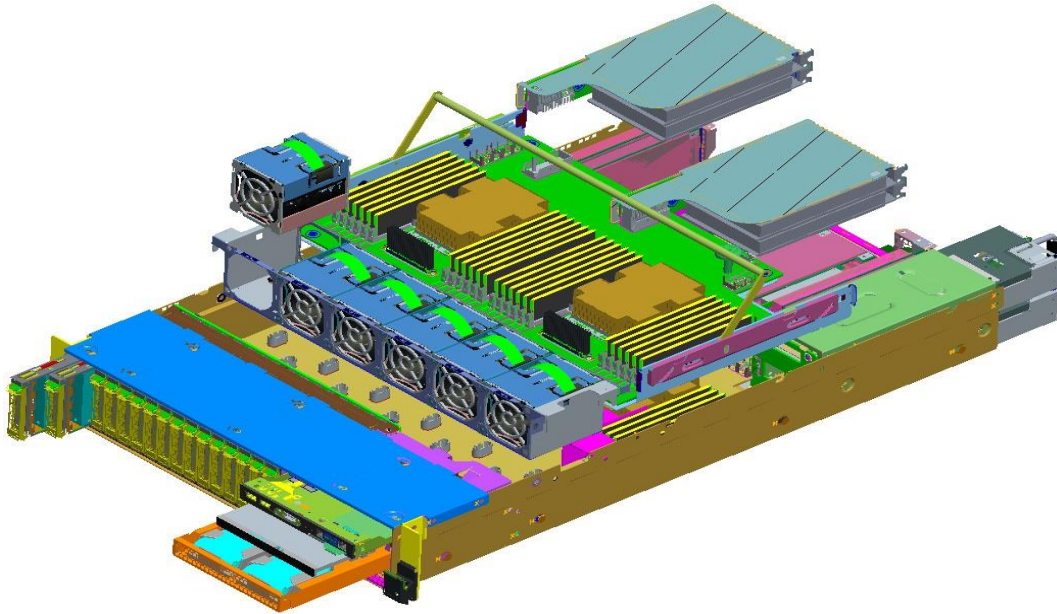


PRIMERGY RX4770 M5
4-way / 2U Rack Server



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, ...)

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

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

<- order code L-part (bold)

<- "name" of this part

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

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

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

For further information see:

Link to datasheet:

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

http://ts.fujitsu.com/products/standard_servers/index.html

(internet)

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

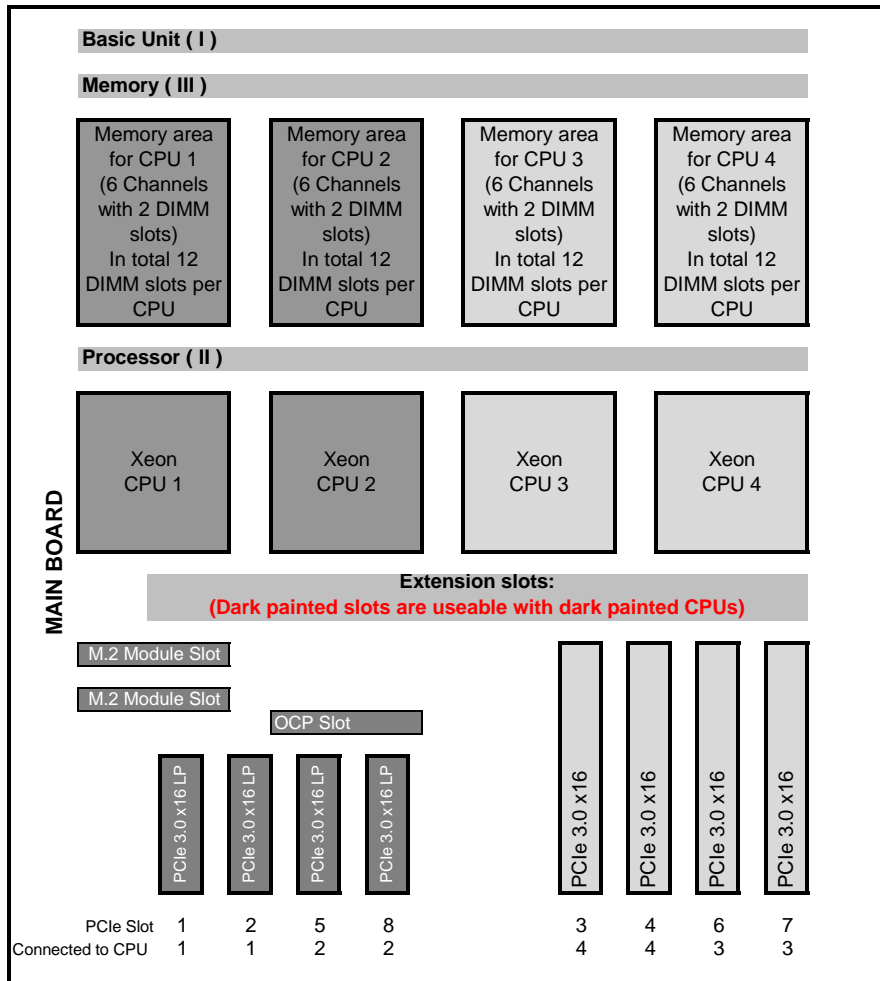
(extranet)

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

Abbreviations

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- <u>E</u> 240" ordercode with "E" means it is either integrated into to Server (CPU, Mem, ..) or integrated in the shipping box /Keyboard, Mouse, ..)
L-Part	"Lose Lieferung-Part"	"e.g. S26361-F1234- <u>L</u> 240" 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



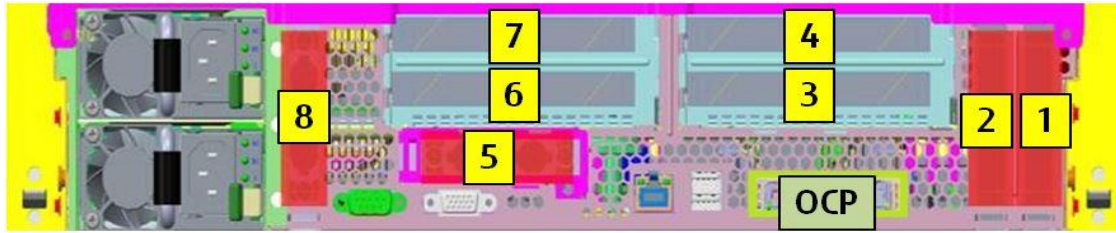
PCIe slot restrictions on high TDP CPUs used in Performance base unit:

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.

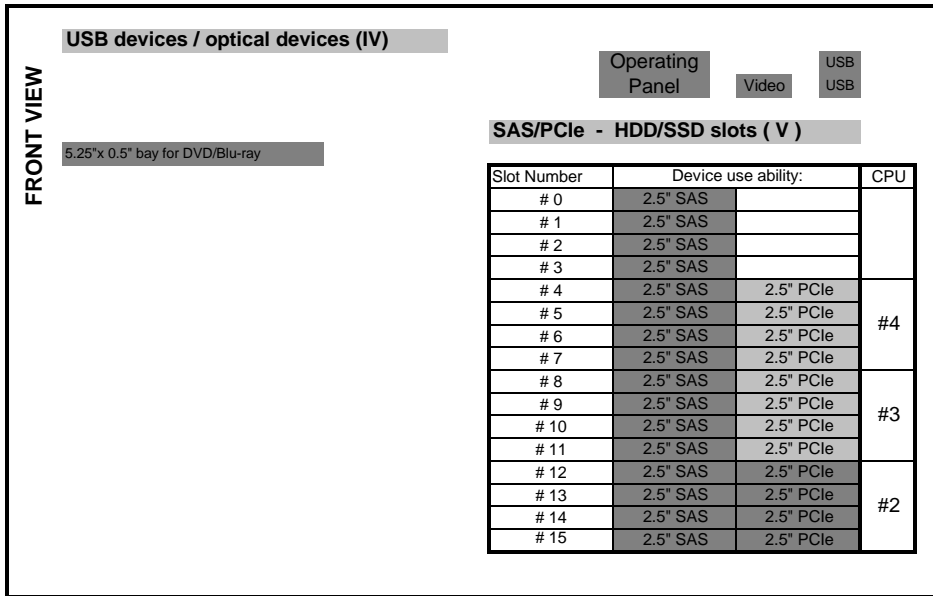
PCIe slot restrictions while using liquid cooled base unit:

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

RX4770 M5 Back view



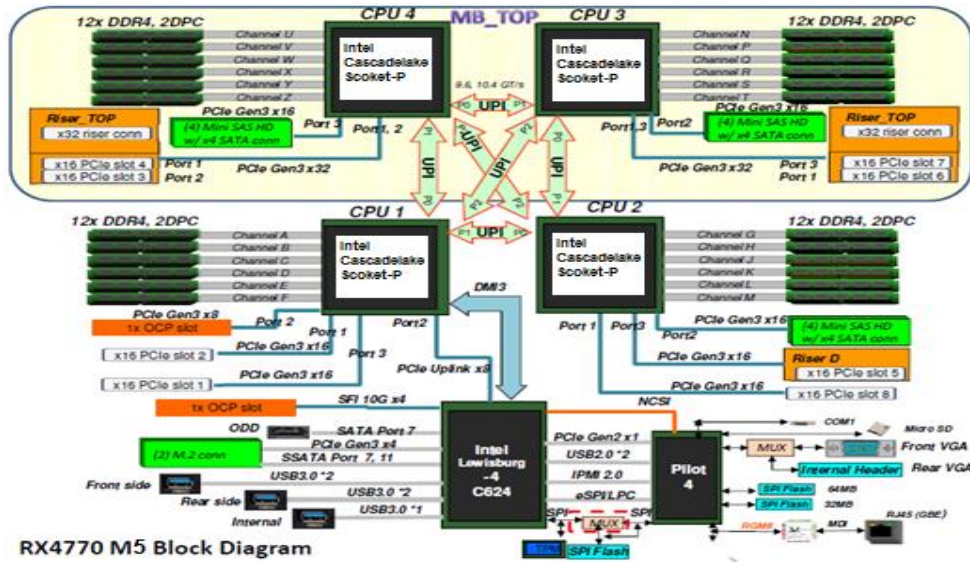
Configuration diagram PRIMERGY RX4770 M5



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 Processor Information's and Rules

Two CPU must be configured as minimum, maximum 4 CPU 's are possible too.
 Memory area defined to not used 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 high 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.

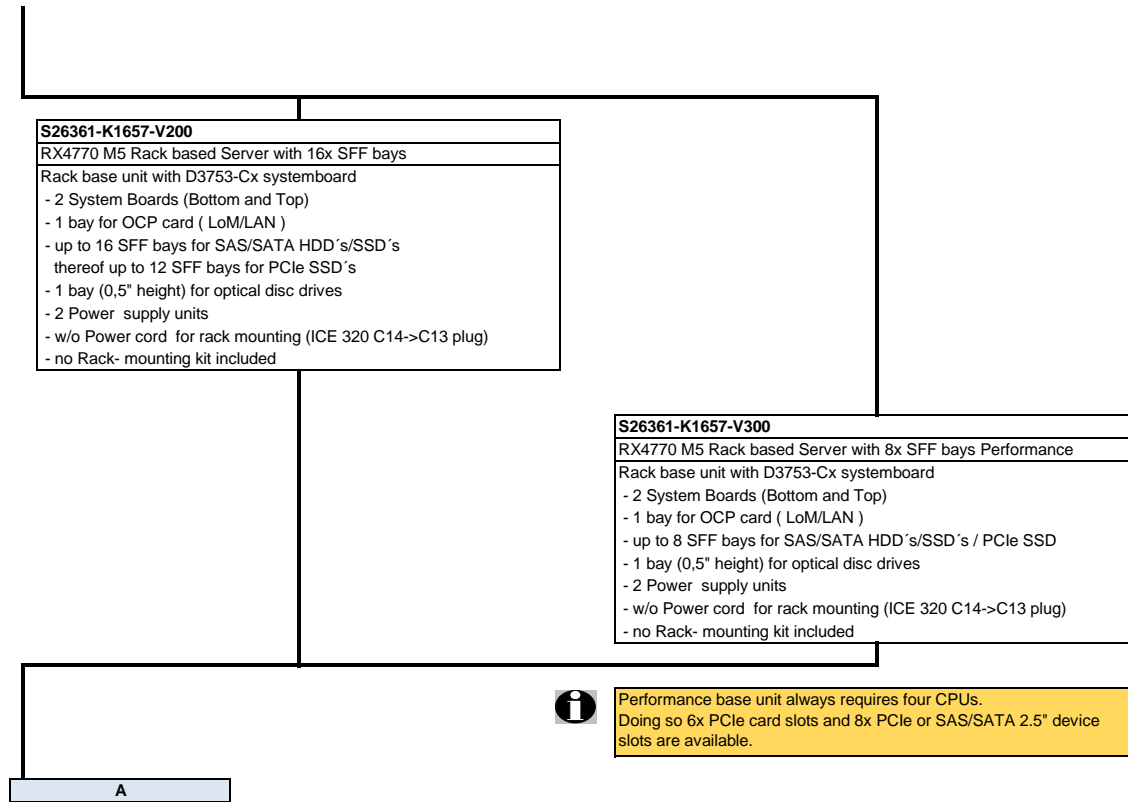
LAN

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



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 CMA QRL LV	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 party racks	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

				Base Units		
				Standard (~V200)	Liquid Cooled (~V2)	Performance (~V30)
<p>B</p> <p>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!</p>						
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	X	

B1

B1					
Xeon Gold 5200L - Advanced (Shelf 3; 4.5TB p. Socket)					
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	
Xeon Gold 6200L - Advanced (Shelf 4; 4.5TB p. Socket)					
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	
Xeon Platinum 8200L - Advanced (4.5TB p. Socket)					
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	X
Xeon Gold 6200Y - Speed Select (Shelf 4)					
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	
Xeon Platinum 8200Y - Speed Select (Shelf 5)					
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	
Cooler Kit (see comment above; please order for every additional CPU 1 additional cooler kit)					
Cooler Kit for 3rd/4th CPUs	S26361-F4051-E4				
Cooler Upgrade Kit for loose delivery CPU		S26361-F4051-L870			
C					

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

S26361-F3694-E10	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	
S26361-F3694-E1	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. Not supported with DCPMM modules! Only one DIMM type is allowed.	
Requires minimum 2x 1R/2R or 1x 4R/8R modules per CPU	
S26361-F3694-E3	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. Not supported with DCPMM modules! Only one DIMM type is allowed.	
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	4R	128GB	4R
1DPC			8GB				16GB		32GB		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		S26361-F4083-E108	S26361-F4083-L108
16GB (1x16GB) 2Rx8 DDR4-2933 R ECC		S26361-F4083-E116	S26361-F4083-L116

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

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

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)

C2		
DCPMM 256GB 2666 (Apache Pass)		
256GB (1x256GB) DCPMM-2666		S26361-F4083-L502
512GB (2x256GB) DCPMM-2666	S26361-F4083-E522	
1024GB (4x256GB) DCPMM-2666	S26361-F4083-E542	
1536GB (6x256GB) DCPMM-2666	S26361-F4083-E562	
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 256GB 2666 (Apache Pass)		
1536GB (6x256GB) DCPMM-2666	S26361-F4083-E562	
Available Memory Packages		
768GB (6x128GB) 4Rx4 DDR4-2933 LR ECC	S26361-F4083-E430	
DCPMM 256GB 2666 (Apache Pass)		
512GB (2x256GB) DCPMM-2666	S26361-F4083-E522	
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	
DCPMM 512GB 2666 (Apache Pass)		
512GB (1x512GB) DCPMM-2666		S26361-F4083-L503
2048GB (4x512GB) DCPMM-2666	S26361-F4083-E543	
3072GB (6x512GB) DCPMM-2666	S26361-F4083-E563	
Available Memory Packages		
384GB (6x64GB) 4Rx4 DDR4-2933 LR ECC	S26361-F4083-E465	
DCPMM 512GB 2666 (Apache Pass)		
3072GB (6x512GB) DCPMM-2666	S26361-F4083-E563	
Available Memory Packages		
768GB (6x128GB) 4Rx4 DDR4-2933 LR ECC	S26361-F4083-E430	
D		

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	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

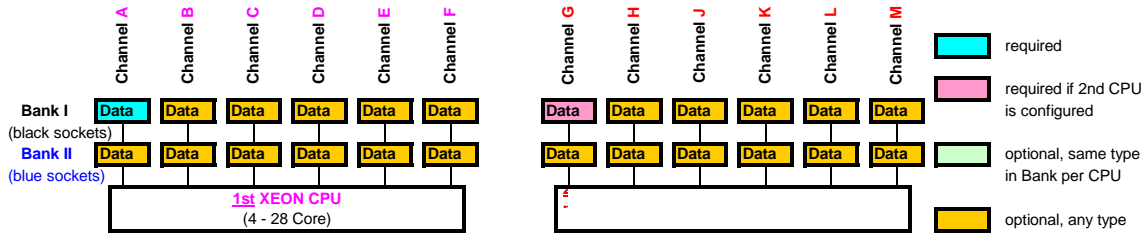
*) For the delivery ex factory the system will be prepared with dedicated BIOS setting.

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

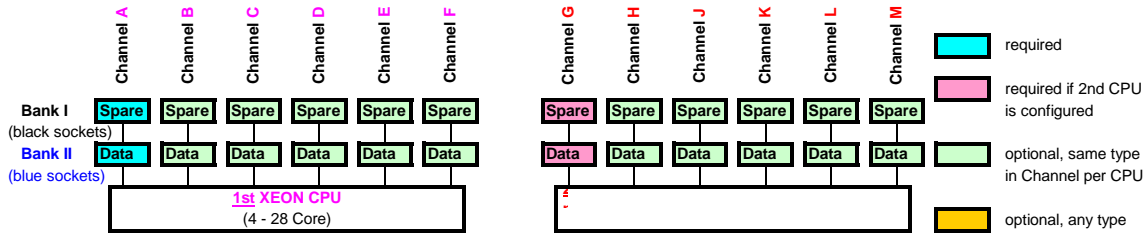
The memory sockets on the Systemboards are color coded

Bank I black sockets Bank II blue sockets

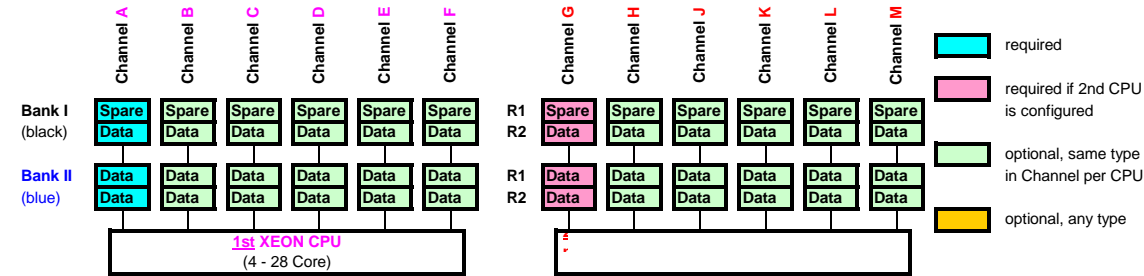
Independant channel mode



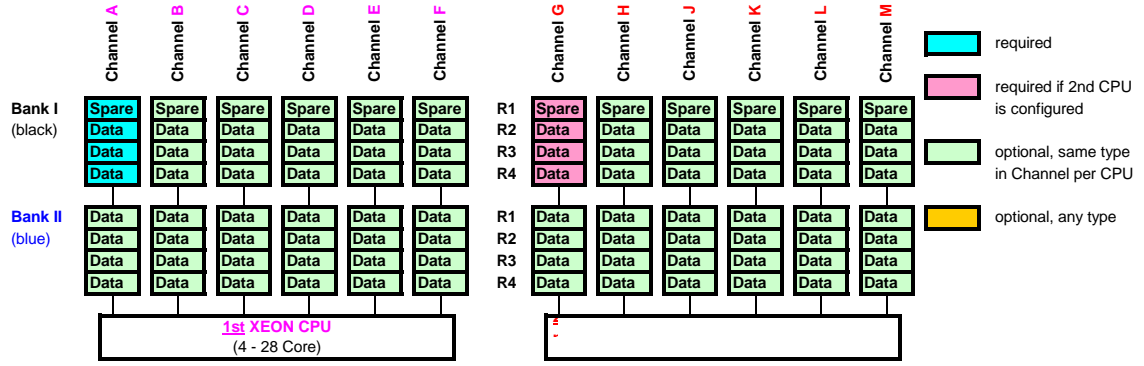
Rank sparing mode --- 1-Rank Memory modules (RDIMM)



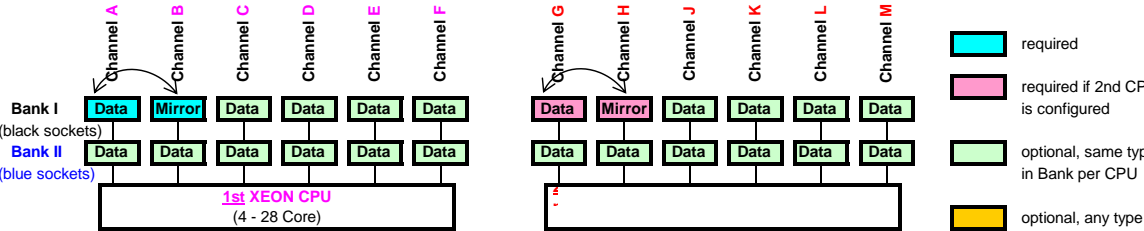
Rank sparing mode --- 2-Rank Memory modules (RDIMM)



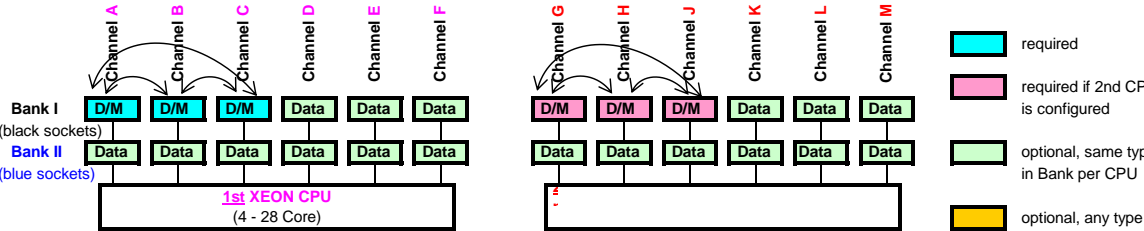
Rank sparing mode --- 4-Rank Memory modules (RDIMM 3DS)



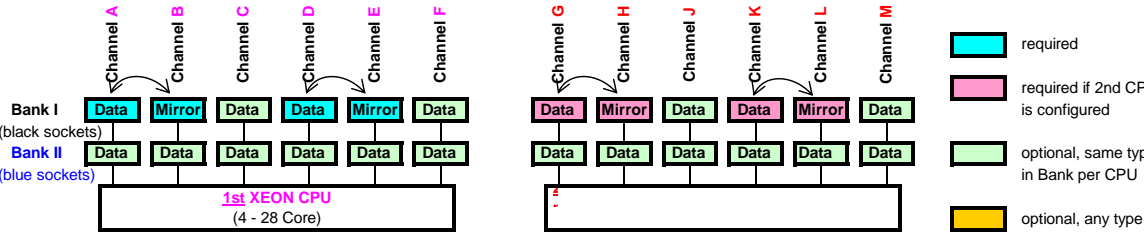
Mirror Channel Mode (2 DIMMS per CPU)



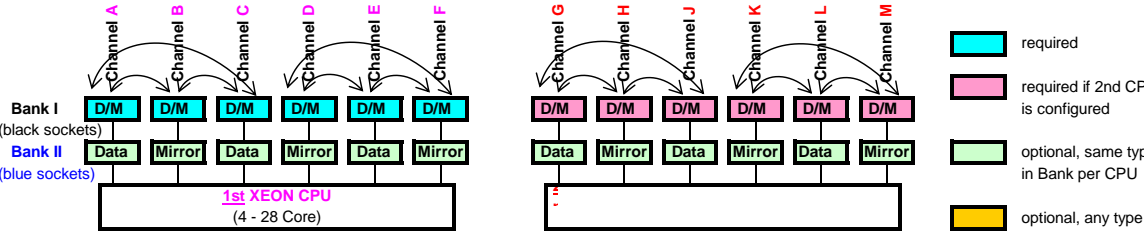
Mirror Channel Mode (3 DIMMS per CPU)



Mirror Channel Mode (4 DIMMS per CPU)

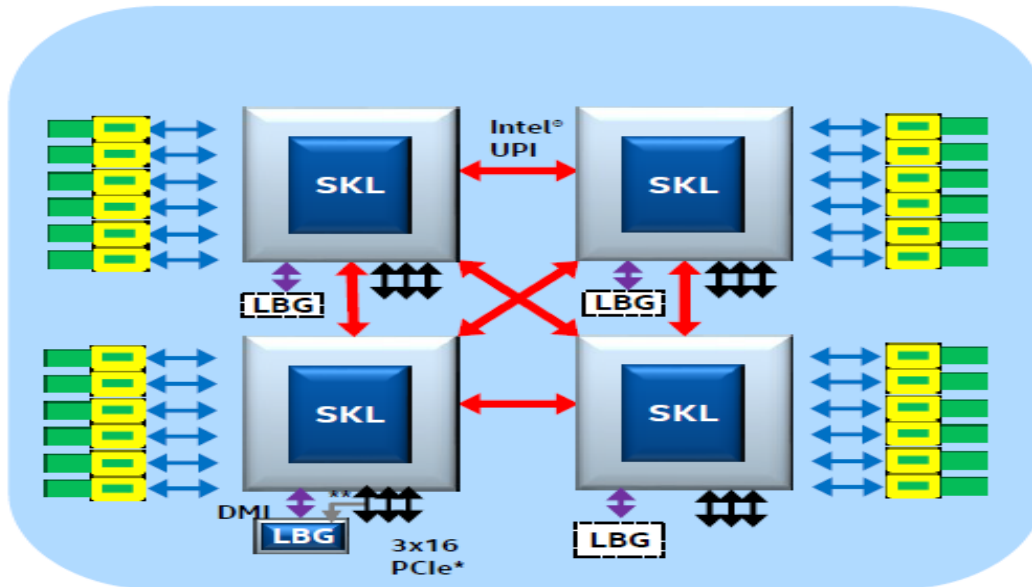


Mirror Channel Mode (6 DIMMS per CPU)



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

Typical 4S Configuration Cross Bar



- DDR4 DIMMs
- DDR4/Apache Pass
- LBG 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					
PRAID CP400i RAID Contr.	No Cache	RAID 0, 1, 1E, 10, 5, 50	1x	S26361-F3842-E1	S26361-F3842-L501
PSAS CP400i HBA SAS Contr.	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 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					
PRAID CP500i RAID Contr.	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 requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					
PSAS CP503i HBA SAS Contr.	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 requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality					
PSAS CP503i HBA SAS Contr. for vSAN	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 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					

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					
PRAID EP400i RAID Contr.	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 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	S26361-F5243-L100
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller		1x	S26361-F5243-E171	S26361-F5243-L113
in case of power failure including cable with 70cm length					
PRAID EP420i RAID Contr.	2GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F5243-E12	S26361-F5243-L12
PRAID EP420i for SafeStore R. Contr.	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 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	S26361-F5243-L200
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller		1x	S26361-F5243-E171	S26361-F5243-L113
in case of power failure including cable with 70cm length					

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					
PRAID EP520i RAID Contr. LP	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 includes Fastpath and SafeStore Advanced SW-Licence requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3508					
PRAID EP540i RAID Contr. LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E204	S26361-F4042-L504
PRAID EP580i RAID Contr. LP	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 16 ports 8Gb/s NVMe PCIe, supports up to 4 x4 NVMe devices (not supported in this system) includes Fastpath and SafeStore Advanced SW-Licence, CacheCade is no longer supported 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		1x	S26361-F4042-E171	S26361-F4042-L113
in case of power failure including cable with 70cm length					

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					
PSAS CP500e HBA SAS Contr. FH	No Cache	HBA, no RAID	2x	S26361-F5793-E51	S26361-F5793-L551
PSAS CP500e HBA SAS Contr. LP	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					
PRAID EP540e RAID Contr. FH / LP	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					
FBU Option for PRAID EP5xx:	Supercap securing the power supply of the RAID controller		2x	S26361-F4042-E171	S26361-F4042-L113
in case of power failure including cable with 55cm length					

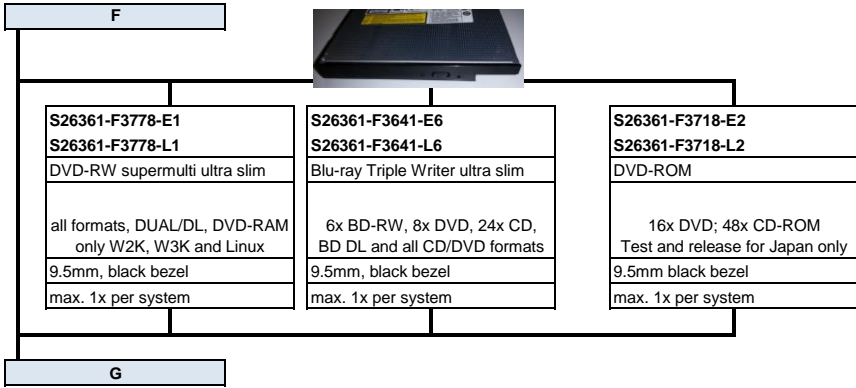
onboard Ocu Link Connector, from CPU to Backplane for internal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)

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

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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		S26361-F5865-E400	S26361-F5865-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5865-E800	S26361-F5865-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5865-E160	S26361-F5865-L160
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5866-E400	S26361-F5866-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5866-E800	S26361-F5866-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5866-E160	S26361-F5866-L160

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		S26361-F5710-E400	S26361-F5710-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5710-E800	S26361-F5710-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		S26361-F5710-E160	S26361-F5710-L160
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5711-E400	S26361-F5711-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5711-E800	S26361-F5711-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	S26361-F5711-E160	S26361-F5711-L160

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		S26361-F5868-E800	S26361-F5868-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5868-E160	S26361-F5868-L160
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5868-E320	S26361-F5868-L320
6.4TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5868-E640	S26361-F5868-L640

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		S26361-F5809-E400	S26361-F5809-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5809-E800	S26361-F5809-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5809-E160	S26361-F5809-L160
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	2,3		S26361-F5809-E320	S26361-F5809-L320

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

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Seagate Nytro3332 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

SSD SAS 2.5" Read Intensive (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
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

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5300 MAX 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

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM897 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

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung SM883 or SM863a 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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SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5300 PRO 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

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM893 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, EMEA only

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM883 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

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5100 PRO or 5200 ECO * 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

HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n		S26361-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

HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n		S26361-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

HDD SAS 2.5" 10K 512e (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
600GB	10 000	SAS 12Gb/s	512e		S26361-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

HDD SAS 2.5" 7.2K 512n (SFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	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

HDD SATA 2.5" 7.2K 512n (SFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		S26361-F3956-E100	S26361-F3956-L100
2TB	7 200	SATA 6Gb/s	512n		S26361-F3956-E200	S26361-F3956-L200

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

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

HDD SATA 2.5" 7.2K 512e (SFF) Enterprise Business Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512e		S26361-F3907-E100	S26361-F3907-L100
2TB	7 200	SATA 6Gb/s	512e		S26361-F3907-E200	S26361-F3907-L200

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

H1

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M.2 SATA SSD

SSD SATA M.2 drive for booting, non hot-plug, for VMware ESXi							
Capacity	Formfactor	Interface		Category		order code E-part	order code L-part
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		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 core dump partition on ESXi hosts. For more information, see the VMware knowledge base article at <http://kb.vmware.com/kb/2147881>.
 max. 1x per Server; connector located on Motherboard. VMware ESXi is only supported.

I

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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)

S26361-F5697-L375 S26361-F5697-E375 PACC EP P4800X AIC 375GB P4800X series, NVMe 30 DWPD PCIe3.0 x4, Low Profile max. 4x per system	S26361-F5697-L750 S26361-F5697-E750 PACC EP P4800X AIC 750GB P4800X series, NVMe 30 DWPD PCIe3.0 x4, Low Profile max. 4x per system
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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, Intel I350-T4	S26361-F4610-E4	S26361-F4610-L504
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	4x		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+				
10/1Gb Ethernet network adapters with SFP+ cage. Adapter ships with empty cages.				
Each cage consumes 1x optical SFP+ transceiver per port, or 1x twinax cable per port, or 1x DAC cable per port. Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules. Only Cavium adapters provide Universal RDMA capabilities, both iWARP and RoCE. Intel adapters don't provide any.				
For Converged Network Adapter features such as iSCSI, iSCSI Offload, FCoE please select the PCNA EP QL41262.				
PLAN EP QL41132 2x10Gb SFP+ FH	4x	2 port NIC with Universal RDMA, Marvell FastLinQ® QL41132HLCU	S26361-F4069-E2	S26361-F4069-L502
PLAN EP QL41132 2x10Gb SFP+ LP	4x	*cannot be selected with Intel X710 series.	S26361-F4069-E202	
PLAN EP QL41134 4x10Gb SFP+ FH	4x	4 port NIC with Universal RDMA, Marvell FastLinQ® QL41134HLCU	S26361-F4069-E4	S26361-F4069-L504
PLAN EP QL41134 4x10Gb SFP+ LP	4x	*cannot be selected with Intel X710 series.	S26361-F4069-E204	
PLAN EP X710-DA2 2x10Gb SFP+ FH	4x	2 port NIC, Intel X710-DA2	S26361-F3640-E2	S26361-F3640-L502
PLAN EP X710-DA2 2x10Gb SFP+ LP	4x	*cannot be selected with Marvell QL411xx	S26361-F3640-E202	
PLAN EP X710-DA4 4x10Gb SFP+ FH	4x	4 port NIC, Intel X710-DA4	S26361-F3640-E4	S26361-F3640-L504
PLAN EP X710-DA4 4x10Gb SFP+ LP	4x	*cannot be selected with Marvell QL411xx	S26361-F3640-E204	
PCNA EP QL41262 2x10/25Gb SFP+/SFP28	4x	2 port CNA with Universal RDMA, iSCSI Offload, FCoE. Marvell FastLinQ® QL41262HLCU	S26361-F4070-E2	S26361-F4070-L502
PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP	4x		S26361-F4070-E202	
Optional, 10Gb SFP+ optical transceiver module, select one per cage.				
Both brands (Finisar, Intel) are supported with all (Intel, Marvell) adapter brands.				
SFP+ Optical Transceiver 10G Single Rate SR	2x ,, 4x	LC, MMF / SR SFP+ module, up to 400m, Finisar	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x ,, 4x	LC, SMF / LR SFP+ module, up to 10km, Finisar	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x ,, 4x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x ,, 4x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	2x .. 4x	Enablement for System Architect	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	2x .. 4x	Customized length. Best fitting length selected at rack factory installation.	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	2x .. 4x		S26361-F3873-E500	
<i>Max. 2x SFP+, DAC, or Twinax Cable per 2 port adapter. Max. 4x SFP+, DAC, or Twinax Cable per 4 port adapter.</i>				
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,	S26361-F4056-E2	S26361-F4056-L502
PLAN EP QL41212 25Gb 2p SFP28 LP	4x	Marvell FastLinQ® QL41212HLCU	S26361-F4056-E202	
PLAN EP MCX4-LX 25Gb 2p SFP28 FH	4x	2 port NIC with RoCE RDMA,	S26361-F4054-E2	S26361-F4054-L502
PLAN EP MCX4-LX 25Gb 2p SFP28 LP	4x	Mellanox ConnectX4-LX	S26361-F4054-E202	
PLAN EP XXV710-DA2 2x25Gb FH	4x	2 port NIC,	S26361-F4055-E2	S26361-F4055-L502
PLAN EP XXV710-DA2 2x25Gb LP	4x	Intel XXV710-DA2	S26361-F4055-E202	
PLAN EP QL41262 25Gb 2p SFP28 FH	4x	2 port CNA with Universal RDMA, iSCSI Offload,	S26361-F4070-E2	S26361-F4070-L502
PLAN EP QL41262 25Gb 2p SFP28 LP	4x	FCoE. Marvell FastLinQ® QL41262HLCU	S26361-F4070-E202	

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

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

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,	S26361-F4053-E2	S26361-F4053-L502
PLAN EP MCX4-EN 40Gb 2p QSFP LP	4x	Mellanox ConnectX4-EN	S26361-F4053-E202	

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	S26361-F4053-E701	S26361-F4053-L701
QSFP 40G SR4 MPO 850nm 150m MC2210411-SR4	2x	MMF / SR4 QSFP module, Mellanox. Max reach supported 150m	S26361-F4053-E702	S26361-F4053-L702
QSFP 40G SR4 MPO 850nm 150m MMA1B00-B150D	2x	MMF / SR4 QSFP module, Mellanox. Max reach supported 150m	S26361-F4053-E703	S26361-F4053-L703
"Virtual Connector" for DAC/AOC cables	2	Enablement for System Architect	V:DAC/AOC-CONNECTOR-40	
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			
40G AOC - Mellanox	2x			

max. 2x QSFP or DAC, AOC per adapter

max. 4x adapters

K2

K2

100Gb Ethernet network components

100Gb Ethernet controller with 1x QSFP28 cage. Adapter ships with empty cage.					
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,	S26361-F4057-E1	S26361-F4057-L501	
PLAN EP QL45611 100Gb 1p QSFP28 LP	4x	Marvell FastLinQ® QL45611HLCU	S26361-F4057-E201	S26361-F4057-L501	
PLAN EP MCX4-EN 100Gb 1p QSFP28 FH	4x	Single Port NIC, RoCE RDMA,	S26361-F4052-E1	S26361-F4052-L501	
PLAN EP MCX4-EN 100Gb 1p QSFP28 LP	4x	Mellanox ConnectX4-EN	S26361-F4052-E201	S26361-F4052-L501	
Optional, 100Gb QSFP28 Optical Transceiver module.					
The Mellanox brand is supported with all (Marvell, Mellanox) adapter brands.					
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	1x	MMF / SR4 QSFP28 module, Mellanox. Max reach supported 100m	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G PSM4 1310nm 500m MMS1C10-CM	1x	MMF / SR QSFP28 module, Mellanox. Max reach supported 500m	S26361-F4052-E801	S26361-F4052-L801	
"Virtual Connector" for DAC/AOC cables	1x	Enablement for System Architect	V: DAC/AOC-CONNECTOR-100		
100G DAC - Cisco	1x	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

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

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)

S26361-F5717-E102/E202
S26361-F5717-L102/L202
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

S26361-F5724-E102/E202
S26361-F5724-I102/L202
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

Cables for Mellanox 100Gbit Controller:(S26361-F5717-E102/E202)
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

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

M

Chapter 12 - OMNI Path Controllers

M

S26361-F5562-E10 / -L10
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)

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

N

Chapter 13 - Power supply unit, power cable

N

no order number required
no order number required
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
2 pieces available in BU

S26113-F574-E477-L477
Dummy module instead PSU
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)	
T26139-Y1968-E100	Powercord for rack, IEC 320 C14 connector
T26139-Y1741-E90	USA, Canada, 1.8m, black, 15A
T26139-Y1757-E/L10	Taiwan, 1.8m
T26139-Y3850-E10	Option "no powercord", for Countries without specific cable orderable like e.g. China

O

Chapter 14 - Energy Star

O

S26361-F3301-E572
E-Star Fam4 Certification for RX4770 M5
Limits configuration in accordance 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: **PRIMERGY RX4770 M5 E-Star Fam4**
non ENERGY STAR-configurationen will be labeled: **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

will be available in CQ3'24

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

S26361-F3552-E100 will be EOL at end-Sep 2022
S26361-F3552-L100
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

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

OS support matrix:		
Operating system for host OS	S26361-F3552-E100	S26361-F3552-E301
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.

S26361-F3552-E101
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	S26361-F1452-E100	-
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	S26361-F1452-E130	-
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	S26361-F1452-E140	-
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	S26361-F1452-E102	-

(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	S26361-F3301-E123	-

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)	S26341-F103-L142

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

Date of change	Configurator revision	Folder / order code / description	What has been changed / comment	Name
26.03.2024	1.31	CPU_RAM	Remove Header	S. Fujita
25.03.2024	1.30	others	revised the description about iRMC MicroSD card option for eLCM	Y. Sugiyama
21.02.2024	1.29	All	Remove Header	Satomi Fujita
16.02.2024	1.28	others	added the iRMC MicroSD card option for eLCM	Y. Sugiyama
04.08.2023	1.27	HD_SSD	updated the EOL information	Yuichi Sugiyama
22.08.2022	1.26	Others	added the Kioxia CM6 series as PCIe-SSD	
29.07.2022	1.25	RAID	updated Notes for TPM2.0	Tatsuya Sudou
26.07.2022	1.24	RAID	corrected Note for mixed configurations	Tatsuya Sudou
16.06.2022	1.23	change_history	restored PSAS/PRAID CP4xx (F3842), PRAID EP4xx (F5243)	Tatsuya Sudou
26.04.2022		RAID	Introduce this history table with a new style	
26.04.2022		Others	removed PSAS/PRAID CP4xx(F3842/F3845), PRAID EP4xx(F5243) due to EOL	Tatsuya Sudou
14.04.2022		HD_SSD	updated Notes for TPM2.0	Tatsuya Sudou
23.12.2021		RAID	added new order codes for SSD SATA "PM893/PM897"	Yuichi Sugiyama
16.12.2021		RAID	removed exclusion b/w PRAID CP500i and EP540e	Tatsuya Sudou
08.11.2021		RAID	Updated the comment for the cable kit for upgrade RAID cards	Satomi Fujita
08.11.2021		LAN	Added the cable kit for upgrade RAID cards	Satomi Fujita
04.11.2021		RAID / S26361-F4042-E202	add the restriction for Intel LAN and Marvell LAN.	Yuya Ikuta
26.10.2021		HD_SSD	added PRAID EP520i	Tatsuya Sudou
11.10.2021		others	removed the description "as soon as available" for several codes.	Yuichi Sugiyama
30.09.2021		RAID	added Notes for TPM2.0	Tatsuya Sudou
15.09.2021		others / S26361-F3552-E301/L301	added Notes for PRAID CP500i	Tatsuya Sudou
09.09.2021		RAID / S26361-F5791/F5792/F5793-*	added TPM2.0 for WS2022	Tatsuya Sudou
05.08.2021		Base	added PRAID CP500i, PSAS CP503i and CP500e	Tatsuya Sudou
05.08.2021		Others	removed S26361-K1587-V210/information	Satomi Fujita
26.07.2021		Others	removed S26361-K1587-V210	Satomi Fujita
01.04.2021		RAID / S26361-F5792-*	removed Cool-safe @ Advanced Thermal design 45°C	Satomi Fujita
17.03.2021		LAN	added PSAS CP503i	Tatsuya Sudou
27.01.2021		LAN	Changed the LOM SFF condition.	Yuya Ikuta
20.01.2021		HD_SSD	Fixed the following update (2020/12/23). Max. 7 is correct. >1Gb Ethernet network adapters with RJ45 interface (1000BASE-T) ->Max. 7 -> Max. 4	Yuya Ikuta
23.12.2020		LAN	fixed the wrong description as follows "SATA drives can be connected to the onboard Controller"	Yuichi Sugiyama
12.11.2020		HD_SSD	1Gb Ethernet network adapters with RJ45 interface (1000BASE-T) Max. 7 -> Max. 4	Yuya Ikuta
20.10.2020		CPU	added the SSD SAS Seagate Nitro3x32 series	Yuichi Sugiyama
07.09.2020		HD_SSD	removed CPU suffix "M" (52xxM/62xxM/82xxM)	Atsushi Iwata
07.08.2020		HD_SSD	updated the description about supported M.2 Module of PDUAL CP200	Yuichi Sugiyama
02.07.2020		Description	add the new drives forSSD SAS/SATA	Yuichi Sugiyama
02.07.2020		RAID	Updated "Block Diagram"	Satomi Fujita
09.06.2020		CPU	removed "PRAID CP400i is not released for expander configurations"	Satomi Fujita
29.05.2020		Others	removed Xeon Gold 6250/Gold 6256	Atsushi Iwata
02.04.2020		Others	removed Made in Germany sticker	Yuri Okubo
30.03.2020		Others	added restriction to Advanced Thermal Design 40°C	Takahiro Konno
26.03.2020		Others	Remove M4Y	Takahiro Konno
12.03.2020		RAM	Added region kit China	Atsushi Iwata
27.02.2020		CPU	Removed performance mode description	Klaus-Dieter Ruf
18.02.2020		IB	Added restriction to new CLX Refresh SKUs (as soon as avail.) Change the cable S26361-F5549-E561/-E563 -> S26361-F5748-E57	Klaus-Dieter Ruf
14.02.2020		CPU	Added E-Star restriction to new CLX Refresh SKUs	Takaoka Masanori
03.02.2020		CPU	Added Cascade Lake-SP Refresh SKUs	Klaus-Dieter Ruf
27.01.2020		HD_SSD / Dual M.2	added 480GB as supported M.2 Modules	Tatsuya Sudou
06.12.2019		HD_SSD	updated the description about Hard Disk Sector Format Information	Yuichi Sugiyama
07.11.2019		Accessories	added the comment on USB Memory Sticks. No longer 32GB.	Y. Narita
30.10.2019		RAM	DCPMM section updated	Klaus-Dieter Ruf
02.10.2019		HDD_SSD / S26361-F5737/F5738-*/ updated	add the "" for hot-plug support	Yuichi Sugiyama
17.09.2019		Energy Star	Energy Star Fam4 added	Klaus-Dieter Ruf
13.08.2019		RAM	DCPMM configuration possibilities update	Klaus-Dieter Ruf
26.07.2019		HDD_SSD / S26361-F5737/F5738-*/ updated	removed the description as "as soon as available"	Yuichi Sugiyama
17.07.2019		LAN	S26361-F4053-E703, -L703 Transceiver 40G added	Ulrich L6sch
03.07.2019		LAN	Missing PLAN CP 4x1Gbit Cu Intel I350-T4 added	Ulrich L6sch
02.07.2019		HDD_SSD / S26361-F5738-*/ added	added PCIe-SSD 2.5" Read-Intensive	Yuichi Sugiyama
26.06.2019		IB	Add ConnectX6(Infiniband card)	Takaoka Masanori
07.05.2019		CPU	Added missing Xeon Gold 6246 SKU	Klaus-Dieter Ruf
30.04.2019		RAM	DCPMM configuration possibilities update	Klaus-Dieter Ruf
14.04.2019		Description	Removed RAS description	Christian Fey
12.04.2019		RAM	RAM & DCPMM Description on top updated	Klaus-Dieter Ruf
02.04.2019		RAM	Rank sparing mode table updated	Klaus-Dieter Ruf
02.04.2019		USB	Memory Sticks - Revised products and order numbers	Ulrich L6sch
28.03.2019		LAN	Cosmetic; trademarks added	Ulrich L6sch
28.03.2019		FC	Cosmetic; trademarks added	Ulrich L6sch
19.03.2019		RAM	PSAS CP403i added	Sven Pilz
12.03.2019		RAM	top section (corrected total capa from 2.048 to 1.920)	Sven Pilz
11.03.2019		RAM	Updated modes within released DCPMM configurations	Klaus-Dieter Ruf
07.03.2019		Raid	Removed FBU restriction for ATD	Fey, Christian
06.03.2019		RAM	Added Memory Packages for easy AEP configuration	Klaus-Dieter Ruf
01.03.2019		HD_SSD / S26361-F5737-*/ added	added	Yuichi Sugiyama
25.02.2019		RAM	Further AEP configuration update (added step 3)	Klaus-Dieter Ruf
12.02.2019		RAM	Added AEP configurations for 1st & 2nd step	Klaus-Dieter Ruf
12.02.2019		HD_SSD / S26361-F3907-*/ added the exclusion	added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID EP5x0i	Yuichi Sugiyama
08.02.2019		IB	removed FDR card and change EDR card parts number	Takaoka Masanori
08.02.2019		OMNI	remove the comment.	Takaoka Masanori
04.02.2019		RAID	removed PRAID EP420e as PRAID EP540e is available	Johannes Linne
04.02.2019		HD_SSD	removed the description as "as soon as available" because of available when this system is released	Yuichi Sugiyama

04.02.2019		HD_SSD	added the description about supplier / ModelName of SSD	Yuichi Sugiyama
18.12.2018		RAM	LRDIMM 3DS removed; minor update on description	Klaus-Dieter Ruf
11.12.2018		CPU	Xeon Gold 5222S changed to Xeon Gold 5220S	M.Pentney-Schmidt
10.12.2018		CPU	slot "Base Units" updated	M.Pentney-Schmidt
10.12.2018		RAM	order codes and specifications added	M.Pentney-Schmidt
03.12.2018		HDD_SSD / S26361-F5734/F5735-* / removed	removed	Yuichi Sugiyama
28.11.2018		CPU	CPU page updated	M.Pentney-Schmidt
19.11.2018		HDD_SSD / S26361-F5735-* / add the order codes	add the order codes for PCIe-SSD 2.5" Read Intensive	Yuichi Sugiyama
19.11.2018		HDD_SSD / S26361-F5734-* / add the order codes	add the order codes for PCIe-SSD 2.5" Mixed Use	Yuichi Sugiyama
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	Yuichi Sugiyama
19.11.2018		HDD_SSD / HDD SAS 2.5" 10K 512n / changed order codes	changed from F5550-* to F5729-* for WS2019SDDC-AQ cert	Yuichi Sugiyama
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	Yuichi Sugiyama
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	Yuichi Sugiyama
13.11.2018		LAN - PLAN/PCNA QL41XXX adapters	Added: Order Numbers	Ulrich Lösch
13.11.2018		LAN - PLAN EP QL41112 2X10GBASE-T	Name change reflected	Ulrich Lösch
13.11.2018		LAN - PCNA EP QL41262 2x25G SFP28	Name change reflected	Ulrich Lösch
26.09.2018		HD_SSD / S26361-F5650-*	removed PACC EP P4600 AIC 2/4TB	Yuichi Sugiyama
26.09.2018		HDD_SSD / PCIe-SSD 2.5" Mixed Use	added PCIe SSD 2.5" MU 1.6/3.2/6.4TB	Yuichi Sugiyama
26.09.2018		HDD_SSD / PCIe-SSD Low Power 2.5" Read-Int.	added PCIe SSD 2.5" RI 960GB/1.92TB/3.85TB	Yuichi Sugiyama
26.09.2018		HDD_SSD / S26361-F5694-*	removed SSD SATA MU S4600	Yuichi Sugiyama
26.09.2018		HDD_SSD / S26361-F5588-E384/L384	added SSD SATA MU 3.84TB	Yuichi Sugiyama
01.08.2018		HD_SSD	Updated	Yuichi Sugiyama
04.07.2018		RAID	copy from M4	Johannes Linne
07.05.2018		LAN	Typo QL41112 --> QL41132, QL41114 --> QL41134	Ulrich Lösch
26.04.2018		HD_SSD	Updated	Sudou, Tatsuya
23.04.2018		FC - First Draft reviewed	Changed: Max no per line	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Deleted: PLAN EP QL45212 2x25Gb	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PCNA EP QL41262 2x10/25Gb	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Deleted: PCNA EP OCe14102 2x10Gb	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PLAN EP QL41114 4x10Gb SFP+	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PLAN EP QL41112 2x10GbSFP+	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Deleted: PLAN EP OCe14102 2x10Gb	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PLAN EP X710-T4 4x10GBASE-T	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PLAN EP QL41114 4x10GBASE-T	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Added: PLAN EP QL41112 2x10GBASE-T	Ulrich Lösch
23.04.2018		LAN - Corrections on first draft	Deleted: PLAN EP OCe14102 2x 10GBase-T	Ulrich Lösch
11.04.2018		First Draft Configurator PY RX4770 M5	Initial Draft RX4770M5	Christian Fey