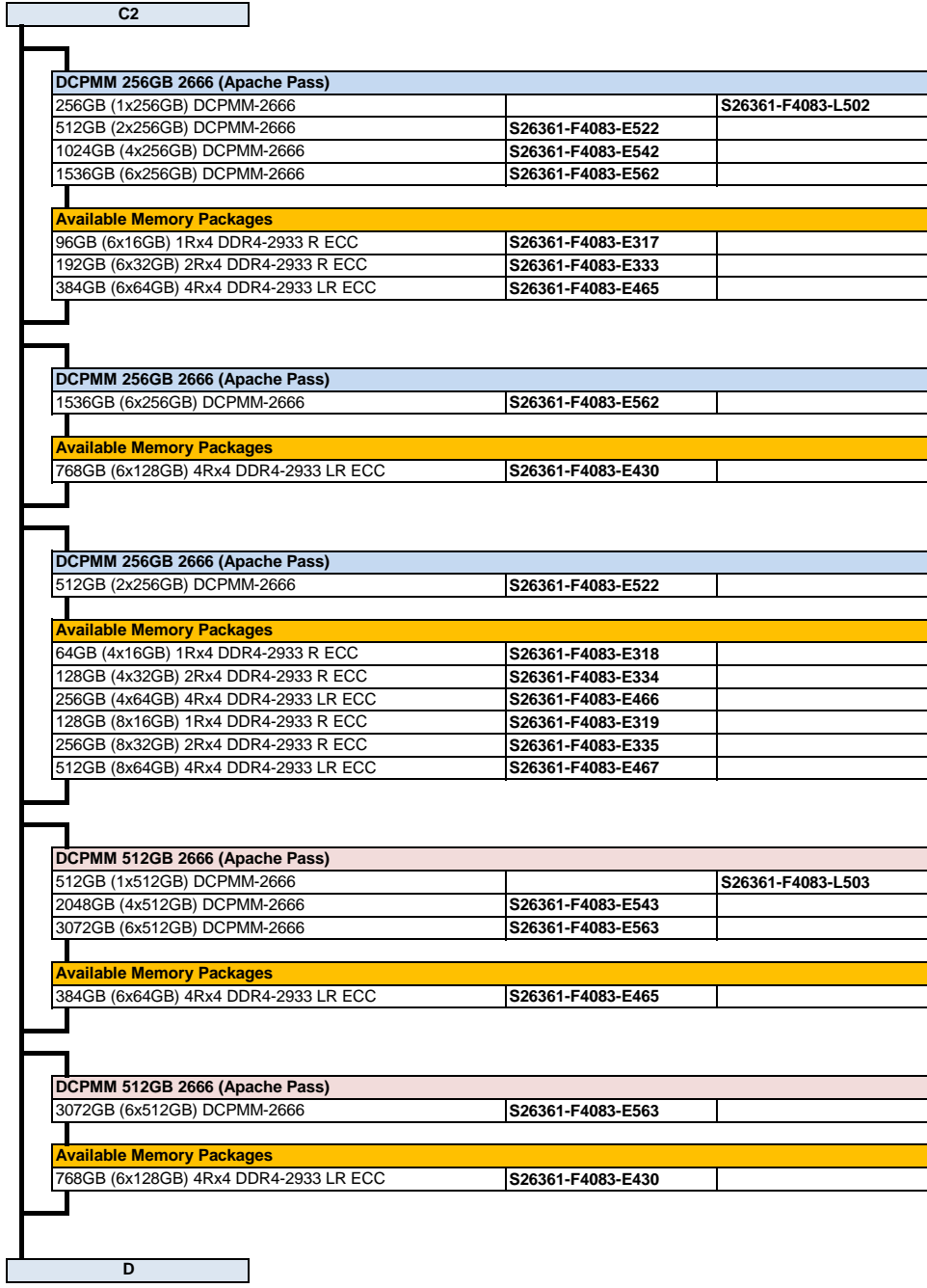
| Available Memory Packages             |                   |  |
|---------------------------------------|-------------------|--|
| 768GB (6x128GB) 4Rx4 DDR4-2933 LR ECC | S26361-F4083-E430 |  |

| DCPMM 128GB 2666 (Apache Pass) |                   |  |
|--------------------------------|-------------------|--|
| 256GB (2x128GB) DCPMM-2666     | S26361-F4083-E521 |  |

| Available Memory Packages            |                   |  |
|--------------------------------------|-------------------|--|
| 64GB (4x16GB) 1Rx4 DDR4-2933 R ECC   | S26361-F4083-E318 |  |
| 128GB (4x32GB) 2Rx4 DDR4-2933 R ECC  | S26361-F4083-E334 |  |
| 256GB (4x64GB) 4Rx4 DDR4-2933 LR ECC | S26361-F4083-E466 |  |
| 128GB (8x16GB) 1Rx4 DDR4-2933 R ECC  | S26361-F4083-E319 |  |
| 256GB (8x32GB) 2Rx4 DDR4-2933 R ECC  | S26361-F4083-E335 |  |
| 512GB (8x64GB) 4Rx4 DDR4-2933 LR ECC | S26361-F4083-E467 |  |

C2

**DCPMM configuration section (256 & 512 GB Modules)**



Detailed information

Min. - Max. Memory DIMM basics:

Minimum Memory DIMM basics:

- Each CPU DIMM population should be homogenous.
- Each CPU offers 6 Memory Lanes, each Memory Lane 2 DIMM slots.

Per CPU max. 12 DIMM slots use able

- with 2 CPU = max. 24 DIMM slots use able
- with 4 CPU = max. 48 DIMM slots use able

- on each CPU must be populated a minimum of Memory defined by Intel rules.

| Mode                     | Configuration              | RDIMM |           | Use case, advantage                               |
|--------------------------|----------------------------|-------|-----------|---|
|                          |                            | x8    | LRDIMM x4 |   |
| SDDC (chipkill) support  | any                        | no    | yes       | supports detecting multi-bit errors               |
| Independant channel mode | 1 or 2 Modules per Bank    | yes   | yes       | offers max. flexibility, upgradeability, capacity |
| Mirrored channel mode *) | 6 identical Modules / Bank | no    | yes       | offers maximum security                           |
| Rank sparing mode *)     | min. 2 Ranks / Channel     | no    | yes       | balances performance and capacity                 |

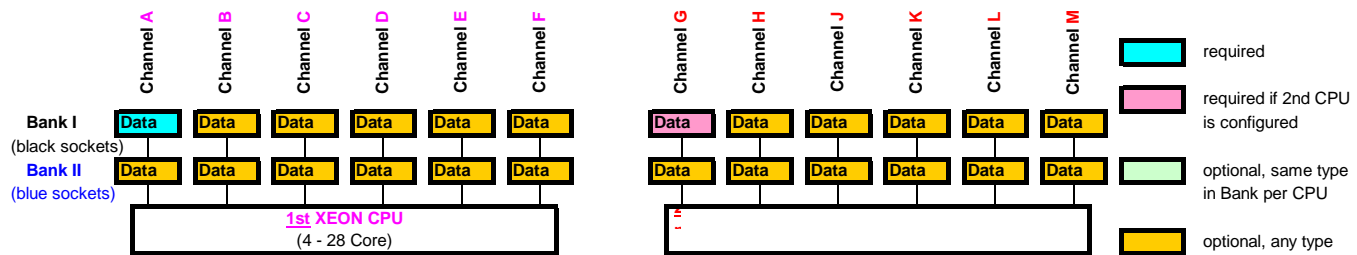
\*) For the delivery ex factory the system will be prepared with dedicated BIOS setting.

| Capacity               | Configuration       | RDIMM   | Notes         |
|------------------------|---------------------|---------|---------------|
| Min. Memory per CPU    | 1 Module / CPU      | 1x8GB   | with one CPU  |
| Max. Memory per CPU    | 12 Modules / CPU    | 12x64GB | with two CPU  |
| Max. Memory per System | 48 Modules / System | 3.072GB | with four CPU |

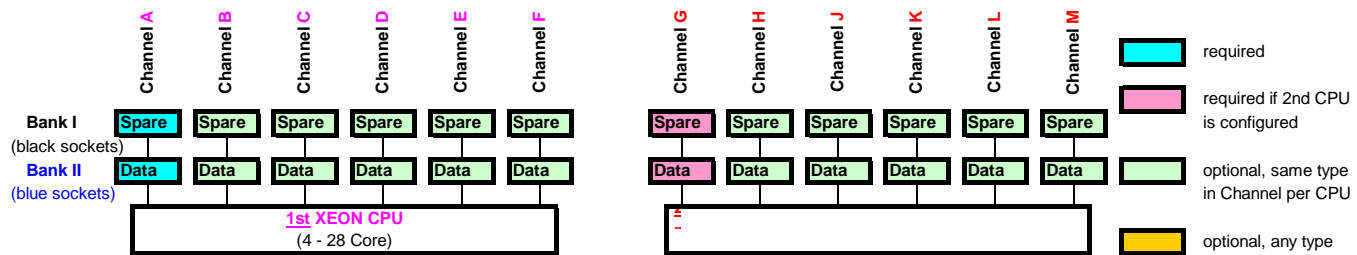
The memory sockets on the Systemboards are color coded

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

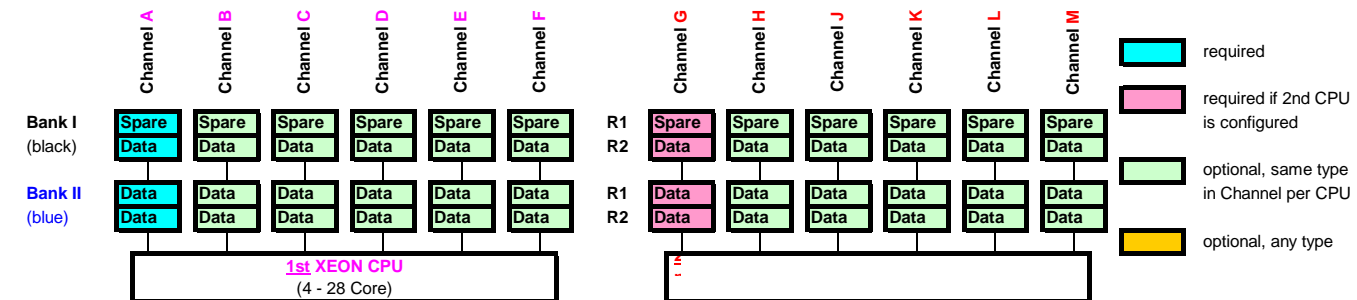
Independant channel mode



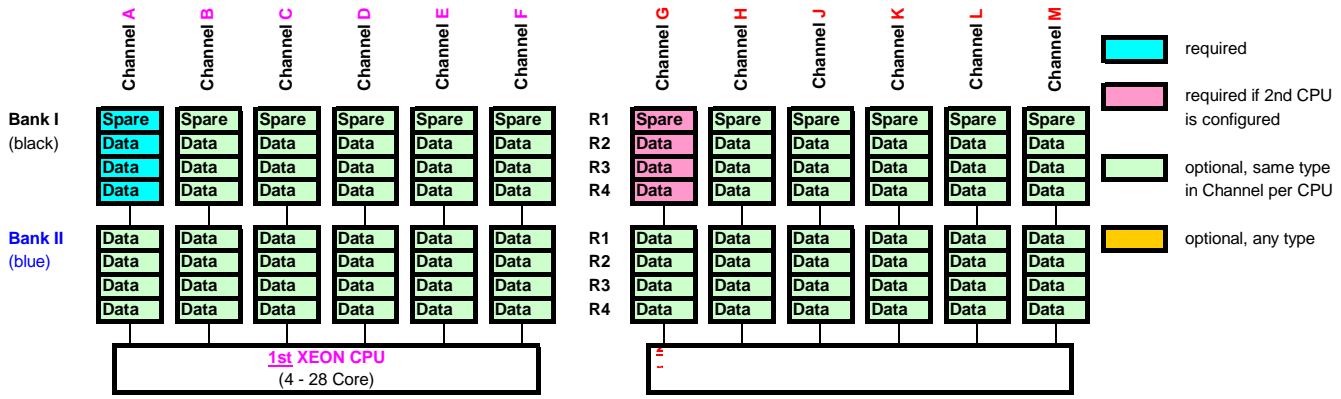
Rank sparing mode --- 1-Rank Memory modules (RDIMM)



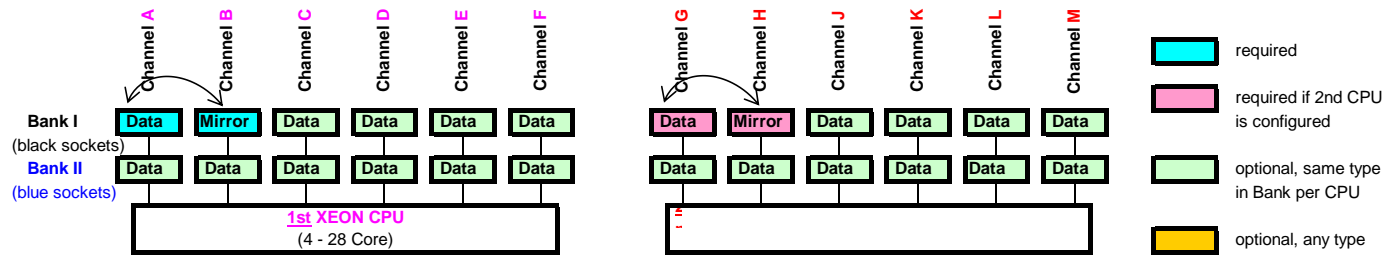
Rank sparing mode --- 2-Rank Memory modules (RDIMM)



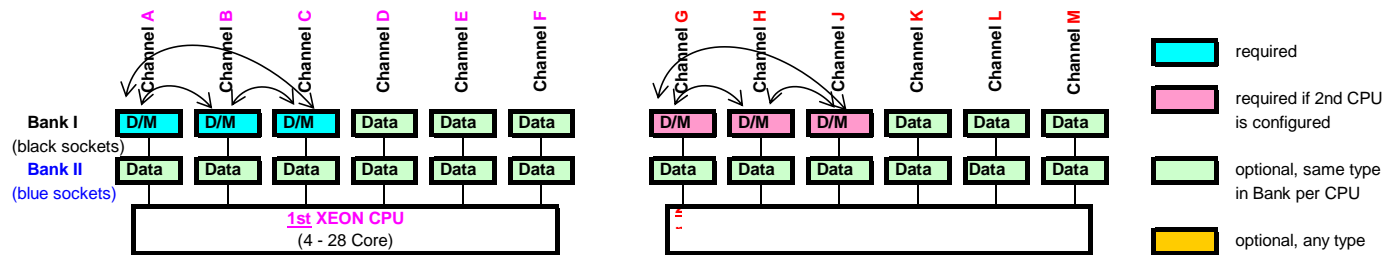
Rank sparing mode --- 4-Rank Memory modules (RDIMM 3DS)



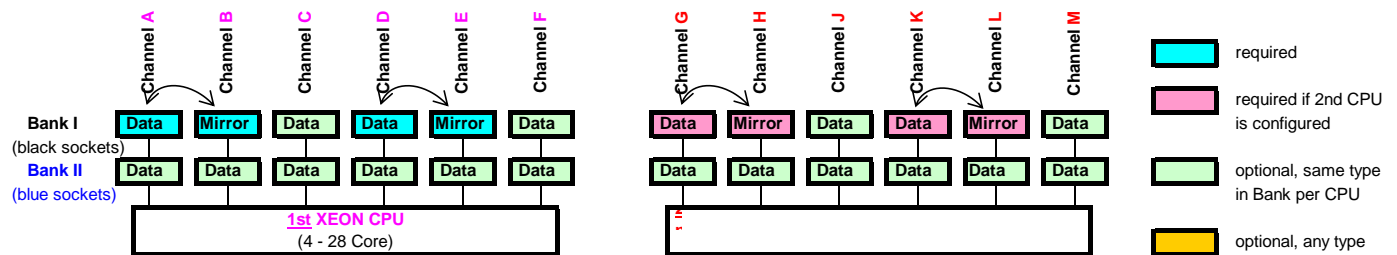
Mirror Channel Mode (2 DIMMS per CPU)



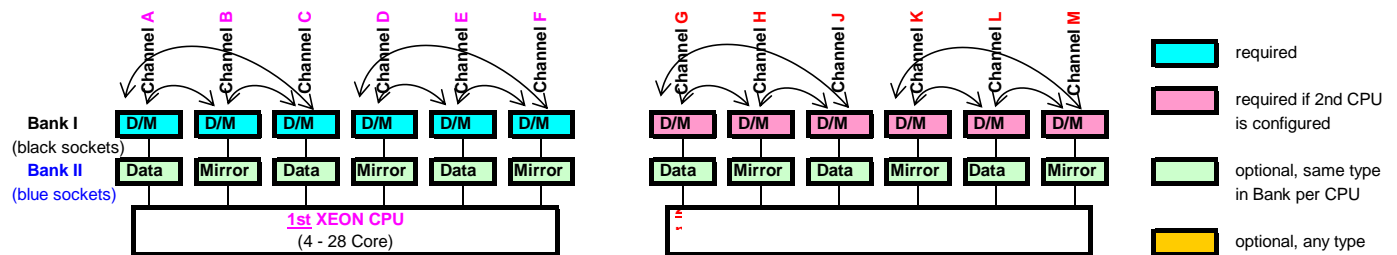
Mirror Channel Mode (3 DIMMS per CPU)



Mirror Channel Mode (4 DIMMS per CPU)



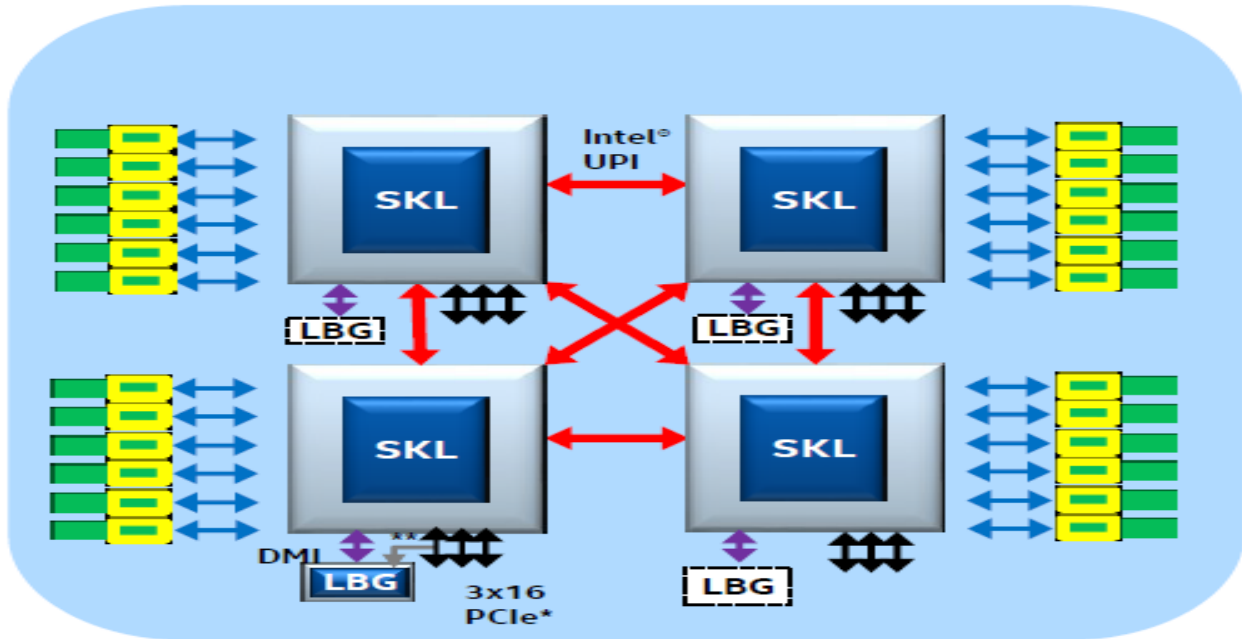
Mirror Channel Mode (6 DIMMS per CPU)








**4Socket Purley Platform; CPU, Memory and AEP Configuration Example**

# Typical 4S Configuration Cross Bar



-  DDR4 DIMMs
-  DDR4/Apache Pass
-  Optional
- PCIe\* uplink connection for Intel® QuickAssistTechnology and Intel® Ethernet
- Example DIMM population shown; please look up Apache Pass customer collateral for specific rules on
- \*\* DDR4/Apache Pass DIMM populations

Released configurations with DCPMM modules per CPU

| Modes   | iMC0      |        |           |        |           |        | iMC1      |        |           |        |           |        | Config  |
|---------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|-----------|--------|---------|
|         | Channel 0 |        | Channel 1 |        | Channel 2 |        | Channel 0 |        | Channel 1 |        | Channel 2 |        |         |
|         | Bank II   | Bank I | Bank II   | Bank I | Bank II   | Bank I | Bank II   | Bank I | Bank II   | Bank I | Bank II   | Bank I |         |
| AD + MM | 128       | 16     | 128       | 16     | 128       | 16     | 128       | 16     | 128       | 16     | 128       | 16     | 2-2-2   |
| AD + MM | 128       | 32     | 128       | 32     | 128       | 32     | 128       | 32     | 128       | 32     | 128       | 32     | 2-2-2   |
| AD      | 128       | 64     | 128       | 64     | 128       | 64     | 128       | 64     | 128       | 64     | 128       | 64     | 2-2-2   |
| AD      | 128       | 128    | 128       | 128    | 128       | 128    | 128       | 128    | 128       | 128    | 128       | 128    | 2-2-2   |
| AD + MM | 256       | 16     | 256       | 16     | 256       | 16     | 256       | 16     | 256       | 16     | 256       | 16     | 2-2-2   |
| AD + MM | 256       | 32     | 256       | 32     | 256       | 32     | 256       | 32     | 256       | 32     | 256       | 32     | 2-2-2   |
| AD + MM | 256       | 64     | 256       | 64     | 256       | 64     | 256       | 64     | 256       | 64     | 256       | 64     | 2-2-2   |
| AD      | 256       | 128    | 256       | 128    | 256       | 128    | 256       | 128    | 256       | 128    | 256       | 128    | 2-2-2   |
| AD + MM | 512       | 64     | 512       | 64     | 512       | 64     | 512       | 64     | 512       | 64     | 512       | 64     | 2-2-2   |
| AD + MM | 512       | 128    | 512       | 128    | 512       | 128    | 512       | 128    | 512       | 128    | 512       | 128    | 2-2-2   |
| AD + MM | 128       | 16     | 128       | 16     |           | 16     | 128       | 16     | 128       | 16     |           | 16     | 2-2-1   |
| AD      | 128       | 32     | 128       | 32     |           | 32     | 128       | 32     | 128       | 32     |           | 32     | 2-2-1   |
| AD      | 128       | 64     | 128       | 64     |           | 64     | 128       | 64     | 128       | 64     |           | 64     | 2-2-1   |
| AD + MM | 256       | 16     | 256       | 16     |           | 16     | 256       | 16     | 256       | 16     |           | 16     | 2-2-1   |
| AD + MM | 256       | 32     | 256       | 32     |           | 32     | 256       | 32     | 256       | 32     |           | 32     | 2-2-1   |
| AD      | 256       | 64     | 256       | 64     |           | 64     | 256       | 64     | 256       | 64     |           | 64     | 2-2-1   |
| AD + MM | 512       | 64     | 512       | 64     |           | 64     | 512       | 64     | 512       | 64     |           | 64     | 2-2-1   |
| AD      | 128       | 16     |           | 16     |           | 16     | 128       | 16     |           | 16     |           | 16     | 2-1-1   |
| AD      | 128       | 32     |           | 32     |           | 32     | 128       | 32     |           | 32     |           | 32     | 2-1-1   |
| AD      | 128       | 64     |           | 64     |           | 64     | 128       | 64     |           | 64     |           | 64     | 2-1-1   |
| AD + MM | 256       | 16     |           | 16     |           | 16     | 256       | 16     |           | 16     |           | 16     | 2-1-1   |
| AD      | 256       | 32     |           | 32     |           | 32     | 256       | 32     |           | 32     |           | 32     | 2-1-1   |
| AD      | 256       | 64     |           | 64     |           | 64     | 256       | 64     |           | 64     |           | 64     | 2-1-1   |
| AD + MM |           | 16     |           | 16     |           | 128    |           | 16     |           | 16     |           | 128    | 1-1-1   |
| AD      |           | 32     |           | 32     |           | 128    |           | 32     |           | 32     |           | 128    | 1-1-1   |
| AD      |           | 64     |           | 64     |           | 128    |           | 64     |           | 64     |           | 128    | 1-1-1   |
| AD + MM |           | 16     |           | 16     |           | 256    |           | 16     |           | 16     |           | 256    | 1-1-1   |
| AD + MM |           | 32     |           | 32     |           | 256    |           | 32     |           | 32     |           | 256    | 1-1-1   |
| AD      |           | 64     |           | 64     |           | 256    |           | 64     |           | 64     |           | 256    | 1-1-1   |
| AD      | 16        | 16     | 16        | 16     |           | 128    | 16        | 16     | 16        | 16     |           | 128    | 2-2-1   |
| AD      | 32        | 32     | 32        | 32     |           | 128    | 32        | 32     | 32        | 32     |           | 128    | 2-2-1   |
| AD      | 64        | 64     | 64        | 64     |           | 128    | 64        | 64     | 64        | 64     |           | 128    | 2-2-1   |
| AD      | 16        | 16     | 16        | 16     |           | 256    | 16        | 16     | 16        | 16     |           | 256    | 2-2-1   |
| AD      | 32        | 32     | 32        | 32     |           | 256    | 32        | 32     | 32        | 32     |           | 256    | 2-2-1   |
| AD      | 64        | 64     | 64        | 64     |           | 256    | 64        | 64     | 64        | 64     |           | 256    | 2-2-1   |
| AD      | 128       | 32     |           | 32     |           | 32     |           | 32     |           | 32     |           | 32     | 2/1-1-1 |
| AD      | 128       | 64     |           | 64     |           | 64     |           | 64     |           | 64     |           | 64     | 2/1-1-1 |

**Chapter 7 - SAS / RAID Controller**

F

The internal RAID controller have to be installed on PCIe slot #8  
 In addition 2 external RAID controllers can be installed on PCIe slot #5, #6 or #7.  
 All installed RAID controllers can have an optional FBU.

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

| Internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives   |          |                          |    |                   |                   |
|---|----------|--------------------------|----|-------------------|-------------------|
| <b>PRAID CP400i RAID Contr.</b>   | No Cache | RAID 0, 1, 1E, 10, 5, 50 | 1x | S26361-F3842-E1   | S26361-F3842-L501 |
| <b>PSAS CP400i HBA SAS Contr.</b>   | No Cache | HBA + RAID 0, 1          | 1x | S26361-F3842-E2   | S26361-F3842-L502 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008  |          |                          |    |                   |                   |
| Internal drive RAID / HBA controllers for SAS, SATA HDD or SSD drives   |          |                          |    |                   |                   |
| <b>PRAID CP500i RAID Contr.</b>   | No Cache | RAID 0, 1, 10, 5, 50     | 1x | S26361-F5791-E251 | S26361-F5791-L551 |
| 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 SAS3408   |          |                          |    |                   |                   |
| <b>PSAS CP503i HBA SAS Contr.</b>   | No Cache | HBA, no RAID             | 1x | S26361-F5792-E253 | S26361-F5792-L553 |
| 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 SAS3408; IT FW stack without RAID functionality   |          |                          |    |                   |                   |
| <b>PSAS CP503i HBA SAS Contr. for vSAN</b>  | No Cache | HBA, no RAID             | 1x | S26361-F5792-E254 | S26361-F5792-L554 |
| 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 SAS3408; IT FW stack without RAID functionality; released for VMWare vSAN / vSphere in V200 base unit |          |                          |    |                   |                   |

**PSAS CP500e and PSAS CP400i cannot be mixed**

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

| Internal drive RAID / SAS, SATA controllers with Cache and opt. TFM module + Flash Backup Unit and opt. Advanced SW Options                        |           |   |    |                   |                   |
|--|-----------|---|----|-------------------|-------------------|
| <b>PRAID EP400i RAID Contr.</b>  | 1GB Cache | RAID 0,1,1E,10,5,50,6,60  | 1x | 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                  |           |   |    |                   |                   |
| RAID Advanced SW Option CacheCade @Broadcom: SSD-cache-based HDD acceleration  |           |   | 1x | S26361-F5243-E670 | S26361-F5243-L670 |
| optional Transportable Flash module (TFM) and Flash Backup Unit (FBU), both components required  |           |   |    |                   |                   |
| TFM module for 1GB Cache   |           | NV-RAM & FBU control logic  |    | 1x                | S26361-F5243-E100 |
| FBU Option for PRAID EP4xx:  |           | Supercap securing the power supply of the RAID controller in case of power failure including cable with 70cm length |    | 1x                | S26361-F5243-E171 |
| <b>PRAID EP420i RAID Contr.</b>  | 2GB Cache | RAID 0,1,1E,10,5,50,6,60  | 1x | 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  | 1x | 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                  |           |   |    |                   |                   |
| RAID Advanced SW Option CacheCade @Broadcom: SSD-cache-based HDD acceleration  |           |   | 1x | S26361-F5243-E670 | S26361-F5243-L670 |
| optional TFM module and Flash Backup Unit (FBU), both components required  |           |   |    |                   |                   |
| TFM module for 2GB Cache   |           | NV-RAM & FBU control logic  |    | 1x                | S26361-F5243-E200 |
| FBU Option for PRAID EP4xx:  |           | Supercap securing the power supply of the RAID controller in case of power failure including cable with 70cm length |    | 1x                | S26361-F5243-E171 |

Remark: NVMe drives in this system are always connected directly to the CPU, not the controller

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

| Internal drive RAID / SAS controllers for E91 and SAS, SATA HDD or SSD drives   |           |   |    |                   |                   |
|---|-----------|---|----|-------------------|-------------------|
| <b>PRAID EP520i RAID Contr. LP</b>  | 2GB Cache | RAID 0,1,1E,10,5,50,6,60  | 1x | S26361-F4042-E202 | S26361-F4042-L502 |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander<br>includes Fastpath and SafeStore Advanced SW-Licence<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3508   |           |   |    |                   |                   |
| <b>PRAID EP540i RAID Contr. LP</b>  | 4GB Cache | RAID 0,1,1E,10,5,50,6,60  | 1x | S26361-F4042-E204 | S26361-F4042-L504 |
| <b>PRAID EP580i RAID Contr. LP</b>  | 8GB Cache | RAID 0,1,1E,10,5,50,6,60  | 1x | S26361-F4042-E208 | S26361-F4042-L508 |
| 16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3516, supports up to 16 devices without expander or<br>16 ports 8Gb/s NVMe PCIe, supports up to 4 x4 NVMe devices (not supported in this system)<br>includes Fastpath and SafeStore Advanced SW-Licence, CacheCade is no longer supported<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  |           |   |    |                   |                   |
| FBU Option for PRAID EP5xx:   |           | Supercap securing the power supply of the RAID controller in case of power failure including cable with 70cm length |    | 1x                | S26361-F4042-E171 |

Up to 2x FBU can be integrated per System

Expander configurations: Use PRAID EPxxx for optimal performance

Cable kit for upgrade cards: For upgrade, L-parts Cable Kit is available.  
 Cable Kit for EP5xx/CP5xx: S26361-F5894-L1 \*will be available\*

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**Advanced SW options:**  
 simultaneous operation of SafeStore or CacheCade + FastPath or is supported,  
 simultaneous operation of Safestore + CacheCade is not supported

external SAS controller

**HBA controller for ext. drives SAS, SATA HDD or SSD drives**

|                                      |          |              |    |                   |                   |
|--------------------------------------|----------|--------------|----|-------------------|-------------------|
| <b>PSAS CP500e HBA SAS Contr. FH</b> | No Cache | HBA, no RAID | 2x | S26361-F5793-E51  | S26361-F5793-L551 |
| <b>PSAS CP500e HBA SAS Contr. LP</b> | No Cache | HBA, no RAID | 2x | S26361-F5793-E251 |                   |

8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD)  
 requires 1x FH or LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408

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

**RAID / SAS, SATA controllers for external drives with Cache and opt. Flash Backup Unit**

|   |           |                          |    |                      |                   |
|---|-----------|--------------------------|----|----------------------|-------------------|
| <b>PRAID EP540e RAID Contr. FH / LP</b> | 4GB Cache | RAID 0,1,1E,10,5,50,6,60 | 2x | S26361-F4063-E4/E204 | S26361-F4063-L504 |
|---|-----------|--------------------------|----|----------------------|-------------------|

8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD)  
 includes Fastpath and SafeStore Advanced SW-Licence  
 requires 1x FH or 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-E171 | S26361-F4042-L113 |
|--|----|-------------------|-------------------|

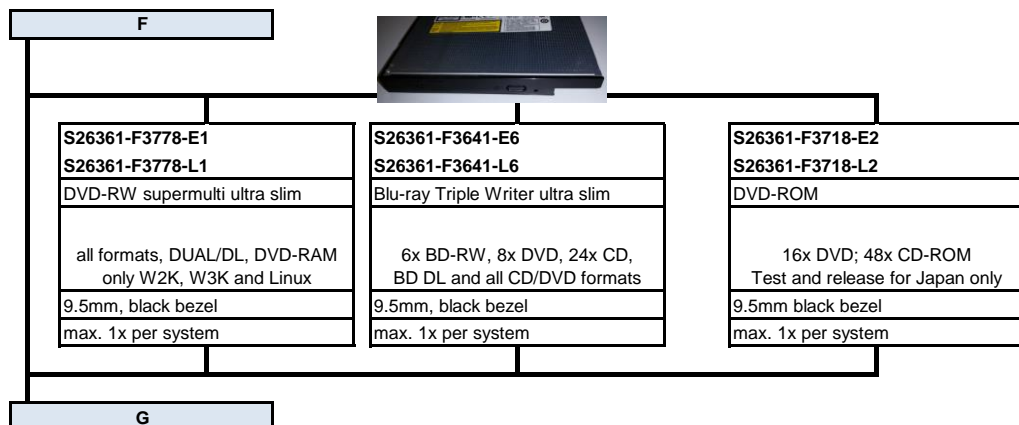
**onboard Ocu Link Connector, from CPU to Backplane for intenal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)**

|                          |           |          |     |         |
|--------------------------|-----------|----------|-----|---------|
| 12/8 ports 8Gb/s PCIe x4 | Intel CPU | No Cache | 12x | onboard |
|--------------------------|-----------|----------|-----|---------|

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**Chapter 6 - Optical Disk Drives**

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



**Chapter 7 - storage drives**

**G**

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.  
**SATA/SAS drives require a dedicated SAS / RAID Controller**  
 Hard Disk Sector Format Information:  
 512n HDD: 512 byte sectors on the drive media.  
 512e (e=emulation) HDD: 4K physical sectors on the drive media with 512 byte logical configuration.  
 512e HDD Disk Drives: VMware 6.0 or earlier is not supported.  
 When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.  
<https://kb.vmware.com/kb/2145210>  
 DWPD: Drive Writes Per Day over 5 years.  
 SED (=Self Encrypting Drives) require either a RAID controller with \*SafeStore (SED) support or an HBA and in addition a software instance, supporting SED Key Management.  
 It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality.  
**HDD Classes:**  
 Economic (ECO) SATA: Entry Class Drives.  
 Business-Critical (BC) -SATA=Nearline SATA Enterprise Drives / 7.2Krpm, SATA 6G.  
 Business-Critical (BC) -SAS=Nearline SAS Enterprise Drives / 7.2Krpm, SAS 12G .  
 Mission-Critical (MC)=SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.  
**Warranty:**  
 SSD and SATA DOM have a built-in Wear-Out indicator. In this case the warranty for such a component, as an exception to the system warranty, is restricted to the time period until the indicator reaches the exhaust level.

**2.5" (SFF) SAS and SATA SSD**

**SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray**  
 based on **Seagate Nytro3732** drives

| Capacity | Formfactor | Interface  | Endurance       | DWPD |     | order code E-part        | order code L-part        |
|----------|------------|------------|-----------------|------|-----|--------------------------|--------------------------|
| 400GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5865-E400</b> | <b>S26361-F5865-L400</b> |
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5865-E800</b> | <b>S26361-F5865-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5865-E160</b> | <b>S26361-F5865-L160</b> |
| 400GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5866-E400</b> | <b>S26361-F5866-L400</b> |
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5866-E800</b> | <b>S26361-F5866-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5866-E160</b> | <b>S26361-F5866-L160</b> |

max. 8/16x - depending on base unit & configuration

as long as stock available

**SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray**  
 based on **Toshiba PM5-M** drives

| Capacity | Formfactor | Interface  | Endurance       | DWPD |     | order code E-part        | order code L-part        |
|----------|------------|------------|-----------------|------|-----|--------------------------|--------------------------|
| 400GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5710-E400</b> | <b>S26361-F5710-L400</b> |
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5710-E800</b> | <b>S26361-F5710-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   |     | <b>S26361-F5710-E160</b> | <b>S26361-F5710-L160</b> |
| 400GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5711-E400</b> | <b>S26361-F5711-L400</b> |
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5711-E800</b> | <b>S26361-F5711-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Write Intensive | 10   | SED | <b>S26361-F5711-E160</b> | <b>S26361-F5711-L160</b> |

max. 8/16x - depending on base unit & configuration

**SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray**  
 based on **Seagate Nytro3532** drives

| Capacity | Formfactor | Interface  | Endurance | DWPD |  | order code E-part        | order code L-part        |
|----------|------------|------------|-----------|------|--|--------------------------|--------------------------|
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5868-E800</b> | <b>S26361-F5868-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5868-E160</b> | <b>S26361-F5868-L160</b> |
| 3.2TB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5868-E320</b> | <b>S26361-F5868-L320</b> |
| 6.4TB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5868-E640</b> | <b>S26361-F5868-L640</b> |

max. 8/16x - depending on base unit & configuration

as long as stock available

**SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray**  
 based on **Western Digital DC SS200 / SS530** drives

| Capacity | Formfactor | Interface  | Endurance | DWPD |  | order code E-part        | order code L-part        |
|----------|------------|------------|-----------|------|--|--------------------------|--------------------------|
| 400GB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5809-E400</b> | <b>S26361-F5809-L400</b> |
| 800GB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5809-E800</b> | <b>S26361-F5809-L800</b> |
| 1.6TB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 3    |  | <b>S26361-F5809-E160</b> | <b>S26361-F5809-L160</b> |
| 3.2TB    | 2.5" (SFF) | SAS 12Gb/s | Mixed Use | 2,3  |  | <b>S26361-F5809-E320</b> | <b>S26361-F5809-L320</b> |

max. 8/16x - depending on base unit & configuration

| <b>SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |  |                   |                   |
|--|------------|------------|----------------|------|--|-------------------|-------------------|
| based on <b>Seagate Nytro3332</b> drives   |            |            |                |      |  |                   |                   |
| Capacity   | Formfactor | Interface  | Endurance      | DWPD |  | order code E-part | order code L-part |
| 960GB  | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5870-E960 | S26361-F5870-L960 |
| 1.92TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5870-E192 | S26361-F5870-L192 |
| 3.84TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5870-E384 | S26361-F5870-L384 |
| 7.68TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5870-E768 | S26361-F5870-L768 |
| 15.36TB  | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5870-E153 | S26361-F5870-L153 |

max. 8/16x - depending on base unit & configuration

as long as stock available

| <b>SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |  |                   |                   |
|--|------------|------------|----------------|------|--|-------------------|-------------------|
| based on <b>Western Digital DC SS200 / SS530</b> drives                            |            |            |                |      |  |                   |                   |
| Capacity   | Formfactor | Interface  | Endurance      | DWPD |  | order code E-part | order code L-part |
| 480GB  | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5811-E480 | S26361-F5811-L480 |
| 960GB  | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5811-E960 | S26361-F5811-L960 |
| 1.92TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5811-E192 | S26361-F5811-L192 |
| 3.84TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 1    |  | S26361-F5811-E384 | S26361-F5811-L384 |
| 7.68TB   | 2.5" (SFF) | SAS 12Gb/s | Read Intensive | 0,9  |  | S26361-F5811-E768 | S26361-F5811-L768 |

max. 8/16x - depending on base unit & configuration

| <b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |           |      |  |                   |                   |
|--|------------|------------|-----------|------|--|-------------------|-------------------|
| based on <b>Micron 5300 MAX</b> drives   |            |            |           |      |  |                   |                   |
| Capacity   | Formfactor | Interface  | Endurance | DWPD |  | order code E-part | order code L-part |
| 240GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 5,0  |  | S26361-F5776-E240 | S26361-F5776-L240 |
| 480GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 5,0  |  | S26361-F5776-E480 | S26361-F5776-L480 |
| 960GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 5,0  |  | S26361-F5776-E960 | S26361-F5776-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 5,0  |  | S26361-F5776-E192 | S26361-F5776-L192 |
| 3.84TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3,5  |  | S26361-F5776-E384 | S26361-F5776-L384 |

max. 8/16x - depending on base unit & configuration

| <b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |           |      |                      |                   |                   |
|--|------------|------------|-----------|------|----------------------|-------------------|-------------------|
| based on <b>Samsung PM897</b> drives   |            |            |           |      |                      |                   |                   |
| Capacity   | Formfactor | Interface  | Endurance | DWPD |                      | order code E-part | order code L-part |
| 480GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3    | as soon as available | S26361-F5938-E480 | S26361-F5938-L480 |
| 960GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3    | as soon as available | S26361-F5938-E960 | S26361-F5938-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3    | as soon as available | S26361-F5938-E192 | S26361-F5938-L192 |
| 3.84TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3    | as soon as available | S26361-F5938-E384 | S26361-F5938-L384 |

max. 8/16x - depending on base unit & configuration

EOL

| <b>SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |           |      |  |                   |                   |
|--|------------|------------|-----------|------|--|-------------------|-------------------|
| based on <b>Samsung SM883</b> or <b>SM863a</b> drives * 3.84TB is SM883 only   |            |            |           |      |  |                   |                   |
| 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-F5733-E240 | S26361-F5733-L240 |
| 480GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3,6  |  | S26361-F5733-E480 | S26361-F5733-L480 |
| 960GB  | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3,6  |  | S26361-F5733-E960 | S26361-F5733-L960 |
| 1.92TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3,6  |  | S26361-F5733-E192 | S26361-F5733-L192 |
| 3.84TB   | 2.5" (SFF) | SATA 6Gb/s | Mixed Use | 3,6  |  | S26361-F5588-E384 | S26361-F5588-L384 |

max. 8/16x - depending on base unit & configuration

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| <b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |  |                   |                   |
|---|------------|------------|----------------|------|--|-------------------|-------------------|
| based on <b>Micron 5300 PRO</b> drives  |            |            |                |      |  |                   |                   |
| Capacity  | Formfactor | Interface  | Endurance      | DWPD |  | order code E-part | order code L-part |
| 240GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5  |  | S26361-F5783-E240 | S26361-F5783-L240 |
| 480GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5  |  | S26361-F5783-E480 | S26361-F5783-L480 |
| 960GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5  |  | S26361-F5783-E960 | S26361-F5783-L960 |
| 1.92TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5  |  | S26361-F5783-E192 | S26361-F5783-L192 |
| 3.84TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,2  |  | S26361-F5783-E384 | S26361-F5783-L384 |
| 7.68TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,6  |  | S26361-F5783-E768 | S26361-F5783-L768 |
| max. 8/16x - depending on base unit & configuration                                 |            |            |                |      |  |                   |                   |

| <b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |                      |                   |                   |
|---|------------|------------|----------------|------|----------------------|-------------------|-------------------|
| based on <b>Samsung PM893</b> drives  |            |            |                |      |                      |                   |                   |
| Capacity  | Formfactor | Interface  | Endurance      | DWPD |                      | order code E-part | order code L-part |
| 240GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E240 | S26361-F5946-L240 |
| 480GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E480 | S26361-F5946-L480 |
| 960GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E960 | S26361-F5946-L960 |
| 1.92TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E192 | S26361-F5946-L192 |
| 3.84TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E384 | S26361-F5946-L384 |
| 7.68TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,0  | as soon as available | S26361-F5946-E768 | S26361-F5946-L768 |
| max. 8/16x - depending on base unit & configuration                                 |            |            |                |      |                      |                   |                   |

EOL, EMEIA only

| <b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |  |                   |                   |
|---|------------|------------|----------------|------|--|-------------------|-------------------|
| based on <b>Samsung PM883</b> drives  |            |            |                |      |  |                   |                   |
| Capacity  | Formfactor | Interface  | Endurance      | DWPD |  | order code E-part | order code L-part |
| 240GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E240 | S26361-F5802-L240 |
| 480GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E480 | S26361-F5802-L480 |
| 960GB   | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E960 | S26361-F5802-L960 |
| 1.92TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E192 | S26361-F5802-L192 |
| 3.84TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E384 | S26361-F5802-L384 |
| 7.68TB  | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,7  |  | S26361-F5802-E768 | S26361-F5802-L768 |
| max. 8/16x - depending on base unit & configuration                                 |            |            |                |      |  |                   |                   |

as long as stock available

| <b>SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray</b> |            |            |                |      |  |                   |                   |
|---|------------|------------|----------------|------|--|-------------------|-------------------|
| based on <b>Micron 5100 PRO</b> or <b>5200 ECO</b> * 240GB is 5100, others are 5200 |            |            |                |      |  |                   |                   |
| 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. 8/16x - depending on base unit & configuration                                 |            |            |                |      |  |                   |                   |

2.5" (SFF) Hard drives

| <b>HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray</b> |        |            |        |  |                   |                   |
|--|--------|------------|--------|--|-------------------|-------------------|
| Capacity   | RPM    | Interface  | Sector |  | order code E-part | order code L-part |
| 300GB  | 15 000 | SAS 12Gb/s | 512n   |  | S26361-F5727-E530 | S26361-F5727-L530 |
| 600GB  | 15 000 | SAS 12Gb/s | 512n   |  | S26361-F5727-E560 | S26361-F5727-L560 |
| 900GB  | 15 000 | SAS 12Gb/s | 512n   |  | S26361-F5531-E590 | S26361-F5531-L590 |
| max. 8/16x - depending on base unit & configuration                                      |        |            |        |  |                   |                   |

| <b>HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray</b> |        |            |        |     |                   |                   |
|---|--------|------------|--------|-----|-------------------|-------------------|
| Capacity  | RPM    | Interface  | Sector |     | order code E-part | order code L-part |
| 300GB   | 10 000 | SAS 12Gb/s | 512n   |     | S26361-F5729-E130 | S26361-F5729-L130 |
| 600GB   | 10 000 | SAS 12Gb/s | 512n   |     | S26361-F5729-E160 | S26361-F5729-L160 |
| 900GB   | 10 000 | SAS 12Gb/s | 512n   |     | S26361-F5729-E190 | S26361-F5729-L190 |
| 1.2TB   | 10 000 | SAS 12Gb/s | 512n   |     | S26361-F5729-E112 | S26361-F5729-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. 8/16x - depending on base unit & configuration   |        |            |        |     |                   |                   |

| <b>HDD SAS 2.5" 10K 512e</b> (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-F5730-E160 | S26361-F5730-L160 |
| 900GB   | 10 000 | SAS 12Gb/s | 512e   |     | S26361-F5730-E190 | S26361-F5730-L190 |
| 1.2TB   | 10 000 | SAS 12Gb/s | 512e   |     | S26361-F5730-E112 | S26361-F5730-L112 |
| 1.8TB   | 10 000 | SAS 12Gb/s | 512e   |     | S26361-F5730-E118 | S26361-F5730-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. 8/16x - depending on base unit & configuration

| <b>HDD SAS 2.5" 7.2K 512n</b> (SFF) Enterprise Business Critical with hot plug/hot replace tray |       |            |        |  |                   |                   |
|---|-------|------------|--------|--|-------------------|-------------------|
| Capacity  | RPM   | Interface  | Sector |  | order code E-part | order code L-part |
| 1TB   | 7 200 | SAS 12Gb/s | 512n   |  | S26361-F5600-E100 | S26361-F5600-L100 |
| 2TB   | 7 200 | SAS 12Gb/s | 512n   |  | S26361-F5600-E200 | S26361-F5600-L200 |

max. 8/16x - depending on base unit & configuration

| <b>HDD SATA 2.5" 7.2K 512n</b> (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. 8/16x - depending on base unit & configuration

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

| <b>HDD SATA 2.5" 7.2K 512e</b> (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. 8/16x - depending on base unit & configuration

H1

H1

M.2 SATA SSD

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

| Capacity | Formfactor | Interface  | DWPD | Category | order code E-part | order code L-part |
|----------|------------|------------|------|----------|-------------------|-------------------|
| 240GB    | M.2        | SATA 6Gb/s |      | Boot     | S26361-F5816-E240 | S26361-F5816-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 (Port1: 2242 or 2280; Port2: 2280 or 22110). 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 |
|----------|------------|------------|------|----------|-------------------|-------------------|
| 240GB    | M.2        | SATA 6Gb/s | 1,5  | Boot     | S26361-F5787-E240 | S26361-F5787-L240 |
| 480GB    | M.2        | SATA 6Gb/s | 1,5  | Boot     | S26361-F5787-E480 | S26361-F5787-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. 1x per Server; connector located on Motherboard (Port1: 2242 or 2280; Port2: 2280 or 22110). VMware is not supported.

Dual M.2

Dual microSD, PDUAL CP200 and M.2 drive cannot be mixed

**PDUAL CP200, dual M.2 for booting, non hot-plug**

| Capacity | Formfactor | Interface | DWPD | Category | order code E-part | order code L-part |
|----------|------------|-----------|------|----------|-------------------|-------------------|
| n/a      | AIC        | PCIe      |      | Boot LP  | S26361-F4065-E201 | S26361-F4065-L501 |
| n/a      | AIC        | PCIe      |      | Boot FH  | S26361-F4065-E1   | S26361-F4065-L501 |

PDUAL CP200 is a carrier 2x M.2 SATA modules and offers RAID1 with 2x M.2 modules.

PDUAL CP200 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, 2x M.2 modules need to be ordered separately.

Supported M.2 Modules : SSD SATA M.2 240GB/480GB, and 240GB for VMware ESXi.

(S26361-F5706-E240/L240/E480/L480 or S26361-F5707-E240/L240 or S26361-F5787-E240/L240/E480/L480 or S26361-F5816-E240/L240)

max. 1x per Server, requires 2x SSD SATA M.2 drives.

Dual microSD

Dual microSD, PDUAL CP200 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 coreDump 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. VMware ESXi is only supported.

I

2.5" (SFF) PCIe-SSD

\*hot plug support : as soon as available

**PCIe-SSD 2.5" P4800X (SFF) Enterprise with hot plug/hot replace tray\***

| Capacity | Formfactor | Interface  | Endurance | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------|------|-------------------|-------------------|
| 750GB    | 2.5" (SFF) | PCIe3.0 x4 | -         | 30   | S26361-F5719-E750 | S26361-F5719-L750 |

max. 8x/12x - depending on base unit & configuration

this SSD will be worked with PCIe3.0 due to server specification

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

based on **Kioxia CM6-V** drives

| Capacity | Formfactor | Interface  | Endurance | DWPD | order code E-part | order code L-part |
|----------|------------|------------|-----------|------|-------------------|-------------------|
| 1.6TB    | 2.5" (SFF) | PCIe4.0 x4 | Mixed Use | 3    |                   | S26361-F5904-L160 |
| 3.2TB    | 2.5" (SFF) | PCIe4.0 x4 | Mixed Use | 3    |                   | S26361-F5904-L320 |
| 6.4TB    | 2.5" (SFF) | PCIe4.0 x4 | Mixed Use | 3    |                   | S26361-F5904-L640 |
| 12.8TB   | 2.5" (SFF) | PCIe4.0 x4 | Mixed Use | 3    |                   | S26361-F5904-L128 |

max. 8x/12x - depending on base unit & configuration

EOL

**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. 8x/12x - depending on base unit & configuration

this SSD will be worked with PCIe3.0 due to server specification

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

based on **Kioxia CM6-R** drives

| Capacity | Formfactor | Interface  | Endurance      | DWPD | order code E-part | order code L-part |
|----------|------------|------------|----------------|------|-------------------|-------------------|
| 960GB    | 2.5" (SFF) | PCIe4.0 x4 | Read Intensive | 1    |                   | S26361-F5905-L960 |
| 1.92TB   | 2.5" (SFF) | PCIe4.0 x4 | Read Intensive | 1    |                   | S26361-F5905-L192 |
| 3.84TB   | 2.5" (SFF) | PCIe4.0 x4 | Read Intensive | 1    |                   | S26361-F5905-L384 |
| 7.68TB   | 2.5" (SFF) | PCIe4.0 x4 | Read Intensive | 1    |                   | S26361-F5905-L768 |
| 15.36TB  | 2.5" (SFF) | PCIe4.0 x4 | Read Intensive | 1    |                   | S26361-F5905-L153 |

max. 8x/12x - depending on base unit & configuration

EOL

**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. 8x/12x - depending on base unit & configuration

AIC PCIe-SSD

EOL

PCIe-SSD (occupies one PCIe slot)

|   |   |
|---|---|
| <b>S26361-F5697-L375</b><br><b>S26361-F5697-E375</b><br>PACC EP P4800X AIC 375GB<br>P4800X series, NVMe<br>30 DWPD<br>PCIe3.0 x4, Low Profile<br>max. 4x per system | <b>S26361-F5697-L750</b><br><b>S26361-F5697-E750</b><br>PACC EP P4800X AIC 750GB<br>P4800X series, NVMe<br>30 DWPD<br>PCIe3.0 x4, Low Profile<br>max. 4x per system |
|---|---|

J

## Chapter 9 - LAN Components

J

Default: 1x RJ45 for 1Gbit Server Management LAN is available

## DynamicLoM OCP PHY interface cards

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

|                                       |                             |                   |                   |
|---------------------------------------|-----------------------------|-------------------|-------------------|
| PLAN EM 4x 1Gb T OCP interface Intel  | 4x RJ45 plug for 1000BASE-T | S26361-F3953-E401 | S26361-F3953-L401 |
| PLAN EM 2x 10Gb T OCP interface Intel | 2x RJ45 plug for 10GBASE-T  | S26361-F3953-E210 | S26361-F3953-L210 |
| max. 1x per system                    |                             |                   |                   |

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

|  |  |                   |                   |
|--|--|-------------------|-------------------|
| PLAN EM 2x 10GB SFP+ OCP interface Intel | 2x SFP+ cages for SFP+ optical transceivers or twinax cables | S26361-F3953-E211 | S26361-F3953-L211 |
| PLAN EM 4x 10GB SFP+ OCP interface Intel | 4x SFP+ cages for SFP+ optical transceivers or twinax cables | S26361-F3953-E411 | S26361-F3953-L411 |

## Optional for products with SFP+ cages: SFP+ optical transceiver modules or twinax cables

|  |          |  |                    |                                      |
|--|----------|--|--------------------|--------------------------------------|
| 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                      |
| 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                      |
| "Virtual Connector" for DAC/AOC cables       | 2x .. 4x | Enablement for System Architect  | V:TWX CONNECTOR-PY |                                      |
| SFP+ active Twinax Cable Fujitsu             | 2x .. 4x | customized cable length  | S26361-F3989-E600  | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade             | 2x .. 4x | (best fitting cable length is defined during rack installation at the factory) | S26361-F3873-E500  |                                      |
| SFP+ passive Twinax Cable Cisco - Sold Out   | 2x .. 4x |  | S26361-F4571-E500  |                                      |
| max. 1x per cage                             |          |  |                    |                                      |
| max. 1x per system                           |          |  |                    |                                      |

## 1Gb Ethernet network components

## 1Gb Ethernet network adapters with RJ45 interface (1000BASE-T)

|                                     |    |               |                   |                   |
|-------------------------------------|----|---------------|-------------------|-------------------|
| PLAN CP 4x1Gbit Cu Intel I350-T4    | 4x | 4 port NIC,   | S26361-F4610-E4   | S26361-F4610-L504 |
| PLAN CP 4x1Gbit Cu Intel I350-T4 LP | 4x | Intel I350-T4 | S26361-F4610-E204 |                   |
| max. 7x adapters per server system  |    |               |                   |                   |

## 10/1Gb Ethernet network components

## 10GBASE-T

## 10/1Gb Ethernet network adapters with RJ45 interface (10GBASE-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.

|                                    |    |   |                   |                   |
|------------------------------------|----|---|-------------------|-------------------|
| PLAN EP QL41112 2x10GBASE-T FH     | 4x | 2 port NIC with Universal RDMA, Marvell FastLinQ® QL41112HLRJ | S26361-F4068-E2   | S26361-F4068-L502 |
| PLAN EP QL41112 2x10GBASE-T LP     | 4x | *cannot be selected with Intel X710 series.                   | S26361-F4068-E202 |                   |
| PLAN EP QL41134 4x10GBASE-T FH     | 4x | 4 port NIC with Universal RDMA, Marvell FastLinQ® QL41134HLRJ | S26361-F4068-E4   | S26361-F4068-L504 |
| PLAN EP QL41134 4x10GBASE-T LP     | 4x | *cannot be selected with Intel X710 series.                   | S26361-F4068-E204 |                   |
| PLAN EP X550-T2 2x10GBASE-T FH     | 4x | 2 port NIC, Intel X550-T2                                     | S26361-F3948-E2   | S26361-F3948-L502 |
| PLAN EP X550-T2 2x10GBASE-T LP     | 4x |   | S26361-F3948-E202 |                   |
| PLAN EP X710-T4 4x10GBASE-T FH     | 4x | 4 port NIC, Intel X710-T4                                     | S26361-F3948-E4   | S26361-F3948-L504 |
| PLAN EP X710-T4 4x10GBASE-T LP     | 4x | *cannot be selected with Marvell QL411xx                      | S26361-F3948-E204 |                   |
| max. 7x adapters per server system |    |   |                   |                   |

K

**K**

**10G SFP+**

|   |          |  |                    |                                      |
|---|----------|--|--------------------|--------------------------------------|
| <b>10/1Gb Ethernet network adapters with SFP+ cage. Adapter ships with empty cages.</b>   |          |  |                    |                                      |
| Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port.<br>Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.<br>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.  |          |  |                    |                                      |
| PLAN EP QL41132 2x10Gb SFP+ FH  | 4x       | 2 port NIC with Universal RDMA,<br><b>Marvell FastLinQ® QL41132HLCU</b>                      | S26361-F4069-E2    | S26361-F4069-L502                    |
| PLAN EP QL41132 2x10Gb SFP+ LP  | 4x       | <b>*cannot be selected with Intel X710 series.</b>   | S26361-F4069-E202  |                                      |
| PLAN EP QL41134 4x10Gb SFP+ FH  | 4x       | 4 port NIC with Universal RDMA,<br><b>Marvell FastLinQ® QL41134HLCU</b>                      | S26361-F4069-E4    | S26361-F4069-L504                    |
| PLAN EP QL41134 4x10Gb SFP+ LP  | 4x       | <b>*cannot be selected with Intel X710 series.</b>   | S26361-F4069-E204  |                                      |
| PLAN EP X710-DA2 2x10Gb SFP+ FH   | 4x       | 2 port NIC,<br><b>Intel X710-DA2</b>   | S26361-F3640-E2    | S26361-F3640-L502                    |
| PLAN EP X710-DA2 2x10Gb SFP+ LP   | 4x       | <b>*cannot be selected with Marvell QL411xx</b>  | S26361-F3640-E202  |                                      |
| PLAN EP X710-DA4 4x10Gb SFP+ FH   | 4x       | 4 port NIC,<br><b>Intel X710-DA4</b>   | S26361-F3640-E4    | S26361-F3640-L504                    |
| PLAN EP X710-DA4 4x10Gb SFP+ LP   | 4x       | <b>*cannot be selected with Marvell QL411xx</b>  | S26361-F3640-E204  |                                      |
| PCNA EP QL41262 2x10/25Gb SFP+/SFP28  | 4x       | 2 port CNA with Universal RDMA, iSCSI Offload,<br>FCoE. <b>Marvell FastLinQ® QL41262HLCU</b> | S26361-F4070-E2    | S26361-F4070-L502                    |
| PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP   | 4x       |  | S26361-F4070-E202  |                                      |
| <b>Optional, 10Gb SFP+ optical transceiver module, select one per cage.</b>   |          |  |                    |                                      |
| <b>Both brands (Finisar, Intel) are supported with all (Intel, Marvell) adapter brands.</b>   |          |  |                    |                                      |
| SFP+ Optical Transceiver 10G Single Rate SR   | 2x ,, 4x | LC, MMF / SR SFP+ module, up to 400m, <b>Finisar</b>   | S26361-F3986-E3    | S26361-F3986-L3                      |
| SFP+ Optical Transceiver 10G Single Rate LR   | 2x ,, 4x | LC, SMF / LR SFP+ module, up to 10km, <b>Finisar</b>   | S26361-F3986-E4    | S26361-F3986-L4                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate SR  | 2x ,, 4x | LC, MMF / SR SFP+ module, up to 400m, <b>Intel</b>   | S26361-F3986-E5    | S26361-F3986-L5                      |
| SFP+ Optical Transceiver 10G/1G Dual Rate LR  | 2x ,, 4x | LC, SMF / LR SFP+ module, up to 10km, <b>Intel</b>   | 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 selected at   | S26361-F3989-E600  | see table at the bottom of this page |
| SFP+ active Twinax Cable Brocade  | 2x .. 4x | rack factory installation.   | S26361-F3873-E500  |                                      |
| Max. 2x SFP+, DAC, or Twinax Cable per 2 port adapter. Max. 4x SFP+, DAC, or Twinax Cable per 4 port adapter.   |          |  |                    |                                      |
| max. 7x adapters per server system  |          |  |                    |                                      |

**K1**

K1

25/10Gb Ethernet network components

10G SFP+

25G SFP28

**25/10Gb Ethernet network adapters with 2x SFP28 cages. Adapter ships with empty cages.**

Each cage consumes 1x optical SFP28 or SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port. Multiple speed support, auto-sense: All adapters support 25Gbps, and 10Gbps. Intel adapters support 1Gbps line rate per-port in addition, with the Intel-branded 10G/1G Dual Rate SFP+ Optical Transceiver Modules. Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Mellanox adapters just provide RoCE RDMA. Intel adapters don't provide any kind of RDMA capabilities. For Converged Network Adapter features such as FCoE, iSCSI, iSCSI Offload please select the PCNA EP QL41262. 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. Other adapters do not support CNA features.

|                                  |    |  |                          |                   |
|----------------------------------|----|--|--------------------------|-------------------|
| PLAN EP QL41212 25Gb 2p SFP28 FH | 4x | 2 port NIC with Universal RDMA,  | <b>S26361-F4056-E2</b>   | S26361-F4056-L502 |
| PLAN EP QL41212 25Gb 2p SFP28 LP | 4x | <b>Marvell FastLinQ®</b> QL41212HLCU   | <b>S26361-F4056-E202</b> |                   |
| PLAN EP MCX4-LX 25Gb 2p SFP28 FH | 4x | 2 port NIC with RoCE RDMA,   | <b>S26361-F4054-E2</b>   | S26361-F4054-L502 |
| PLAN EP MCX4-LX 25Gb 2p SFP28 LP | 4x | <b>Mellanox ConnectX4-LX</b>   | <b>S26361-F4054-E202</b> |                   |
| PLAN EP XXV710-DA2 2x25Gb FH     | 4x | 2 port NIC,  | <b>S26361-F4055-E2</b>   | S26361-F4055-L502 |
| PLAN EP XXV710-DA2 2x25Gb LP     | 4x | <b>Intel XXV710-DA2</b>  | <b>S26361-F4055-E202</b> |                   |
| PLAN EP QL41262 25Gb 2p SFP28 FH | 4x | 2 port <b>CNA</b> with Universal RDMA, iSCSI Offload, FCoE. <b>Marvell FastLinQ®</b> QL41262HLCU | <b>S26361-F4070-E2</b>   | S26361-F4070-L502 |
| PLAN EP QL41262 25Gb 2p SFP28 LP | 4x |  | <b>S26361-F4070-E202</b> |                   |

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

**Both brands (Mellanox, Intel) are supported with all (Marvell, Mellanox, Intel) adapter brands.**

|   |    |   |                               |                   |
|---|----|---|-------------------------------|-------------------|
| SFP28 Optical Transceiver 25G SR MMA2P00-AS LC  | 2x | MMF / SR SFP28 module, Mellanox. Max reach supported 100m                                 | <b>S26361-F4054-E701</b>      | S26361-F4054-L701 |
| SFP28 Optical Transceiver 25G SR E25GSFP28SR LC | 2x | MMF / SR SFP28 module, Intel. Max reach supported 30m                                     | <b>S26361-F4055-E701</b>      | S26361-F4055-L701 |
| "Virtual Connector" for DAC/AOC cables          | 2x | Enablement for System Architect   | <b>V:DAC/AOC-CONNECTOR-25</b> |                   |
| 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 |   |                               |                   |
| 25G AOC - Cisco                                 | 2x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                               |                   |
| 25G AOC - Intel                                 | 2x |   |                               |                   |

Max. 2x SFP28, 25G DAC, or 25G AOC per adapter

**Optional, 10Gb SFP+ optical transceiver module, each cage consumes one.**

**Both brands (Finisar, Intel) are supported with all (Marvell, Mellanox, Intel) adapter brands.**

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

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

max. 7x adapters per system

40Gb Ethernet network components

**40Gb Ethernet controller with QSFP cages. Adapter ships with empty cages.**

Supports 40Gbps line rate per-port

|                                 |    |                              |                          |                   |
|---------------------------------|----|------------------------------|--------------------------|-------------------|
| PLAN EP MCX4-EN 40Gb 2p QSFP FH | 4x | Dual Port NIC, RoCE RDMA,    | <b>S26361-F4053-E2</b>   | S26361-F4053-L502 |
| PLAN EP MCX4-EN 40Gb 2p QSFP LP | 4x | <b>Mellanox ConnectX4-EN</b> | <b>S26361-F4053-E202</b> |                   |

**Optional, 40Gb QSFP Optical Transceiver module with MPO connector for PLAN EP MCX4-EN 40Gb 2p QSFP**

|  |    |   |                               |                   |
|--|----|---|-------------------------------|-------------------|
| QSFP 40G SR4L MPO 850nm 30m MC2210411-SR4L | 2x | MMF / SR4L QSFP module, Mellanox. Max reach supported 30m                                 | <b>S26361-F4053-E701</b>      | S26361-F4053-L701 |
| QSFP 40G SR4 MPO 850nm 150m MC2210411-SR4  | 2x | MMF / SR4 QSFP module, Mellanox. Max reach supported 150m                                 | <b>S26361-F4053-E702</b>      | S26361-F4053-L702 |
| QSFP 40G SR4 MPO 850nm 150m MMA1B00-B150D  | 2x | MMF / SR4 QSFP module, Mellanox. Max reach supported 150m                                 | <b>S26361-F4053-E703</b>      | S26361-F4053-L703 |
| "Virtual Connector" for DAC/AOC cables     | 2  | Enablement for System Architect   | <b>V:DAC/AOC-CONNECTOR-40</b> |                   |
| 40G DAC - Cisco                            | 2x | DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                               |                   |
| 40G DAC - Mellanox                         | 2x |   |                               |                   |
| 40G AOC - Cisco                            | 2x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                               |                   |
| 40G AOC - Mellanox                         | 2x |   |                               |                   |

Max. 2x QSFP or DAC, AOC per adapter

max. 4x adapters

K2



K2

100Gb Ethernet network components

|   |    |   |                                |                          |
|---|----|---|--------------------------------|--------------------------|
| <b>100Gb Ethernet controller with 1x QSFP28 cage. Adapter ships with empty cage.</b>  |    |   |                                |                          |
| Each cage consumes 1x optical QSFP28 transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port. Multiple speed support, auto-sense on Cavium adapters only: 100Gbps, and with a Splitter DAC also 4X25Gbps, 4X10Gbps. |    |   |                                |                          |
| PLAN EP QL45611 100Gb 1p QSFP28 FH  | 4x | Single Port NIC, RoCE RDMA,   | <b>S26361-F4057-E1</b>         | <b>S26361-F4057-L501</b> |
| PLAN EP QL45611 100Gb 1p QSFP28 LP  | 4x | <b>Marvell FastLinQ®</b> QL45611HLCU  | <b>S26361-F4057-E201</b>       |                          |
| PLAN EP MCX4-EN 100Gb 1p QSFP28 FH  | 4x | Single Port NIC, RoCE RDMA,   | <b>S26361-F4052-E1</b>         | <b>S26361-F4052-L501</b> |
| PLAN EP MCX4-EN 100Gb 1p QSFP28 LP  | 4x | <b>Mellanox</b> ConnectX4-EN  | <b>S26361-F4052-E201</b>       |                          |
| <b>Optional, 100Gb QSFP28 Optical Transceiver module.</b>   |    |   |                                |                          |
| <b>The Mellanox brand is supported with all (Marvell, Mellanox) adapter brands.</b>   |    |   |                                |                          |
| QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D  | 1x | MMF / SR4 QSFP28 module, Mellanox. Max reach supported 100m                               | <b>S26361-F4052-E701</b>       | <b>S26361-F4052-L701</b> |
| QSFP28 100G PSM4 1310nm 500m MMS1C10-CM   | 1x | MMF / SR QSFP28 module, Mellanox. Max reach supported 500m                                | <b>S26361-F4052-E801</b>       | <b>S26361-F4052-L801</b> |
| "Virtual Connector" for DAC/AOC cables  | 1x | Enablement for System Architect   | <b>V:DAC/AOC-CONNECTOR-100</b> |                          |
| 100G DAC - Cisco  | 1x | DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                                |                          |
| 100G DAC - Mellanox   | 1x | DAC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                                |                          |
| 100G AOC - Cisco  | 1x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                                |                          |
| 100G AOC - Mellanox   | 1x | AOC are not in Fujitsu's portfolio yet. Thus, test only and purchase from switch vendors. |                                |                          |
| <i>Max. 1x QSFP28 or DAC/AOC Cable per adapter</i>  |    |   |                                |                          |
| max. 4x adapters  |    |   |                                |                          |

Network cables for later upgrade

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

L

## Chapter 10 - Fibre Channel Controller

K

**32Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3)**

These components ship with optical transceiver modules equipped for all ports. Supported line rates: 32, 16, and 8Gbps.

|                            |    |                                       |                   |                   |
|----------------------------|----|---------------------------------------|-------------------|-------------------|
| PFC EP LPe32000 1x 32Gb    | 4x | 1 port, full height, Broadcom Emulex® | S26361-F4044-E1   | S26361-F4044-L501 |
| PFC EP LPe32000 1x 32Gb LP | 4x | 1 port, low profile, Broadcom Emulex® | S26361-F4044-E201 |                   |
| PFC EP LPe32002 2x 32Gb    | 4x | 2 port, full height, Broadcom Emulex® | S26361-F4044-E2   | S26361-F4044-L502 |
| PFC EP LPe32002 2x 32Gb LP | 4x | 2 port, low profile, Broadcom Emulex® | S26361-F4044-E202 |                   |
| PFC EP QLE2740 1x 32Gb     | 4x | 1 port, full height, Marvell Qlogic®  | S26361-F4043-E1   | S26361-F4043-L501 |
| PFC EP QLE2740 1x 32Gb LP  | 4x | 1 port, low profile, Marvell Qlogic®  | S26361-F4043-E201 |                   |
| PFC EP QLE2742 2x 32Gb     | 4x | 2 port, full height, Marvell Qlogic®  | S26361-F4043-E2   | S26361-F4043-L502 |
| PFC EP QLE2742 2x 32Gb LP  | 4x | 2 port, low profile, Marvell Qlogic®  | S26361-F4043-E202 |                   |

**16Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3)**

These components ship with optical transceiver modules equipped for all ports. Supported line rates: 16, 8, and 4Gbps.

|                            |    |                                       |                   |                   |
|----------------------------|----|---------------------------------------|-------------------|-------------------|
| PFC EP LPe31000 1x 16Gb    | 4x | 1 port, full height, Broadcom Emulex® | S26361-F5596-E1   | S26361-F5596-L501 |
| PFC EP LPe31000 1x 16Gb LP | 4x | 1 port, low profile, Broadcom Emulex® | S26361-F5596-E201 |                   |
| PFC EP LPe31002 2x 16Gb    | 4x | 2 port, full height, Broadcom Emulex® | S26361-F5596-E2   | S26361-F5596-L502 |
| PFC EP LPe31002 2x 16Gb LP | 4x | 2 port, low profile, Broadcom Emulex® | S26361-F5596-E202 |                   |
| PFC EP QLE2690 1x 16Gb     | 4x | 1 port, full height, Marvell Qlogic®  | S26361-F5580-E1   | S26361-F5580-L501 |
| PFC EP QLE2690 1x 16Gb LP  | 4x | 1 port, low profile, Marvell Qlogic®  | S26361-F5580-E201 |                   |
| PFC EP QLE2692 2x 16Gb     | 4x | 2 port, full height, Marvell Qlogic®  | S26361-F5580-E2   | S26361-F5580-L502 |
| PFC EP QLE2692 2x 16Gb LP  | 4x | 2 port, low profile, Marvell Qlogic®  | S26361-F5580-E202 |                   |

max. 7 Controller per system (mixed configurations are supported)

L

**Chapter 11 - Infiniband Controllers**

L

Max. 4x IB Controller per System  
(configuration of different Controllers NOT supported )

|  |
|--|
| <b>S26361-F5717-E102/E202</b>  |
| <b>S26361-F5717-L102/L202</b>  |
| IB HCA 100Gb 1channel EDR with PCI riser   |
| 100Gbit 1/2channel Infiniband Controller EDR technology (8.0GT/s) with PCI short riser |
| 1x Q-SFP+ connector/2x Q-SFP+ connector  |
| PCIe Gen3 x16 Full Hight Card, 170mm   |
| max. 4x per system   |

|  |
|--|
| <b>S26361-F5724-E102/E202</b>  |
| <b>S26361-F5724-I102/L202</b>  |
| IB HCA 100Gb 1/2channel HDR with PCI riser   |
| 100Gbit 1/2channel Infiniband Controller HDR technology (8.0GT/s) with PCI short riser |
| 1x Q-SFP+ connector/2x Q-SFP+ connector  |
| PCIe Gen3 x16 Full Hight Card, 170mm   |
| max. 4x per system   |

The following card can not be mixed Infiniband card(S26361-F5717-E102/E202)  
S26361-F4054-E302/S26361-F4052-E201/S26361-F4052-E1/S26361-F4053-E2/S26361-F4053-E202

The following card can not be mixed Infiniband card(S26361-F5724-E102/E202)  
S26361-F4054-E302/S26361-F4052-E201/S26361-F4052-E1/S26361-F4053-E2/S26361-F4053-E202

**For loose delivery and in Rack customizing**

|  |
|--|
| <b>Cables for Mellanox 100Gbit Controller:(S26361-F5717-E102/E202)</b> |
| S26361-F5549-L561/ -E561   |
| MELLANOX COP. CABLE, 100GB/S, QSFP, LSZH, 1M                           |
| S26361-F5549-L563/ -E563   |
| MELLANOX COP. CABLE, 100GB/S, QSFP, LSZH, 3M                           |

**For loose delivery and in Rack customizing**

|  |
|--|
| <b>Cables for Mellanox 100Gbit Controller:(S26361-F5724-E102/E202)</b> |
| S26361-F5748-E571 (To HDR SW)  |
| MELLANOX COP. Y-CABLE, 100GB/S, QSFP, LSZH, 1M                         |

M

**Chapter 12 - OMNI Path Controllers**

**M**

|                                |
|--------------------------------|
| <b>S26361-F5562-E10 / -L10</b> |
| POP EP 100Gb 1port Omni Path   |
| 100Gbit 1channel HFI Card      |
| Q-SFP+ connector               |
| PCIe Gen3 x16 Card             |
| max. 4 per system              |

Max. 4x Omni Path Card per System (configuration of different Controllers NOT supported )

|  |
|--|
| <b>Cables for Omni Path 100Gbit Controller:</b>                              |
| S26361-F5563-L150 / -E150<br>Omni Passive Copper Cable , 100GB/S, QSFP, 1.5M |
| S26361-F5563-L200 / -E200<br>Omni Passive Copper Cable , 100GB/S, QSFP, 2M   |
| S26361-F5563-L300 / - E300<br>Omni Passive Copper Cable , 100GB/S, QSFP, 3M  |

**N**

**Chapter 13 - Power supply unit, power cable**

**N**

|   |
|---|
| <b>no order number required</b>   |
| <b>no order number required</b>   |
| 1600W platinum power supply unit  |
| 1600W PSU module platinum 1st or 2nd PSU for redundancy and DPF. 94% efficiency |
| 100-240V, 50-60Hz   |
| hot plug  |
| <b>2 pieces available in BU</b>   |

|   |
|---|
| <b>S26113-F574-E477-L477</b>  |
| <b>Dummy module instead PSU</b>   |
| Dummy module for closing the 2nd PSU hole, in case only 1 PSU is required, max. 1x per system |
| On special release request only   |

**Rack**

| 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-Y1741-E90</b>                                  | USA, Canada, 1.8m, black, 15A   |
| <b>T26139-Y1757-E/L10</b>                                | Taiwan, 1.8m  |
| <b>T26139-Y3850-E10</b>                                  | Option "no powercord", for Countries without specific cable orderable like e.g. China |

**O**

**Chapter 14 - Energy Star**

O

|   |
|---|
| <b>S26361-F3301-E572</b>  |
| E-Star Fam4 Certification for RX4770 M5                             |
| Limits configuration in accordance<br>with Energy Star requirements |
| max. 1x per system  |

limitations for E-Star Fam4 certification:

**Please make sure to follow the guidelines below in order to meet ENERGY STAR V3.0 Fam4 requirements:**

Always 4 CPUs have to be installed  
CPU restriction according to CPU page

ENERGY STAR-configurationen will be labeled:  
non ENERGY STAR-configurationen will be labeled:

**PRIMERGY RX4770 M5 E-Star Fam4**  
**PRIMERGY R4770 M5**

P

**Chapter 15 - iRMC, eLCM, Cool-safe, TPM, Region Kits**

P

**i** iRMC S5 (integrated Remote Management Controller) onboard server management with dedicated 10/100/1000 LAN-port and integrated graphics controller.

**S26361-F1790-E243**  
**iRMC S5 advanced pack**  
 integrated remote management controller  
 activation key for  
 Advanced Video Redirection (AVR)  
 and Remote Media  
 max. 1x per system

**i** Loose delivery  
 iRMC S4 advanced pack  
 (Node Locked License)  
**S26361- F1790-L244**

**i** Executing system updates, controlling the hardware setup or running diagnostic tests on components are frequent tasks of IT administrators to ensure a continuous 24x7 server operation. ServerView embedded Lifecycle Management (eLCM) for Fujitsu PRIMERGY servers greatly supports such routine tasks by consolidating and enhancing management functions directly available ("embedded") within the server.

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

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

**iRMC MicroSD card option**

| Capacity | Interface | E-parts | L-parts   |
|----------|-----------|---------|-----------|
| 32GB     | SDHC      | --      | PY-MD32R1 |

max. 1x per system, instead of 16GB MicroSD card

Advanced Thermal design 40°C can be combined with Standard base unit(S26361-K1657-V200) only!

**S26361-F3776-E440**  
 Cool-safe @ Advanced Thermal design 40°C  
 enables the PRIMERGY Server to cope with temperatures from 5-40° in operating mode due to extended Fan settings  
 this setting can be activated ex factory only  
 max. 1x per system

Q

Q

|   |
|---|
| <b>S26361-F3552-E100</b> <b>will be EOL at end-Sep 2022</b> |
| <b>S26361-F3552-L100</b>                                    |
| TPM 2.0 Module SPI  |
| Trusted Platform Module on Motherboard                      |
| Use according to import restrictions                        |
| Microsoft Windows Server 2022 not supported                 |
| max. 1x per system  |

|   |
|---|
| <b>S26361-F3552-E301</b>                            |
| <b>S26361-F3552-L301</b>                            |
| TPM 2.0 Module SPI                                  |
| Trusted Platform Module on Motherboard              |
| <b>Microsoft Windows Server 2022 only supported</b> |
| max. 1x per system                                  |

| OS support matrix:              |  |  |
|---------------------------------|--|--|
| Operating system for host OS    | S26361-F3552-E100<br>S26361-F3552-L100 | S26361-F3552-E301<br>S26361-F3552-L301 |
| Windows Server 2022             | -                                      | supported                              |
| Windows Server 2019             | supported                              | supported                              |
| Windows Server 2016             | supported                              | supported                              |
| Red Hat Enterprise Linux 8      | supported                              | supported                              |
| Red Hat Enterprise Linux 7      | supported                              | supported                              |
| SUSE Linux Enterprise Server 15 | -                                      | -                                      |
| SUSE Linux Enterprise Server 12 | -                                      | -                                      |
| VMware ESXi 7.0                 | supported                              | supported                              |
| VMware ESXi 6.7                 | supported                              | supported                              |
| VMware ESXi 6.5                 | -                                      | -                                      |

Support OS may vary by system.

S26361-F3552-E100/L100 will be EOL at end-Sep 2022.  
S26361-F3552-E301/L301 will be an alternative because they have extended the support OS like the table on the left and they are backward compatible with S26361-F3552-E100/L100.

|  |
|--|
| <b>S26361-F3552-E101</b>               |
| TPM 1.2 Module SPI                     |
| Trusted Platform Module on Motherboard |
| Use according to import restrictions   |
| max. 1x per system                     |

| Region Kits, required to order one of them, 1x per System  | build-in order code      | loose delivery order code |
|--|--------------------------|---------------------------|
| Region Kit APAC/EMEA/India, Contains warranty sheet and safety instructions for APAC, EMEA and India   | <b>S26361-F1452-E100</b> | -                         |
| Region Kit America, Contains warranty sheet, registration hints and safety instructions for America  | <b>S26361-F1452-E130</b> | -                         |
| Region Kit Europe, Contains warranty sheet and safety instructions in German, English, French, Spanish, Italian, Polish, Russian and Welsh language, need to be included always into the order from EU and EFTA  | <b>S26361-F1452-E140</b> | -                         |
| Region Kit China for CCC option not required systems (N/A CCC systems for more than 1300W PSU or, systems printing CCC mark always), Contains warranty sheet and safety instructions for China, need to be included always into the order from China country | <b>S26361-F1452-E102</b> | -                         |

(Sales region for EMEA only)

(Sales region for APAC only)

| Certifications, optional 1x per system   | build-in order code      | loose delivery order code |
|--|--------------------------|---------------------------|
| Certification for India, (BIS), Reduced component selection possible, only with no power cord option | <b>S26361-F3301-E123</b> | -                         |

Your Server is ready



## Chapter 16 - Accessories

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

**USB Mouse:**

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

**USB Memory Sticks - Available until August 2020. No successor planned.**

|  |  |                   |
|--|--|-------------------|
| ADATA UC350 USB3.1 Type C OTG Flash Drive 64GB |  | S26391-F6048-L464 |
|--|--|-------------------|

**USB Keyboards for Tower Servers for following countries:**

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

**USB Optical Disc Drive**

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

Please find the layout of all Fujitsu keyboards here:  
<http://abg0355a.abg.fsc.net/>

| Date of change | Configurator or revision | Folder / order code / description       | What has been changed / comment  |
|----------------|--------------------------|---|--|
| 01.07.2024     | 1.32                     | others                                  | released iRMC MicroSD  |
| 26.03.2024     | 1.31                     | CPU_RAM                                 | Remove Header  |
| 25.03.2024     | 1.30                     | others                                  | revised the description about iRMC MicroSD card option for eLCM  |
| 21.02.2024     | 1.29                     | All                                     | Remove Header  |
| 16.02.2024     | 1.28                     | others                                  | added the iRMC MicroSD card option for eLCM  |
| 04.08.2023     | 1.27                     | HD_SSD                                  | updated the EOL information<br>added the Kioxia CM6 series as PCIe-SSD   |
| 22.08.2022     | 1.26                     | Others                                  | updated Notes for TPM2.0   |
| 29.07.2022     | 1.25                     | RAID                                    | corrected Note for mixed configurations  |
| 26.07.2022     | 1.24                     | RAID                                    | restored PSAS/PRAID CP4xx (F3842), PRAID EP4xx (F5243)   |
| 16.06.2022     | 1.23                     | change_history                          | Introduce this history table with a new style  |
| 26.04.2022     |                          | RAID                                    | removed PSAS/PRAID CP4xx(F3842/F3845), PRAID EP4xx(F5243) due to EOL   |
| 26.04.2022     |                          | Others                                  | updated Notes for TPM2.0   |
| 14.04.2022     |                          | HD_SSD                                  | added new order codes for SSD SATA "PM893/PM897"   |
| 23.12.2021     |                          | RAID                                    | removed exclusion b/w PRAID CP500i and EP540e  |
| 16.12.2021     |                          | RAID                                    | Updated the comment for the cable kit for upgrade RAID cards   |
| 08.11.2021     |                          | RAID                                    | Added the cable kit for upgrade RAID cards   |
| 08.11.2021     |                          | LAN                                     | add the restriction for Intel LAN and Marvell LAN.   |
| 04.11.2021     |                          | RAID / S26361-F4042-E202                | added PRAID EP520i   |
| 26.10.2021     |                          | HD_SSD                                  | removed the description "as soon as available" for several codes.  |
| 11.10.2021     |                          | others                                  | added Notes for TPM2.0   |
| 30.09.2021     |                          | RAID                                    | added Notes for PRAID CP500i   |
| 15.09.2021     |                          | others / S26361-F3552-E301/L301         | added TPM2.0 for WS2022  |
| 09.09.2021     |                          | RAID / S26361-F5791/F5792/F5793-*       | added PRAID CP500i, PSAS CP503i and CP500e   |
| 05.08.2021     |                          | Base                                    | removed S26361-K1587-V210/information  |
| 05.08.2021     |                          | Others                                  | removed S26361-K1587-V210  |
| 26.07.2021     |                          | Others                                  | removed Cool-safe ® Advanced Thermal design 45°C   |
| 01.04.2021     |                          | RAID / S26361-F5792-*                   | added PSAS CP503i  |
| 17.03.2021     |                          | LAN                                     | Changed the LOM SFP condition.   |
| 27.01.2021     |                          | LAN                                     | Fixed the following update (2020/12/23). Max. 7 is correct.<br>>1Gb Ethernet network adapters with RJ45 interface (1000BASE-T)<br>>Max. 7 -> Max 4 |
| 20.01.2021     |                          | HD_SSD                                  | fixed the wrong description as follows<br>"SATA drives can be connected to the onboard Controller"   |
| 23.12.2020     |                          | LAN                                     | 1Gb Ethernet network adapters with RJ45 interface (1000BASE-T)<br>Max. 7 -> Max 4  |
| 12.11.2020     |                          | HD_SSD                                  | added the SSD SAS Seagate Nytro3x32 series   |
| 20.10.2020     |                          | CPU                                     | removed CPU suffix "M" (52xxM/62xxM/82xxM)   |
| 07.09.2020     |                          | HD_SSD                                  | updated the description about supported M.2 Module of PDUAL CP200  |
| 07.08.2020     |                          | HD_SSD                                  | add the new drives for SSD SAS/SATA  |
| 02.07.2020     |                          | Description                             | Updated "Block Diagram"  |
| 02.07.2020     |                          | RAID                                    | removed "PRAID CP400i is not released for expander configurations"   |
| 09.06.2020     |                          | CPU                                     | removed Xeon Gold 6250/Gold 6256   |
| 29.05.2020     |                          | Others                                  | removed Made in Germany sticker  |
| 02.04.2020     |                          | Others                                  | added restriction to Advanced Thermal Design 40°C  |
| 30.03.2020     |                          | Others                                  | Remove M4Y   |
| 26.03.2020     |                          | Others                                  | Added region kit China   |
| 12.03.2020     |                          | RAM                                     | Removed performance mode description   |
| 27.02.2020     |                          | CPU                                     | Added restriction to new CLX Refresh SKUs (as soon as avail.)  |
| 18.02.2020     |                          | IB                                      | Change the cable<br>S26361-F5549-E561/-E563 -> S26361-F5748-E57  |
| 14.02.2020     |                          | CPU                                     | Added E-Star restriction to new CLX Refresh SKUs   |
| 03.02.2020     |                          | CPU                                     | Added Cascade Lake-SP Refresh SKUs   |
| 27.01.2020     |                          | HD_SSD / Dual M.2                       | added 480GB as supported M.2 Modules   |
| 06.12.2019     |                          | HD_SSD                                  | updated the description about Hard Disk Sector Format Information  |
| 07.11.2019     |                          | Accessories                             | added the comment on USB Memory Sticks. No longer 32GB.  |
| 30.10.2019     |                          | RAM                                     | DCPMM section updated  |
| 02.10.2019     |                          | HDD_SSD / S26361-F5737/F5738-*/ updated | add the "*" for hot-plug support   |
| 17.09.2019     |                          | Energy Star                             | Energy Star Fam4 added   |
| 13.08.2019     |                          | RAM                                     | DCPMM configuration possibilities update   |
| 26.07.2019     |                          | HDD_SSD / S26361-F5737/F5738-*/ updated | removed the description as "as soon as available"  |
| 17.07.2019     |                          | LAN                                     | S26361-F4053-E703, -L703 Transceiver 40G added   |
| 03.07.2019     |                          | LAN                                     | Missing PLAN CP 4x1Gbit Cu Intel I350-T4 added   |
| 02.07.2019     |                          | HDD_SSD / S26361-F5738-*/ added         | added PCIe-SSD 2.5" Read-Intensive   |
| 26.06.2019     |                          | IB                                      | Add ConnectX6(Infiniband card)   |
| 07.05.2019     |                          | CPU                                     | Added missing Xeon Gold 6246 SKU   |
| 30.04.2019     |                          | RAM                                     | DCPMM configuration possibilities update   |
| 14.04.2019     |                          | Description                             | Removed RAS description  |
| 12.04.2019     |                          | RAM                                     | RAM & DCPMM Description on top updated   |
| 02.04.2019     |                          | RAM                                     | Rank sparing mode table updated  |
| 02.04.2019     |                          | USB                                     | Memory Sticks - Revised products and order numbers   |
| 28.03.2019     |                          | LAN                                     | Cosmetic: trademarks added   |
| 28.03.2019     |                          | FC                                      | Cosmetic: trademarks added   |
| 19.03.2019     |                          | RAM                                     | PSAS CP403i added  |
| 12.03.2019     |                          | RAM                                     | top section (corrected total capa from 2.048 to 1.920)   |
| 11.03.2019     |                          | RAM                                     | Updated modes within released DCPMM configurations   |
| 07.03.2019     |                          | Raid                                    | Removed FBU restriction for ATD  |
| 06.03.2019     |                          | RAM                                     | Added Memory Packages for easy AEP configuration   |

|            |  |   |   |
|------------|--|---|---|
| 01.03.2019 |  | HD_SSD / S26361-F5737-* / added                         | added   |
| 25.02.2019 |  | RAM   | Further AEP configuration update (added step 3)   |
| 12.02.2019 |  | RAM   | Added AEP configurations for 1st & 2nd step   |
| 12.02.2019 |  | HD_SSD / S26361-F3907-* / added the exclusion           | added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID EP5x0i                                    |
| 08.02.2019 |  | IB  | removed FDR card and change EDR card parts number   |
| 08.02.2019 |  | OMNI  | remobe the comment.   |
| 04.02.2019 |  | RAID  | removed PRAID EP420e as PRAID EP540e is available   |
| 04.02.2019 |  | HD_SSD  | removed the description as "as soon as available" because of available when this system is released |
| 04.02.2019 |  | HD_SSD  | added the description about supplier / ModelName of SSD   |
| 18.12.2018 |  | RAM   | LRDIMM 3DS removed; minor update on description   |
| 11.12.2018 |  | CPU   | Xeon Gold 5222S changed to Xeon Gold 5220S  |
| 10.12.2018 |  | CPU   | slot "Base Units" updated   |
| 10.12.2018 |  | RAM   | order codes and specifications added  |
| 03.12.2018 |  | HDD_SSD / S26361-F5734/F5735-* / removed                | removed   |
| 28.11.2018 |  | CPU   | CPU page updated  |
| 19.11.2018 |  | HDD_SSD / S26361-F5735-* / add the order codes          | add the order cordes for PCIe-SSD 2.5" Read Intensive   |
| 19.11.2018 |  | HDD_SSD / S26361-F5734-* / add the order codes          | add the order cordes for PCIe-SSD 2.5" Mixed Use  |
| 19.11.2018 |  | HDD_SSD / HDD SAS 2.5" 10K 512e / changed order codes   | changed from F5543-* to F5730-* w/o 2.4TB for WS2019SDDC-AQ cert                                    |
| 19.11.2018 |  | HDD_SSD / HDD SAS 2.5" 10K 512n / changed order codes   | changed from F5550-* to F5729-* for WS2019SDDC-AQ cert  |
| 19.11.2018 |  | HDD_SSD / HDD SAS 2.5" 15K / changed order codes        | changed from F5531-* to F5727-* w/o 900GB for WS2019SDDC-AQ cert                                    |
| 19.11.2018 |  | HDD_SSD / SSD SATA 2.5" Mixed Use / changed order codes | changed from F5675/F5588-* to F5733-* w/o 3.84TB for WS2019SDDC-AQ cert                             |
| 13.11.2018 |  | LAN - PLAN/PCNA QL41XXX adapters                        | Added: Order Numbers  |
| 13.11.2018 |  | LAN - PLAN EP QL41112 2X10GBASE-T                       | Name change reflected   |
| 13.11.2018 |  | LAN - PCNA EP QL41262 2x25G SFP28                       | Name change reflected   |
| 26.09.2018 |  | HD_SSD / S26361-F5650-*                                 | removed PACC EP P4600 AIC 2/4TB   |
| 26.09.2018 |  | HDD_SSD / PCIe-SSD 2.5" Mixed Use                       | added PCIe SSD 2.5" MU 1.6/3.2/6.4TB  |
| 26.09.2018 |  | HDD_SSD / PCIe-SSD Low Power 2.5" Read-Int.             | added PCIe SSD 2.5" RI 960GB/1.92TB/3.85TB  |
| 26.09.2018 |  | HDD_SSD / S26361-F5694-*                                | removed SSD SATA MU S4600   |
| 26.09.2018 |  | HDD_SSD / S26361-F5588-E384/L384                        | added SSD SATA MU 3.84TB  |
| 01.08.2018 |  | HD_SSD  | Updated   |
| 04.07.2018 |  | RAID  | copy from M4  |
| 07.05.2018 |  | LAN   | Typo QL41112 --> QL41132, QL41114 --> QL41134   |
| 26.04.2018 |  | HD_SSD  | Updated   |
| 23.04.2018 |  | FC - First Draft reviewed                               | Changed: Max no per line  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Deleted: PLAN EP QL45212 2x25Gb   |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PCNA EP QL41262 2x10/25Gb  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Deleted: PCNA EP OCe14102 2x10Gb  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PLAN EP QL41114 4x10Gb SFP+  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PLAN EP QL41112 2x10GbSFP+   |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Deleted: PLAN EP OCe14102 2x10Gb  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PLAN EP X710-T4 4x10GBASE-T  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PLAN EP QL41114 4x10GBASE-T  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Added: PLAN EP QL41112 2x10GBASE-T  |
| 23.04.2018 |  | LAN - Corrections on first draft                        | Deleted: PLAN EP OCe14102 2x 10GBase-T  |
| 11.04.2018 |  | First Draft Configurator PY RX4770 M5                   | Initial Draft RX4770M5  |