

PRIMERGY RX2540 M5

System configurator and order information guide

PRIMERGY RX2540 M5
2U Rack Server



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	describes base unit of RX2540 M5
2		describes rack mount kits and services
3	CPU	Order code and Infos of Intel® Xeon® Processor Scalable Family CPUs
4	RAM	DDR4 System memory (RAM) and memory modes
5	GFX_FPGA	FPGA-cards , Graphics-, Grid-cards, GPU and Xeon Co processors and other graphics options
6	HD_cage	Drive cage and PCIe riser options
7	RAID	SAS / RAID Controller and components
8	ODD	optical disk drives (DVD, DVD-rw, Blu ray)
9	Backup	LTO drives & RDX drive
10	HD_SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN_FC_IB	LAN Components
12		Fibre Channel Controller
13		Infiniband Controller
14	PSU	Power supply units, power cables, country specific opt.
15	others	System Management, ATD, RS232 port, TPM module
16	USB devices	Keyboards, Mice, USB devices

Instructions

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

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

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

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

Chapter xx - description of chapter

Text fields with grey color offer extra information for related topics (e.g prerequisites, technical background, 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://ts.fujitsu.com/products/standard_servers/index.html

(internet)

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

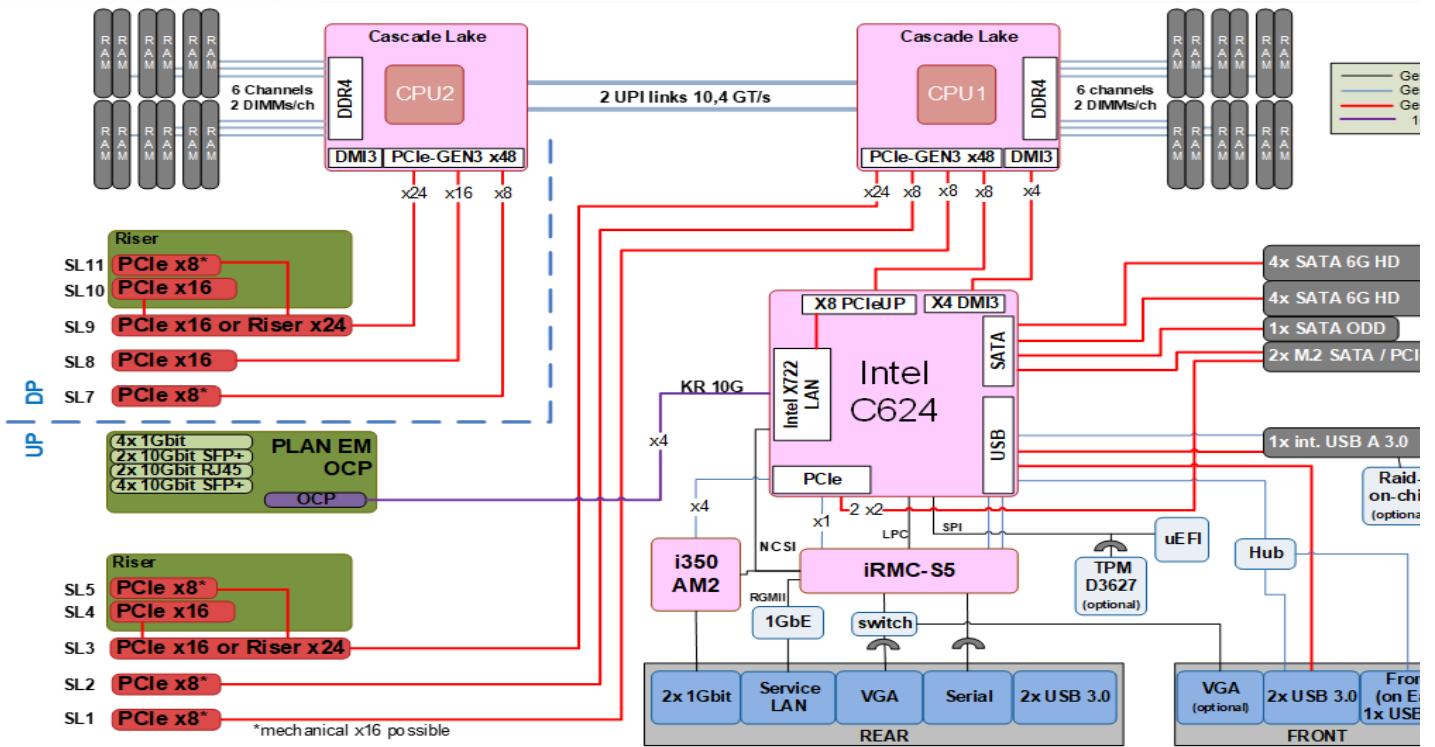
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Fujitsu is providing the content of this document with very high accuracy. In case you identify a mistake, we would kindly encourage you to inform us. We kindly ask for understanding, that errors still may occur and that Fujitsu may change this document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

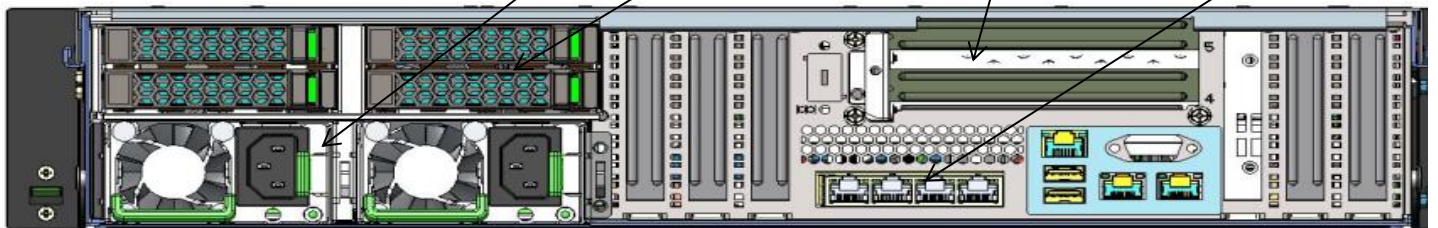
Abbreviations

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")
LFF	Drives	large form factor (=3.5")
CPU	Processor	central processing unit ("processor")
RAID	Drives, RAID	RAID 0 = max speed, RAID 1 = mirroring, RAID 5 = 1 out of x drives is spare
Spaces	OS	Microsoft spaces, optimized in Win2012 R2 offers software RAID and storage tiering
vSAN	OS	
storage tiering	RAID	offers optimized storage allocation (fast area for "hot data"; slower area for "cold data")
hot data	Drives	Data which are currently being processed
cold data	Drives	Data which are currently not processed (only stored)
ODD	Drives	optical disk drive (i.e. DVD-player, DVD-burner, Blu ray player, blu ray burner)
OS	operating system	OS=operating system - required for running, organize and administrating the server
E-Part	"Einbau-Part"	"e.g. S26361-F1234-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 will be shipped with extra package, may be as well with extra shipment

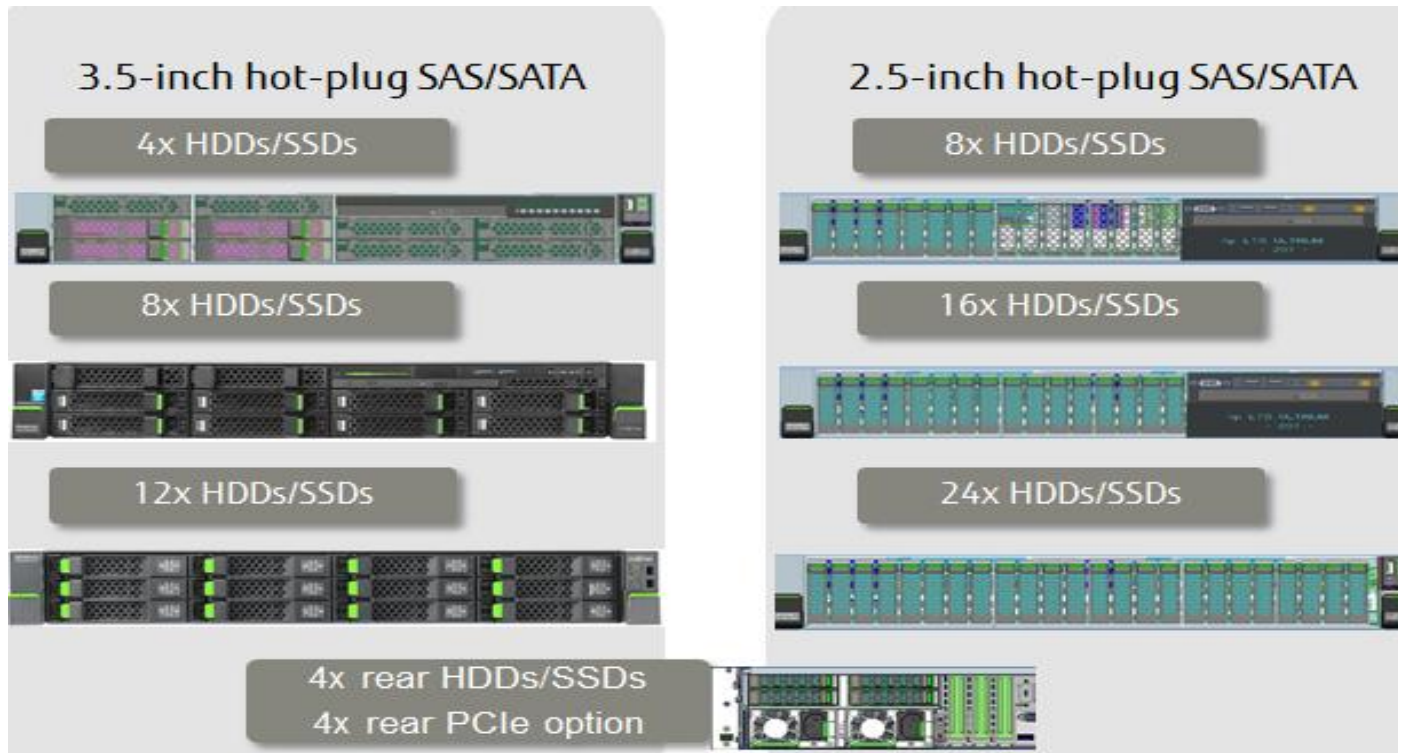
PRIMERGY RX2540 M5 schematics of the System board



PRIMERGY RX2540 M5 rear view with 2x PSU, 4x rear SFF or PCIe riser option and dynamic LoM



PRIMERGY RX2540 M5 front view with drives and operation panel



recommended components for RX2540 M5	#
Independant Mode installation	1x
PLAN EM 4x1Gb T interface card	1x
Region kit APAC/EMEA/India	1x
iRMC advanced pack	1x
Modular PSU 450W platinum hot plug	2x





Chapter 1 - base unit

Start

Power supply units & cooling

The PRIMERGY RX2540 M5 offers bays for 1x or 2x direct attached hot plug (opt. redundant) power supply units of 450W, 800W and 1200W with up to 96% efficiency. The PRIMERGY RX2540 M5 comes equipped with ultimate performance processor heat pipes and 6 high performance single hot plug fans (N+1 redundant).

Server Management

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

Platform

Fujitsu Systemboard D3384-B "made in Germany" based on Chipset Intel® C624 (Lewisburg 4)

> 2 serial KTI links

> Up to two Intel® Xeon® Processor Scalable Family CPUs (Cascade Lake, AEP)

Slots: per default, 6 PCIe slots are on board - please see schematics in "Description"

> 3 PCIe slots low profile, 198 mm length @ first CPU:

Slot 1 PCIe-Gen3 x8 (notched to install x16 cards)

Slot 2 PCIe-Gen3 x8 - preferred for first modular RAID/SAS controller

Slot 3 PCIe-Gen3 x16

> 3 PCIe slot low profile, 198 mm length @ second CPU:

Slot 7 PCIe-Gen3 x8 (notched to install x16 cards)

Slot 8 PCIe-Gen3 x16

Slot 9 PCIe-Gen3 x16

Maximum 8 PCI slots are possible with PCIe riser card options (4x full height, please see chapter 5)

Onboard RAID 0/1 6Gbit/s available for up to 8x SATA drives

System RAM up to DDR4-2666 or 2933 MHz

3.072 GB memory with 24x DDR4 LRDIMMs (12 per CPU) - Cascade Lake plus AEP support!

Memory speed depends on CPU and configuration, please see folder "CPU" and "RAM" for further details.

LAN

LAN on Motherboard with 2x1Gbit/s (RJ45) plus the high performance Chip Intel LBG4 with flexible LAN connections - options for 4x1Gbit/s (RJ45), 2x10Gbit/s (RJ45), 2x10Gbit/s (SFP+) and 4x10Gbit/s (SFP+) available.

Software

* ServerView Suite Software option

Connectivity

Interfaces at rear side

- 1 service LAN RJ45 (1 Gbit)
- 2x RJ45 with integrated LEDs for fixed onboard 1Gb LAN
- 1x VGA (15 pins)
- 2x USB 3.0 UHCI
- 1x serial 16550 interface
- Slot for interface cards from INTEL (OCP FF) /w up to 4 LAN ports driven by Lewisburg chip

Interfaces at front

for base units with less HDD: 2x USB 3.0 and front VGA option
for base units with max HDD: 1x USB2.0 (on "ear"), no front VGA option

Interfaces internal

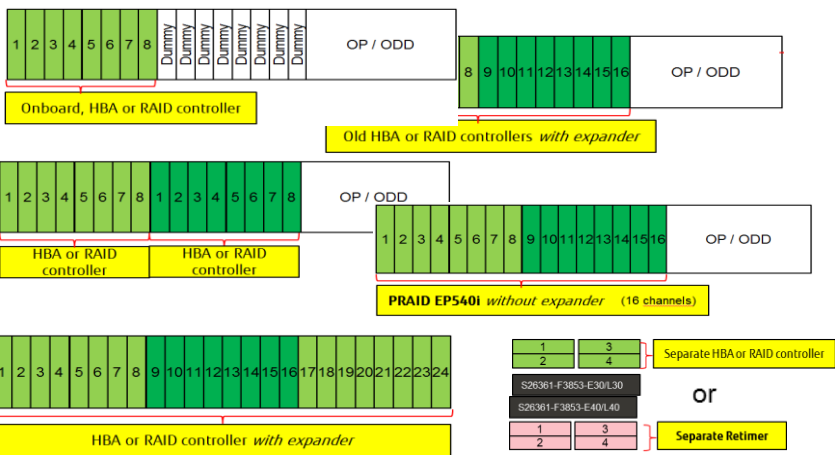
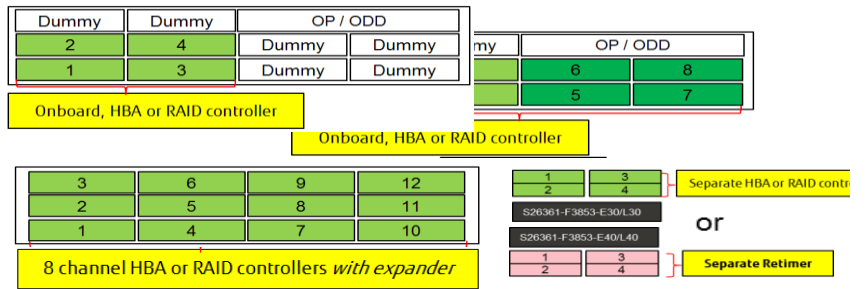
- 1x USB 3.0
- 2x M.2
- 2x 4* SATA 6G

Rack version for 19" racks with 2 height units	
No PSU included in base unit	
Basic unit is without CPU and Memory	
For an orderable basic unit first CPU and one memory = first memory has to be selected	
Basic units LFF with	
4x 3.5" HDD bays	S26361-K1655-V104
Option upgrade 4x LFF	S26361-F2495-E108
No more CPU TDP limitation with ATD40/45 option, No 4x rear SFF option possible!	
12x 3.5" HDD bays S26361-K1655-V112	
Including SAS expander for 8 channel controller	
No limitation for CPU TDP, no ATD45 option	
4x rear SFF option without CPU limitation @sep. ctrl.	
No ATD40/45 with 4x rear SFF option possible!	

Mix of PRAID EP4xxi or PRAID CP4xxi with EP5xxi is not allowed

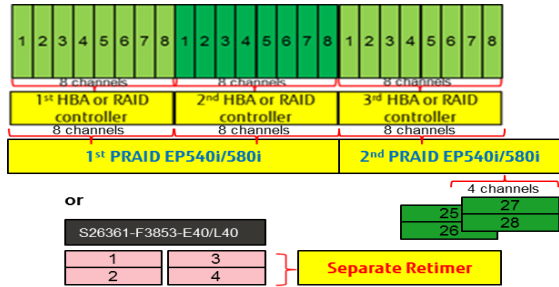
Basic units SFF with	
8x 2.5" HDD bays	S26361-K1655-V408
Option upgrade 8x SFF	S26361-F2495-E416
No more CPU TDP limitation with ATD40/45 option, No 4x rear SFF option possible!	
16x 2.5" HDD bays S26361-K1655-V216	
Without SAS expander for configuration with	
- 2x HBA or RAID controllers (mirrored) or	
- 16 channel PRAID EP540i/580i	
No more CPU TDP limitation with ATD40/45 option, No 4x rear SFF option possible!	
Mix of PRAID EP4xxi or PRAID CP4xxi with EP5xxi is not allowed	
24x 2.5" HDD bays	S26361-K1655-V424
No CPU TDP limitation even with ATD40/45 option, 4x rear SFF option without CPU limitation @sep. ctrl.	
No ATD40/45 with 4x rear SFF option possible!	

Mix of PRAID EP4xxi or PRAID CP4xxi with EP5xxi is not allowed

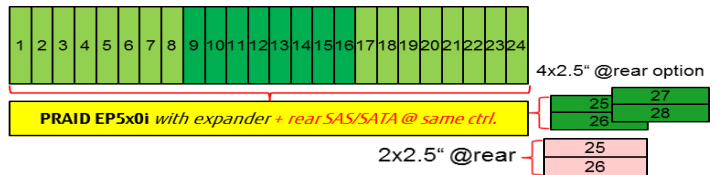


Beneath this five standard basic units there are use case specific basic units available. These may be pre-configured with special components according workload and optimized for a specific use case. There might be different configuration restrictions compared to the seven standard basic units, too...

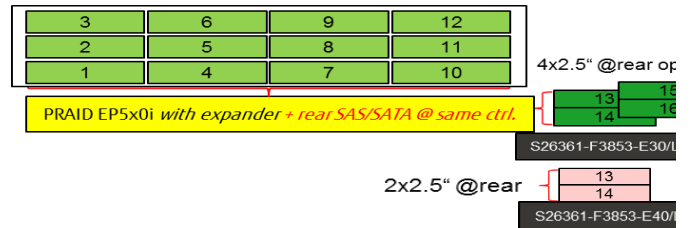
3x 8x 2.5" HDD bays S26361-K1655-V238
VSAN ready node without SAS expander with
 - 3x HBA or RAID 8 channel controllers (Triple)
 or 2x 16-channel-ctrl PRAID EP540i/580i (for non-vSAN)
 No CPU TDP limitation even with ATD40/45 option,
 4x rear SFF option **without CPU limitation**
 No ATD40/45 with 4x rear SAS/SATA option @ same 2nd EP540/580i or
 No ATD40/45 with 4x rear PCIe SSD option @ separate retimer



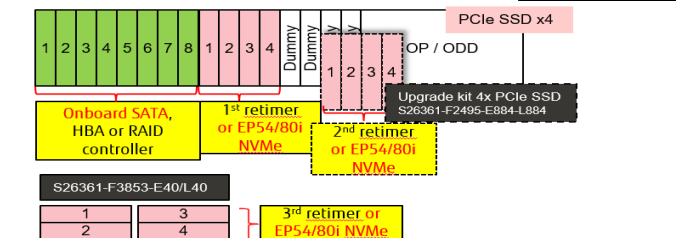
Basic units SFF optimized for Internal Storage
 28x 2.5" big single storage S26361-K1655-V428
 Configuration includes SAS expander, needs 1x PRAID EP5x0i
 and has option for 4x 2.5" rear option (SAS or PCIe)
 No CPU TDP limitation even with ATD40/45 option,
 4x rear SFF option **without CPU limitation** @same ctrl.
 No ATD40/45 with 2x/4x rear SFF options possible!



Basic units LFF optimized for Internal Storage
 12x 3.5" +4x 2.5" big single storage S26361-K1655-V116
 Configuration includes SAS expander, needs 1x PRAID EP5x0i
 and has option for 4x 2.5" rear option (SAS or PCIe)
 No CPU TDP limitation even with ATD40 option, no ATD45!
 4x rear SFF option **without CPU limitation** @same ctrl.
 No ATD40/45 with 2x/4x rear SFF options possible!



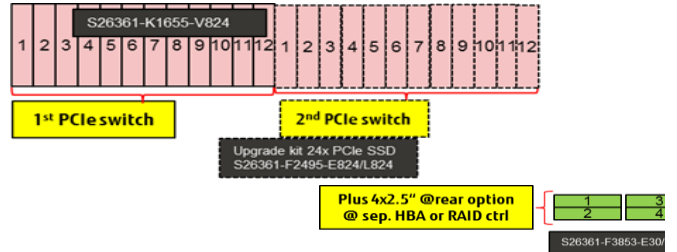
Basic unit SFF optimized for Flash Applications (PCIe SSD)
 8x 2.5" + 4x PCIe SSD basic hybrid flash S26361-K1655-V884
 Config requires 1x Retimer or PRAID EP540/580i NVMe for 4x PCIe SSD each
 No mix of Retimers and PRAID EP540/580i NVMe allowed!
 4x to 8x PCIe SSD upgrade option S26361-F2495-E884 / L884
 No CPU TDP limitation even with ATD40/45 option,
 4x rear SFF option **without CPU limitation** @separate ctrl.
 No ATD40/45 with 4x rear PCIe SSD option



Mix of PRAID EP4xxi or PRAID CP4xxi with EP5xxi is not allowed

PRAID EP540/80i: max. 3x NVMe, + 1 add. PRAID EP5xxi for SAS/SATA

Basic unit SFF optimized for All Flash Applications (PCIe SSD)
 24x PCIe SSD AFA S26361-K1655-V824
 Configuration includes 1st PCIe switch for 12x PCIe SSD
 12x to 24x PCIe SSD upgrade option S26361-F2495-E824 / L824
 No CPU TDP limitation even with ATD40/45 option,
 4x rear SFF option **without CPU limitation** @separate HBA or RAID ctrl.
 No ATD40/45 with 4x rear SAS/SATA SFF option possible!



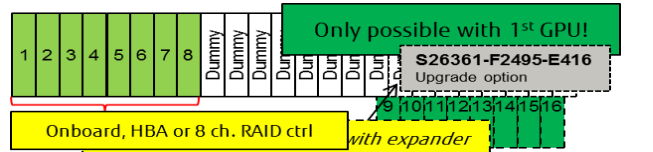
Basic units Liquid Cooled for Performance Storage applications
 28x 2.5" LC big performance storage S26361-K1655-V7xx
 Configuration includes SAS exp., LC CPU and memory, needs 1x EP5x0i
 and has option for 4x 2.5" rear option (SAS or PCIe)
No Limitation: CPU 205W with ambient temperature max 45°C!!
 Planned for special release only!

tbd

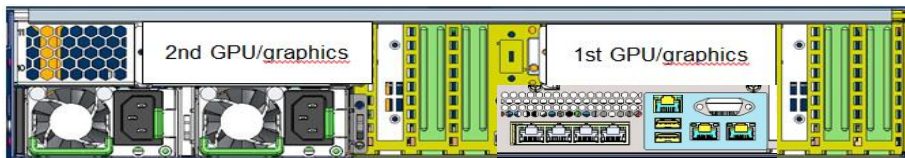
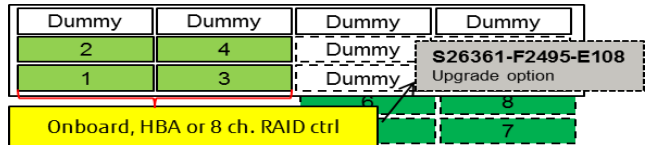
12x 3.5" +4x 2.5" LC big performance storage S26361-K1655-V7xx
 Configuration includes 1x PRAID EP5x0i, SAS exp., LC CPU and memory
 and option for 4x 2.5" rear option (SAS or PCIe)
No Limitation: CPU 205W with ambient temperature max 45°C!!
 Planned for special release only!

tbd

Basic units for best graphics applications
 8x 2.5" best graphics S26361-K1655-V308
 Configuration includes kit for first GPU/graphics card!
 8x 2.5" upgrade option limits to 1x GPU only! S26361-F2495-E416
Limitation: CPU max 165W with ambient temperature max 35°C!!



4x 3.5" best graphics S26361-K1655-V304
 Configuration includes kit for first GPU/graphics card!
 4x 3.5" upgrade option has no limitation S26361-F2495-E108
Limitation: CPU max 165W with ambient temperature max 35°C!!



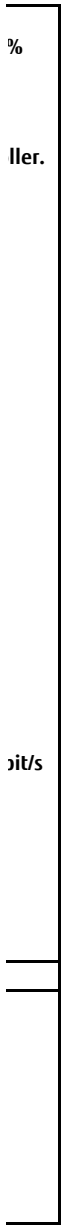
PRIMECENTER Rack

Chapter 2 - Rack architecture

PRIMECENTER Rack

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 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

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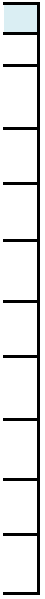
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L30

L40





Chapter 3 - CPU

B

There are 2 processor sockets available. Please configure 1 or 2 Processors.
 >> All processors have to be the same type.
 >> With **one** processor OCP LOM, iRMC, 3x PCIe card slots (1x internal and 2x lp x16) and 12x DIMM slots are available
 >> With **two** processors all 24x DIMM slots, 4x PCIe card slots (1x internal and 3x lp x16) are available.
 >> To configure 2nd CPU an additional cooler kit is required.
 >> Empty CPU slot have to be filled up with a CPU Dummy!
 * HT = Hyper Threading

Xeon Bronze 3200 - Basic (Shelf 1)		
64-bit Intel Xeon processor supporting DDR4 @ 2133MHz & UPI Bus @ 9.6 GT/s		
Xeon Bronze 3204 6C nHT 1.9 GHz 85W	S26361-F4082-E104	S26361-F4082-L104
Xeon Bronze 3206R 8C nHT 1.9GHz 85W	S26361-F4082-E806	S26361-F4082-L806
Xeon Silver 4200 - Standard (Shelf 2)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & UPI Bus 9.6 GT/s		
Xeon Silver 4208 8C 2.1GHz 85W	S26361-F4082-E108	S26361-F4082-L108
Xeon Silver 4210 10C 2.2GHz 85W	S26361-F4082-E110	S26361-F4082-L110
Xeon Silver 4210R 10C 2.4GHz 100W	S26361-F4082-E811	S26361-F4082-L811
Xeon Silver 4214 12C 2.2GHz 85W	S26361-F4082-E114	S26361-F4082-L114
Xeon Silver 4214R 12C 2.4GHz 100W	S26361-F4082-E814	S26361-F4082-L814
Xeon Silver 4216 16C 2.1GHz 100W	S26361-F4082-E116	S26361-F4082-L116
Xeon Silver 4200 - Frequency Optimized (Shelf 2)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & UPI Bus @ 9.6 GT/s		
Xeon Silver 4215 8C 2.5GHz 85W	S26361-F4082-E115	S26361-F4082-L115
Xeon Silver 4215R 8C 3.2GHz 130W	S26361-F4082-E815	S26361-F4082-L815
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
Xeon Gold 5217 8C 3.0GHz 85W	S26361-F4082-E217	S26361-F4082-L217
Xeon Gold 5218 16C 2.3GHz 125W	S26361-F4082-E218	S26361-F4082-L218
Xeon Gold 5218B 16C 2.3GHz 125W	S26361-F4082-E219	S26361-F4082-L219
Xeon Gold 5218R 20C 2.1GHz 125W	S26361-F4082-E818	S26361-F4082-L818
Xeon Gold 5220 18C 2.2GHz 125W	S26361-F4082-E220	S26361-F4082-L220
Xeon Gold 5220R 24C 2.2GHz 150W	S26361-F4082-E820	S26361-F4082-L820
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
Xeon Gold 5200S - 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
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
Xeon Gold 6226R 16C 2.9GHz 150W	S26361-F4082-E826	S26361-F4082-L826
Xeon Gold 6230 20C 2.1GHz 125W	S26361-F4082-E330	S26361-F4082-L330
Xeon Gold 6230R 26C 2.1GHz 150W	S26361-F4082-E830	S26361-F4082-L830
Xeon Gold 6234 8C 3.4GHz 130W	S26361-F4082-E334	S26361-F4082-L334
Xeon Gold 6238 22C 2.1GHz 140W	S26361-F4082-E338	S26361-F4082-L338
Xeon Gold 6238R 28C 2.2GHz 165W	S26361-F4082-E838	S26361-F4082-L838
Xeon Gold 6240 18C 2.6GHz 150W	S26361-F4082-E340	S26361-F4082-L340
Xeon Gold 6240R 24C 2.4GHz 165W	S26361-F4082-E840	S26361-F4082-L840
Xeon Gold 6242 16C 2.8GHz 150W	S26361-F4082-E342	S26361-F4082-L342
Xeon Gold 6242R 20C 3.1GHz 205W	S26361-F4082-E842	S26361-F4082-L842
Xeon Gold 6244 8C 3.6GHz 150W	S26361-F4082-E344	S26361-F4082-L344
Xeon Gold 6246 12C 3.3GHz 165W	S26361-F4082-E346	S26361-F4082-L346
Xeon Gold 6246R 16C 3.4GHz 205W	S26361-F4082-E846	S26361-F4082-L846
Xeon Gold 6248 20C 2.5GHz 150W	S26361-F4082-E348	S26361-F4082-L348
Xeon Gold 6248R 24C 3.0GHz 205W	S26361-F4082-E848	S26361-F4082-L848
Xeon Gold 6250 8C 3.9GHz 185W	S26361-F4082-E850	S26361-F4082-L850
Xeon Gold 6252 24C 2.1GHz 150W	S26361-F4082-E352	S26361-F4082-L352
Xeon Gold 6254 18C 3.1GHz 200W	S26361-F4082-E354	S26361-F4082-L354
Xeon Gold 6256 12C 3.6GHz 205W	S26361-F4082-E856	S26361-F4082-L856
Xeon Gold 6258R 28C 2.7GHz 205W	S26361-F4082-E858	S26361-F4082-L858
Xeon Gold 6200V - VM Density Optimized AEP enabled (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
Xeon Gold 6262V 24C 1.9GHz 135W	S26361-F4082-E362	S26361-F4082-L362

B1

* not allowed for Energy Star 3.0

B1		
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 8260 24C 2.4GHz 165W	S26361-F4082-E360	S26361-F4082-L360
Xeon Platinum 8268 24C 2.9GHz 205W	S26361-F4082-E368	S26361-F4082-L368
Xeon Platinum 8270 26C 2.7GHz 205W	S26361-F4082-E370	S26361-F4082-L370
Xeon Platinum 8276 28C 2.3GHz 165W	S26361-F4082-E376	S26361-F4082-L376
Xeon Platinum 8280 28C 2.7GHz 205W	S26361-F4082-E380	S26361-F4082-L380
Xeon Gold 5200M - Advanced (Shelf 3; 2.0TB p. Socket)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s		
Xeon Platinum 5215M 10C 2.5GHz 85W	S26361-F4082-E415	S26361-F4082-L415
Xeon Gold 6200M - Advanced (Shelf 4; 2.0TB p. Socket)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s		
Xeon Gold 6238M 22C 2.1GHz 140W	S26361-F4082-E438	S26361-F4082-L438
Xeon Gold 6240M 18C 2.6GHz 150W	S26361-F4082-E440	S26361-F4082-L440
Xeon Platinum 8200M - Advanced (2.0 TB p. Socket)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s		
Xeon Platinum 8260M 24C 2.4GHz 165W	S26361-F4082-E460	S26361-F4082-L460
Xeon Platinum 8276M 28C 2.3GHz 165W	S26361-F4082-E476	S26361-F4082-L476
Xeon Platinum 8280M 28C 2.7GHz 205W	S26361-F4082-E480	S26361-F4082-L480
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
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
Xeon Gold 6240L 18C 2.6GHz 150W	S26361-F4082-E540	S26361-F4082-L540
Xeon Platinum 8200L - Advanced (Shelf 5; 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
Xeon Platinum 8276L 28C 2.3GHz 165W	S26361-F4082-E576	S26361-F4082-L576
Xeon Platinum 8280L 28C 2.7GHz 205W	S26361-F4082-E580	S26361-F4082-L580
Xeon Silver 4200Y - Speed Select (Shelf 2)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2400 MHz & UPI Bus @ 9.6 GT/s		
Xeon Silver 4214Y 8/10/12C 2.2GHz 85W	S26361-F4082-E614	S26361-F4082-L614
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
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
Xeon Gold 6200U - Single Socket (Shelf 4)		
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 10.4 GT/s		
Xeon Gold 6208U 16C 2.9GHz 150W	S26361-F4082-E808	
Xeon Gold 6209U 20C 2.1GHz 125W	S26361-F4082-E809	
Xeon Gold 6210U 20C 2.5GHz 150W	S26361-F4082-E810	
Xeon Gold 6212U 24C 2.4GHz 150W	S26361-F4082-E812	

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 12 Slots you have to configure the 2nd 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 4Rx4/8Rx4) **(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:
 1.536GB using RDIMM
 3.072GB using LRDIMM technology with 128GB per module
 7.680 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. 2 different DIMMs are allowed. 6 or 12 identical DIMMs have the best performance per CPU.	
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. Only one DIMM type is allowed. Not supported with DCPMM modules!	
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. Only one DIMM type is allowed. Not supported with DCPMM modules!	
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		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		

i Detailed information

Mode	Configuration	RDIMM		Use case, advantage
		RDIMM	LRDIMM	
		x8	x4	
SDDC (chipkill) support	any	no	yes	supports detecting multi-bit errors
Independant channel mode	1 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

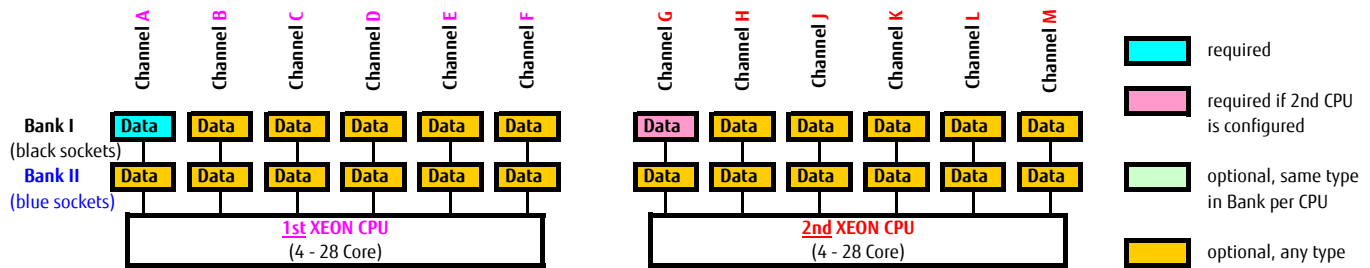
*) For the delivery ex factory the system will be prepared with dedicated BIOS setting.

Capacity	Configuration	RDIMM	LRDIMM	Notes
Min. Memory per CPU	1 Module / CPU	1x8GB	1x64GB	with one CPU
Max. Memory per CPU	12 Modules / CPU	12x64GB	12x128GB	with one CPU
Max. Memory per System	24 Modules / System	1.536GB	3.072GB	if second CPU is configured

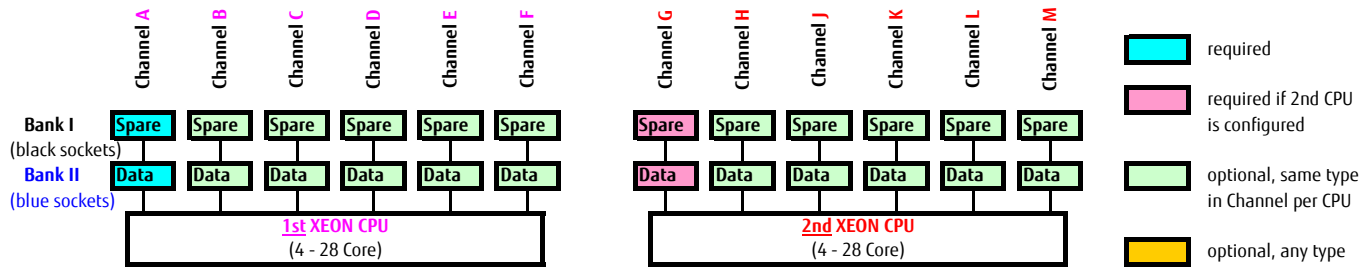
The memory sockets on the Systemboards are color coded

Bank I	black sockets	Bank II	blue sockets
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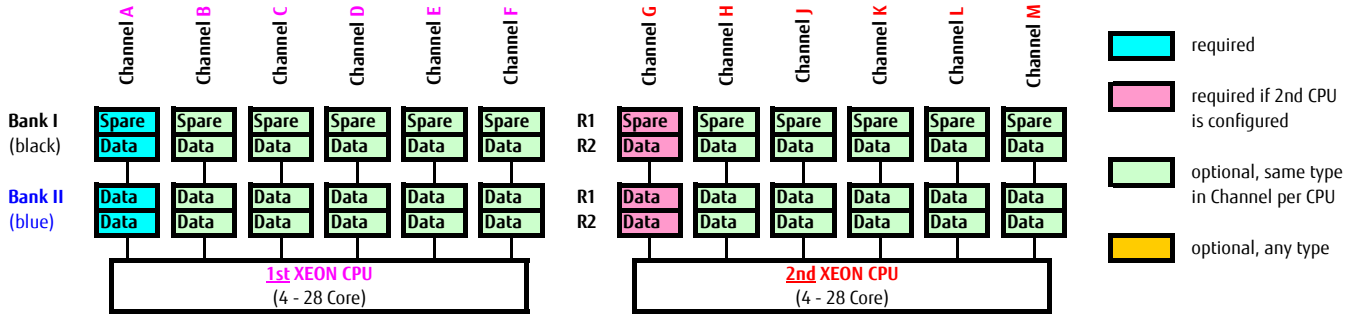
Independant channel mode



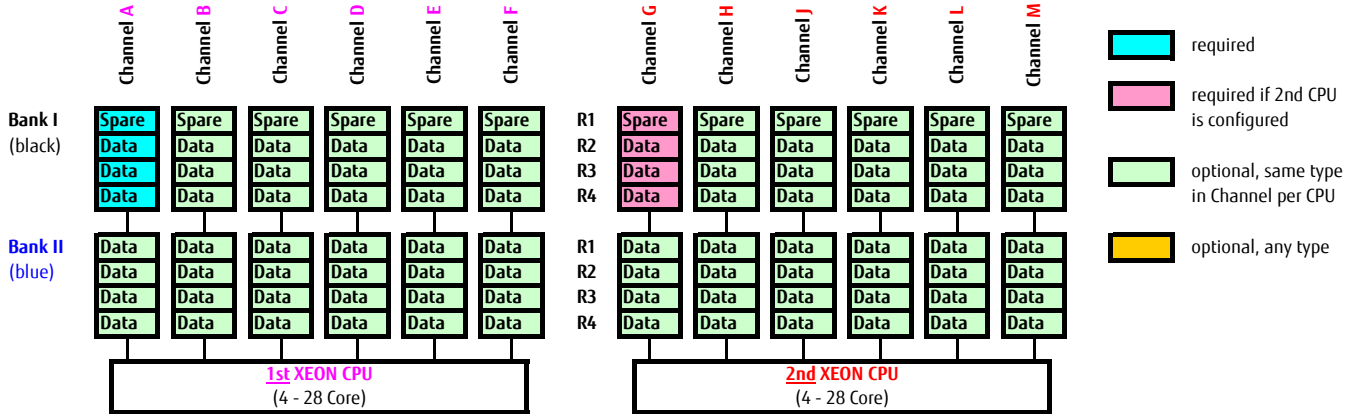
Rank sparing mode --- 1-Rank Memory modules (RDIMM)



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

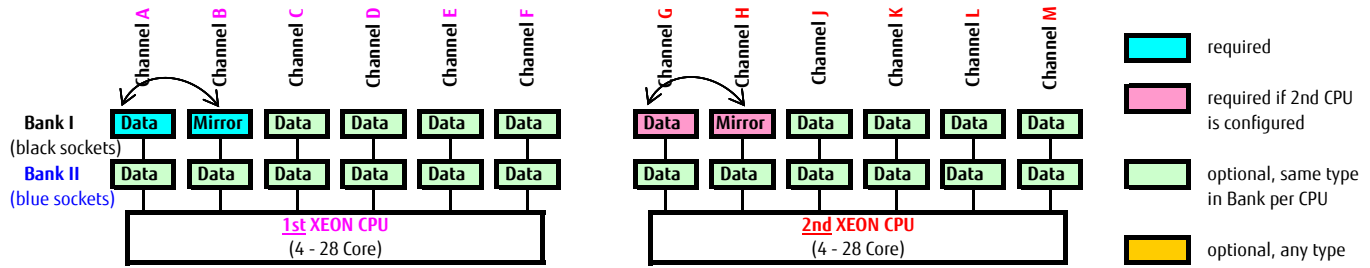


Rank sparing mode --- 4-Rank Memory modules (RDIMM 3DS)



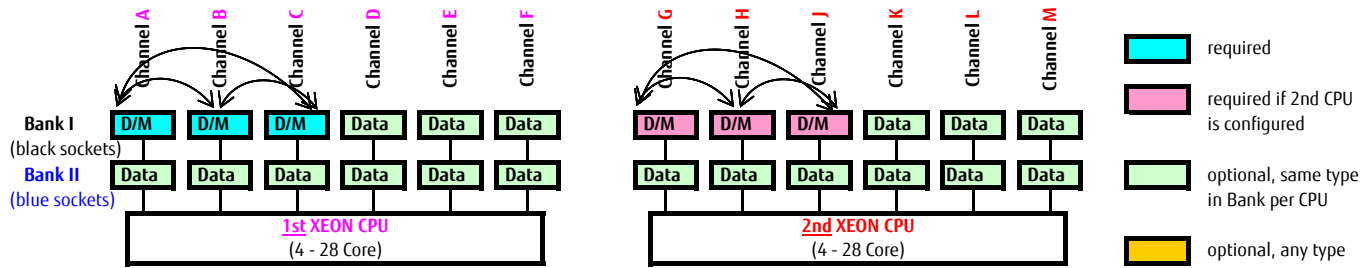
Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel. The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing mode is to achieve max. available memory, e.g. 4 DIMMs will be spread across two channels, each with 2DPC

Mirror Channel Mode (2 DIMMS per CPU)



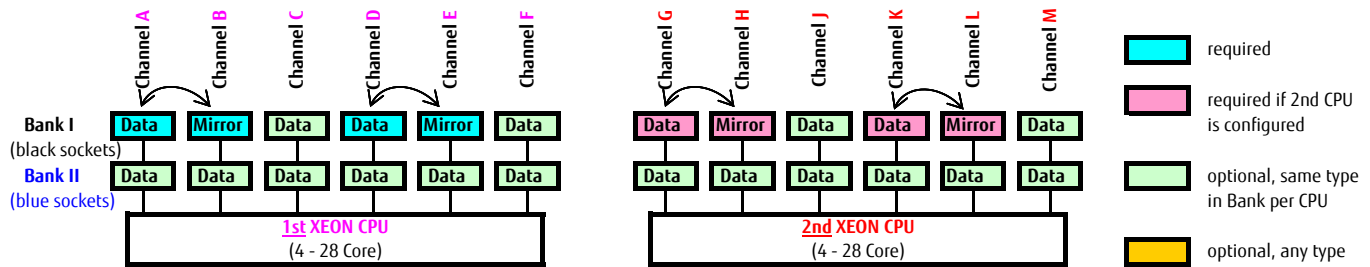
Mirrored Channel Mode (2 DIMMs per CPU) requires identical modules on channel A & B (1st CPU) or channel G & H (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 2 identical modules has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

Mirror Channel Mode (3 DIMMS per CPU)



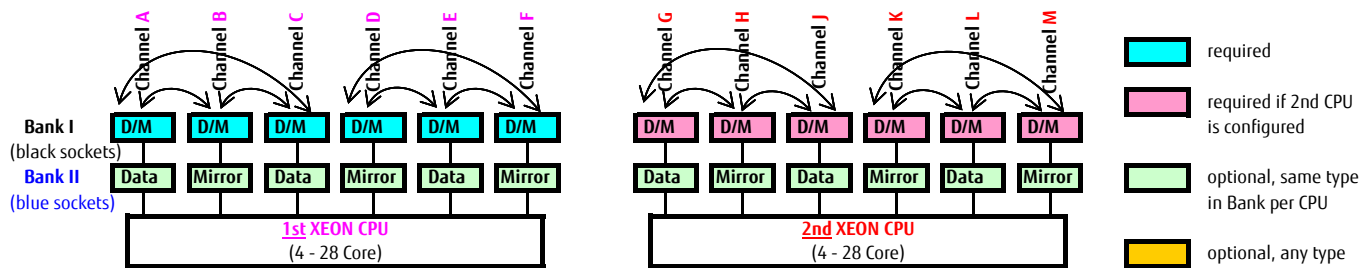
Mirrored Channel Mode (3 DIMMs per CPU) requires identical modules on channel A, B & C (1st CPU) or channel G, H & J (2nd CPU) 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory. If this mode is used, a multiple of 3 identical modules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

Mirror Channel Mode (4 DIMMS per CPU)



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

Mirror Channel Mode (6 DIMMS per CPU)



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

Released configurations with DCPMM modules per CPU

Modes	iMCO						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 5 - Graphics or FPGA options

D	
S26361-F1420-E130 S26361-F1420-L130 Front VGA connector (15-pin) Front VGA connector (15-pin) including cable and front connector Not for base units-V112, V116, V238, VR26, V628 or -V624 max. 1x per system	
S26361-F4066-E401 S26361-F4066-L401 PGRA-CP NVIDIA Quadro P400 NVIDIA Quadro 2GB PCIe 3.0 x16 Connectors: 3x Mini-DP no cable kits included cables must be ordered seperately Triple-head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS occupies slot 3 (or 8) Low profile bracket max. 1x per system	The high end optional NVIDIA Quadro P400 graphic card offers triple head operation and full 3D video support. The cables kit is not included. It is necessary to order cable kit. Remote Video direction via iRMC must be disabled. PY VGA card can be installed in slot 3 (CPU1) or slot 8 (CPU2)
S26361-F4066-E11 S26361-F4066-L11 MiniDP-DP ADAPTER max. 3x per card	
S26361-F4066-E12 S26361-F4066-L12 DP-VGA ADAPTER max. 3x per card	S26361-F4066-E13 S26361-F4066-L13 DP-DVI ADAPTER max. 3x per card

**NVIDIA Quadro P4000/P5000/RTX4000/RTX6000 GPU
NVIDIA Tesla V100 for PCIe**

S26361-F3846-L49 GFX/GPU upgrade kit
Cable Kit to install one GFX/GPU card as works
Includes different power cables for released cards.

Mounting Kit right
is included in GFX/GPU base units

Mounting Kit right
is included in GFX/GPU base units

S26361-F3846-E42
S26361-F3846-L42
GFX/GPU Mounting Kit left
max. 1x per system required, needs 2nd CPU

S26361-F3846-L49 GFX/GPU upgrade kit
Cable Kit to install one GFX/GPU card as works
Includes different power cables for released cards.

S26361-F3846-E42
S26361-F3846-L42
GFX/GPU Mounting Kit left
max. 1x per system required, needs 2nd CPU

As soon as available in December 2019

As soon as available in December 2019

<p>S26361-F4025-E340 S26361-F4025-L340 PGRA CP Quadro P4000 NVIDIA Quadro P4000 Card with 1792 graphic cores & 8GB GDDR5 RAM, PCIe Gen3 power cables from PSU need to be ordered separately, 800W or higher PSU is recommended PCIe *16 (Gen3) - single width - occupies space for one PCIe slots, Full height bracket Limitation: CPU max 150W with ambient temperature max 30°C! Display connector: DisplayPort x 4 max. 2x per system</p>	<p>S26361-F4025-E350 S26361-F4025-L350 PGRA CP Quadro P5000 NVIDIA Quadro P5000 Card with 2560 graphic cores & 16GB GDDR5 RAM, PCIe Gen3 power cables from PSU need to be ordered separately, 800W or higher PSU is recommended PCIe *16 (Gen3) - double width - occupies space for two PCIe slots, Full height bracket Limitation: CPU max 150W with ambient temperature max 30°C! Display connector: DVI-D x 1 DisplayPort x 4 max. 2x per system</p>	<p>S26361-F4025-E540 S26361-F4025-L540 PGRA CP Quadro RTX4000 NVIDIA Quadro RTX4000 Card with 2304 graphic cores & 8GB GDDR6 RAM, PCIe Gen3 power cables from PSU need to be ordered separately, 800W or higher PSU is recommended PCIe *16 (Gen3) - single width - occupies space for one PCIe slots, Full height bracket Limitation: CPU max 150W with ambient temperature max 30°C! Display connector: DisplayPort x 3 max. 2x per system</p>	<p>S26361-F4025-E550 S26361-F4025-L550 PGRA CP Quadro RTX6000 NVIDIA Quadro RTX6000 Card with 4608 graphic cores & 24GB GDDR6 RAM, PCIe Gen3 power cables from PSU need to be ordered separately, 800W or higher PSU is recommended PCIe *16 (Gen3) - single width - occupies space for one PCIe slots, Full height bracket Limitation: CPU max 150W with ambient temperature max 30°C! Display connector: DisplayPort x 4 VirtualLink (USB Type-C) max. 2x per system</p>	<p>S26361-F4025-E580 S26361-F4025-L580 PGRA CP Quadro RTX8000 NVIDIA Quadro RTX8000 Card with 4608 graphic cores & 48GB GDDR6 RAM, PCIe Gen3 power cables from PSU need to be ordered separately, 800W or higher PSU is recommended PCIe *16 (Gen3) - single width - occupies space for one PCIe slots, Full height bracket Limitation: CPU max 150W with ambient temperature max 30°C! Display connector: DisplayPort x 4 VirtualLink (USB Type-C) max. 2x per system</p>
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S26361-F4066-E12
S26361-F4066-L12
DP-VGA ADAPTER
max. 4x (Quadro P4000/ P5000/RTX6000) 3xRTX4000

S26361-F4066-E13
S26361-F4066-L13
DP-DVI ADAPTER
max. 4x (Quadro P4000/ P5000/RTX6000) 3xRTX4000

As soon as available

S26361-F4025-E325
S26361-F4025-L325
PT NVIDIA Tesla V100S for PCIe
NVIDIA Tesla V100 Card with 5120 graphic cores & 32GB HBM2 memory, PCIe Gen3
power cables from PSU need to be ordered separately, 800W or higher PSU is recommended
PCIe *16 (Gen3) - double width - occupies space for two PCIe slots, Full height bracket
Limitation: CPU max 150W with ambient temperature max 28°C!
max. 2x per system

S26361-F4025-E232
S26361-F4025-L232
PT NVIDIA Tesla V100 for PCIe
NVIDIA Tesla V100 Card with 5120 graphic cores & 32GB HBM2 memory, PCIe Gen3
power cables from PSU need to be ordered separately, 800W or higher PSU is recommended
PCIe *16 (Gen3) - double width - occupies space for two PCIe slots, Full height bracket
Limitation: CPU max 150W with ambient temperature max 30°C!
max. 2x per system

S26361-F4025-E400
S26361-F4025-L400
PT NVIDIA Tesla T4
NVIDIA Tesla T4 Card with 2560 graphic cores & 16GB GDDR6 RAM, PCIe Gen3 x16, Low profile, power cables from PSU need to be ordered separately, 800W PSU is recommended
PCIe *16 (Gen3) - single width, low profile bracket, no external power cable, 70W
Limitation:
- CPU max 165W with ambient temperature max 28°C!
- No support ATD 40 or ATD 45
- Max 8x disk 3.5" or 2.5"
- No rear option 4x 2.5"
- No PCIe-riser options for full-height cards (line install for GPU Basic units models)
max. 4x per system

Supported for GPU pass through and vGPU (shared GPU) under Citrix XenServer 6.5 and XenDesktop. Workload depends on application. Ideal for virtualized GPU or shared GPU workload like "Power Users" or "Knowledge Workers", including "Designer" as full power graphic USER (GRID K2 only).
Supported for VMware ESXi 5.5 shared (vSGA) & dedicated (vDGA) virtual graphic support and Microsoft RemoteFX under Windows Server 2012 R2.
All guests OSEs are supported if listed at OS vendors HCL.
NOT certified for CAD / CAM / CAX type of applications using dedicated GPU.

Tesla T4 does not install in "Basic units for best graphics applications". S26361-K1655-V308 & S26361-K1655-V304. Other models are possible to install this card.
This card is not necessary GFX/GPU card external power cable.

NVIDIA TESLA M6U/M10 GPU pass through / VGPU

Tesla T4 does not install in Basic units for best graphics applications... S26361-K1655-V308 & S26361-K1655-V304. Other models are possible to install this card. This card is not necessary GFX/GPU card external power cable.

Mounting Kit right is included in GFX/GPU base units

S26361-F3846-L40 GFX/GPU upgrade kit Cable Kit to install one GFX/GPU card ex works includes different power cables for released cards

For GRID 3.0 to use the virtual graphic (GRID) functionality, a SW activation key and support license has to be purchased additionally. Please refer to additional license offerings for Virtual Applications / Virtual PC / Virtual Workstation plus SUMS (Support, Updates & Maintenance subscriptions). Cards personally is set to graphic card ex factory!

As soon as available in May 2020

As soon as available in May 2020

As soon as available in May 2020

Table with 2 columns: Part Number (S26361-F4025-E400, S26361-F4025-L400), Description (PY NVIDIA Tesla T4, NVIDIA Tesla T4 Card with 2560 graphic cores & 16GB GDDR6 RAM, PCIe Gen3 x16, Low profile, 70W), and Limitations (CPU max 165W with ambient temperature max 28°C, No support ATD 40 or ATD 45, Max ex disk 3.5" or 2.5", No rear option 4x 2.5", No PCIe-riser options for full-height cards, max. 4x per system)

Table with 2 columns: Part Number (S26361-F4025-E325, S26361-F4025-L325), Description (PY NVIDIA Tesla V100S for PCIe, NVIDIA Tesla V100S Card with 5120 graphic cores & 32GB HBM2 memory, PCIe Gen3), and Limitations (CPU max 150W with ambient temperature max 28°C, max. 2x per system)

Table with 2 columns: Part Number (S26361-F2222-E910, S26361-F2222-L910), Description (PGRA CP NVIDIA Tesla M10, NVIDIA Tesla M10 Card with 2560 graphic cores & 32GB GDDR5 RAM, PCIe Gen3), and Limitations (CPU max 165W with ambient temperature max 30°C, It is NOT possible the combination 64GB/128GB memory and this card, max. 2x per system)

Table with 2 columns: Part Number (S26361-F4025-E232, S26361-F4025-L232), Description (PY NVIDIA Tesla V100 for PCIe, NVIDIA Tesla V100 Card with 5120 graphic cores & 32GB HBM2 memory, PCIe Gen3), and Limitations (CPU max 165W with ambient temperature max 30°C, max. 2x per system)

Table with 2 columns: Part Number (S26361-F4025-E560, S26361-F4025-L560), Description (PGRA CP Quadro RTX6000, NVIDIA Quadro RTX6000 Card with 4608 graphic cores & 24GB GDDR6 RAM, PCIe Gen3), and Limitations (CPU max 150W with ambient temperature max 30°C, For VDI, GRID SW license is only "Quadro vDWS", max. 2x per system)

Table with 2 columns: Part Number (S26361-F4025-E580, S26361-F4025-L580), Description (PGRA CP Quadro RTX8000, NVIDIA Quadro RTX8000 Card with 4608 graphic cores & 48GB GDDR6 RAM, PCIe Gen3), and Limitations (CPU max 150W with ambient temperature max 30°C, For VDI, GRID SW license is only "Quadro vDWS", max. 2x per system)

Perpetual Software license

Table with 2 columns: Part Number (S26361-F4024-S101, S26361-F4024-L101), Description (GRID Virtual Applications (vApps) Perpetual License, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S201, S26361-F4024-L201), Description (NVIDIA GRID Virtual PC (vPC) Perpetual License, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S301, S26361-F4024-L301), Description (NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Perpetual License, 1 CCU), and Pricing (48x per RTX6000 card, 24x per RTX8000 card, 32x per V100 card, 16x per T4 card, 64x per M10 card)

SUMS must be ordered in equal numbers with each SW perpetual licenses. Please refer data sheet.

Table with 2 columns: Part Number (S26361-F4024-S804, S26361-F4024-L804), Description (NVIDIA GRID vApps Prod SUMS 4 year, 1 CCU), and Pricing (same volume with perpetual license)

Table with 2 columns: Part Number (S26361-F4024-S805, S26361-F4024-L805), Description (NVIDIA GRID vApps Prod SUMS 5 year, 1 CCU), and Pricing (same volume with perpetual license)

Table with 2 columns: Part Number (S26361-F4024-S814, S26361-F4024-L814), Description (NVIDIA GRID vPC Prod SUMS 4 year, 1 CCU), and Pricing (same volume with perpetual license)

Table with 2 columns: Part Number (S26361-F4024-S815, S26361-F4024-L815), Description (NVIDIA GRID vPC Prod SUMS 5 year, 1 CCU), and Pricing (same volume with perpetual license)

Table with 2 columns: Part Number (S26361-F4024-S824, S26361-F4024-L824), Description (NVIDIA Quadro vDWS Prod SUMS 4 year, 1 CCU), and Pricing (same volume with perpetual license)

Table with 2 columns: Part Number (S26361-F4024-S825, S26361-F4024-L825), Description (NVIDIA Quadro vDWS Prod SUMS 5 year, 1 CCU), and Pricing (same volume with perpetual license)

NVIDIA SUMS License (6 months) for renewal - Loose Delivery -

Table with 2 columns: Part Number (S26361-F4024-L956), Description (NVIDIA GRID vApps Prod SUMS 6 months Renew, 1 CCU), and Pricing (NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L966), Description (NVIDIA GRID vPC Prod SUMS 6 months Renew, 1 CCU), and Pricing (NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L976), Description (NVIDIA GRID vDWS Prod SUMS 6 months Renew, 1 CCU), and Pricing (NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L901), Description (NVIDIA GRID vApps Prod SUMS 1yr Renew, 1 CCU), and Pricing (NVIDIA SUMS License (1 year) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L911), Description (NVIDIA GRID vPC Prod SUMS 1yr Renew, 1 CCU), and Pricing (NVIDIA SUMS License (1 year) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L921), Description (NVIDIA GRID vDWS Prod SUMS 1yr Renew, 1 CCU), and Pricing (NVIDIA SUMS License (1 year) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L952), Description (NVIDIA GRID vApps Prod SUMS 2yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (2 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L962), Description (NVIDIA GRID vPC Prod SUMS 2yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (2 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L972), Description (NVIDIA GRID vDWS Prod SUMS 2yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (2 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L953), Description (NVIDIA GRID vApps Prod SUMS 3yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (3 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L963), Description (NVIDIA GRID vPC Prod SUMS 3yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (3 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L973), Description (NVIDIA GRID vDWS Prod SUMS 3yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (3 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L954), Description (NVIDIA GRID vApps Prod SUMS 4yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (4 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L964), Description (NVIDIA GRID vPC Prod SUMS 4yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (4 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L974), Description (NVIDIA GRID vDWS Prod SUMS 4yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (4 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L955), Description (NVIDIA GRID vApps Prod SUMS 5yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (5 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L965), Description (NVIDIA GRID vPC Prod SUMS 5yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (5 years) for renewal. It needs if you need to continue SUMS.)

Table with 2 columns: Part Number (S26361-F4024-L975), Description (NVIDIA GRID vDWS Prod SUMS 5yrs Renew, 1 CCU), and Pricing (NVIDIA SUMS License (5 years) for renewal. It needs if you need to continue SUMS.)

This license model is NOT requirement for SUMS (Support license). It is including it.

Subscription Software license

Table with 2 columns: Part Number (S26361-F4024-S111, S26361-F4024-L111), Description (GRID Virtual Applications (vApps) Subscription License, 1 year, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S113, S26361-F4024-L113), Description (GRID Virtual Applications (vApps) Subscription License, 3 years, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S115, S26361-F4024-L115), Description (GRID Virtual Applications (vApps) Subscription License, 5 years, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S211, S26361-F4024-L211), Description (NVIDIA GRID Virtual PC (vPC) Subscription License, 1 year, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S213, S26361-F4024-L213), Description (NVIDIA GRID Virtual PC (vPC) Subscription License, 3 years, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S215, S26361-F4024-L215), Description (NVIDIA GRID Virtual PC (vPC) Subscription License, 5 years, 1 CCU), and Pricing (32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S311, S26361-F4024-L311), Description (NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, 1 year, 1 CCU), and Pricing (48x per RTX6000 card, 24x per RTX8000 card, 32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S313, S26361-F4024-L313), Description (NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, 3 years, 1 CCU), and Pricing (48x per RTX6000 card, 24x per RTX8000 card, 32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-S315, S26361-F4024-L315), Description (NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, 5 years, 1 CCU), and Pricing (48x per RTX6000 card, 24x per RTX8000 card, 32x per V100 card, 16x per T4 card, 64x per M10 card)

Table with 2 columns: Part Number (S26361-F4024-L956), Description (NVIDIA GRID vApps Subscription License 6 months Renew, 1 CCU), and Pricing (NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L916), Description (NVIDIA GRID vPC Subscription License 6 months Renew, 1 CCU), and Pricing (NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L926), Description (NVIDIA GRID Quadro vDWS Subscription License 6 months Renew, 1 CCU), and Pricing (NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L902), Description (NVIDIA GRID vApps Subscription License 1yr Renew, 1 CCU), and Pricing (NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L912), Description (NVIDIA GRID vPC Subscription License 1yr Renew, 1 CCU), and Pricing (NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L922), Description (NVIDIA GRID Quadro vDWS Subscription License 1yr Renew, 1 CCU), and Pricing (NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L900), Description (NVIDIA GRID vApps Subscription License 2yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L910), Description (NVIDIA GRID vPC Subscription License 2yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L920), Description (NVIDIA GRID Quadro vDWS Subscription License 2yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L903), Description (NVIDIA GRID vApps Subscription License 3yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L913), Description (NVIDIA GRID vPC Subscription License 3yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L923), Description (NVIDIA GRID Quadro vDWS Subscription License 3yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L904), Description (NVIDIA GRID vApps Subscription License 5yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L914), Description (NVIDIA GRID vPC Subscription License 5yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.)

Table with 2 columns: Part Number (S26361-F4024-L924), Description (NVIDIA GRID Quadro vDWS Subscription License 5yrs Renew, 1 CCU), and Pricing (NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.)

Education Software license

Perpetual license

S26361-F4024-S401
S26361-F4024-L401
NVIDIA GRID EDU Perpetual License, 1 CCU

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EDU SUMs must be ordered in equal numbers with each SW perpetual licenses. Please refer data sheet.

Subscription license

S26361-F4024-S411
S26361-F4024-L411
NVIDIA GRID EDU Subscription License, 1 year, 1 CCU
48x per 01X2000 card
24x per 01X4000 card
12x per V100 card
16x per T4 card
64x per M10 card

S26361-F4024-S413
S26361-F4024-L413
NVIDIA GRID EDU Subscription License, 3 year, 1 CCU
48x per 01X2000 card
24x per 01X4000 card
12x per V100 card
16x per T4 card
64x per M10 card

S26361-F4024-S834
S26361-F4024-L834
NVIDIA GRID EDU SUMS 4 year, 1 CCU
same volume with EDU perpetual license

S26361-F4024-S835
S26361-F4024-L835
NVIDIA GRID EDU SUMS 5 year, 1 CCU
same volume with EDU perpetual license

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NVIDIA EDU SUMS License (6 months) for renewal - Loose Delivery -

S26361-F4024-L836
NVIDIA GRID EDU SUMS 6 months Renew, 1CCU
NVIDIA EDU SUMS License (6 months) for renewal. It needs if you need to continue EDU SUMs.

NVIDIA EDU SUMS License (1 year) for renewal - Loose Delivery -

S26361-F4024-L931
NVIDIA GRID EDU SUMS 1yr Renew, 1CCU
NVIDIA EDU SUMS License (1 year) for renewal. It needs if you need to continue EDU SUMs.

NVIDIA EDU SUMS License (2 years) for renewal - Loose Delivery -

S26361-F4024-L932
NVIDIA GRID EDU SUMS 2yrs Renew, 1CCU
NVIDIA EDU SUMS License (2 years) for renewal. It needs if you need to continue EDU SUMs.

NVIDIA EDU SUMS License (3 years) for renewal - Loose Delivery -

S26361-F4024-L933
NVIDIA GRID EDU SUMS 3yrs Renew, 1CCU
NVIDIA EDU SUMS License (3 years) for renewal. It needs if you need to continue EDU SUMs.

NVIDIA EDU SUMS License (4 years) for renewal - Loose Delivery -

S26361-F4024-L934
NVIDIA GRID EDU SUMS 4yrs Renew, 1CCU
NVIDIA EDU SUMS License (4 years) for renewal. It needs if you need to continue EDU SUMs.

NVIDIA EDU SUMS License (5 years) for renewal - Loose Delivery -

S26361-F4024-L935
NVIDIA GRID EDU SUMS 5yrs Renew, 1CCU
NVIDIA EDU SUMS License (5 years) for renewal. It needs if you need to continue EDU SUMs.

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NVIDIA Subscription License (6 months) for renewal - Loose Delivery -

S26361-F4024-L946
NVIDIA GRID EDU Subscription License 6 months Renew, 1CCU
NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.

NVIDIA Subscription License (1 year) for renewal - Loose Delivery -

S26361-F4024-L941
NVIDIA GRID EDU Subscription License 1yr Renew, 1CCU
NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.

NVIDIA Subscription License (2 years) for renewal - Loose Delivery -

S26361-F4024-L942
NVIDIA GRID EDU Subscription License 2yrs Renew, 1CCU
NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.

NVIDIA Subscription License (3 years) for renewal - Loose Delivery -

S26361-F4024-L943
NVIDIA GRID EDU Subscription License 3yrs Renew, 1CCU
NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.

Intel PAC A10 FPGA Card

Will be available beginning of September 2018

Mounting Kit right

is included in GFX/GPU base units

S26361-F3846-E42

S26361-F3846-L42

GFX/GPU Mounting Kit left

max. 1x per system required, needs 2nd CPU

S26361-F4067-E1

S26361-F4067-L1

Intel PAC Arria 10 GX FPGA

Intel Programmable Acceleration Card with Arria 10 GX

FPGA

power cables from PSU need to be ordered separately.

800W or higher PSU is recommended

INTEL PAC W/A10 FPGA, PCIe-x16(Mechanical) FPGA

card

max 2x per system

Limitation:

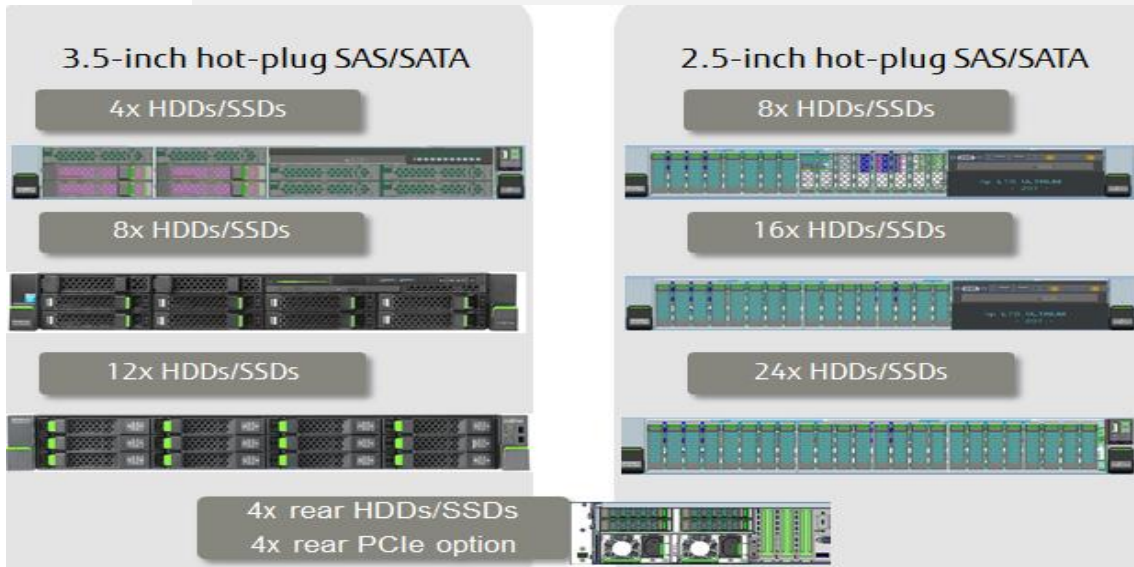
- CPU max 150W
- No support ATD 40 or ATD 45
- Supported only Redhat Linux 7.8
- x1 CPU ordered, 800W or higher PSU is recommended
- x2 CPU ordered, 1200W PSU is recommended
- DCPMM ordered, 1200W PSU is recommended
- No supported mixed configuration with all graphic cards
- No supported mixed configuration with LDM/DCP chip

S26361-F3846-L49 GFX/GPU upgrade kit
Cable Kit to install one GFX/GPU card ex works
Includes different power cables for released cards

Chapter 6 - Drive cage and PCIe riser options

F

Six standard basic units provide the basic 3.5" and 2.5" HDD/SSD configurations as shown below. E.g. front PCIe SSD SFF configurations are offered as use case specific basic unit for hybrid flash. The rear HDD/SSD cage for up to 4x 2.5" devices is offered as an option for the storage units with 12x 3.5" or 24x 2.5" HDD/SSD.

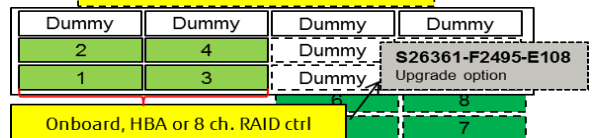
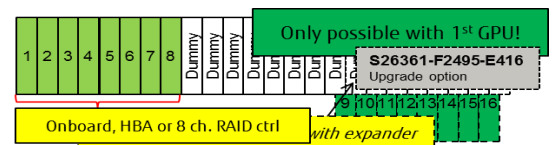
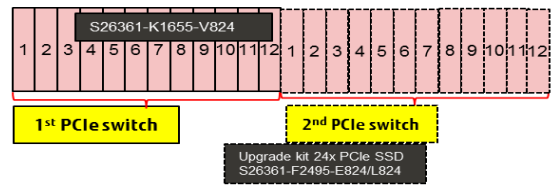
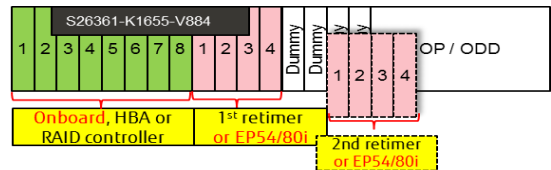


Available Upgrade kit for configuration 4x 3.5" HDD:
 Upgrade kit to 8x 3.5" HDD S26361-F2495-L108

Upgrade to 12x 3.5" HDD is not possible!

Available Upgrade kits for configuration 8x 2.5" HDD (-V408):
 Upgrade kit to 16x 2.5" HDD S26361-F2495-L445
 Upgrade kit to 2x 8x 2.5" HDD S26361-F2495-L416
 Upgrade kit to 24x 2.5" HDD S26361-F2495-L424
 Upgrade kit 4x PCIe-SSD S26361-F2495-L284
 Available Upgrade kit for configuration 16x 2.5" HDD:
 Upgrade kit to 24x 2.5" HDD S26361-F2495-L434

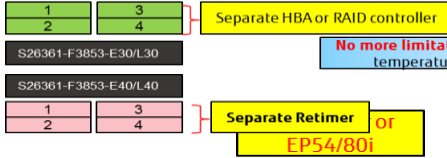
Modular HDD/SSD/PCIe options for special base units	
For Hybrid Flash basic unit V884 only:	
S26361-F2495-E884	Upgrade 4x to 8x PCIe SSD SFF
S26361-F2495-L884	Later upgrade 4x to 8x PCIe SSD SFF
Note: Separate PCIe Retimer or PRAID EP540/80i needed!	
For All Flash basic unit V824 only:	
S26361-F2495-E824	Upgrade 12x to 24x PCIe SSD SFF
S26361-F2495-L824	Later upgrade 12x to 24x PCIe SSD SFF
Note: 2nd PCIe switch, backplane and cables included	
For basic unit V408 and V308 only:	
S26361-F2495-E416	Option upgrade 8x HDD/SSD SFF
Note: Limits for one GFX/GPU card!	
For basic unit V104 and V304 only:	
S26361-F2495-E108	Option upgrade 4x HDD/SSD LFF
No limitation	
max. 1x per system	
Includes all necessary bezels, cages, backplanes and cables	



rear 2.5" SAS/SATA HDD/SSD SFF
rear 2.5" PCIe-SSD SFF



Slot 7 to use for 4x2.5" rear solutions separately



No more limitation with ambient temperature max 35°C!

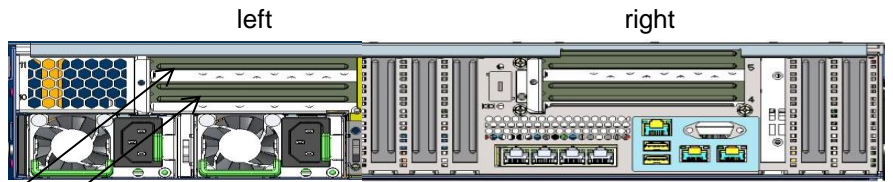
Modular REAR SFF HDD/SSD/PCIe options are possible for basic unit V112, V116, V238, V424, V428, V824 as well as V884	
S26361-F3853-E30	Option REAR SAS/SATA HDD/SSD
S26361-F3853-E40	Option REAR PCIe SSD SFF
Available Upgrade kits for this configuration option:	
S26361-F3853-L30	Upgrade REAR SAS/SATA HDD/SSD
S26361-F3853-L40	Upgrade REAR PCIe SSD SFF
Provides 4 rear hot-plug bays for SAS/SATA HDD/SSD SFF or PCIe-SSD SFF devices	
Note: Separate SAS-Controller or PCIe Retimer needed in slot 7 which requires a 2nd CPU if 8 channel ctrl is used!	
PRAID EP54/80i 16 channel (in V116 or V428) doesn't require this!	
Note: Consumes space for PCIe riser x8 and x16 left max. 1x per system	
Includes all necessary bezels, cages, backplanes and cables	

PCIe riser card options

S26361-F3846-E31
PCIe riser x8 and x16 right
PCIe 3.0 x8 and x16
provides two full height slots
max. 1x per system

S26361-F3846-E32
PCIe riser x8 and x16 left
PCIe 3.0 x8 and x16
provides two full height slots
max. 1x per system

Every PCIe riser card option consumes white PCIe x16 low profile slot each. It provides one PCIe x8 and x16 full height slots instead (Slot no. 4 and 5 or no. 10 and 11). So, max. four PCIe full height slots plus one PCIe x16 and three PCIe x8 low profile slots are available. Please note that some PCIe cards have different order numbers depending on full height slots or low profile slots! And left or right side PCIe riser card option is different!



Detailed PCIe slot description:

Slot 11 PCIe-3 x8, max. 270mm @ CPU2	full-height slot
Slot 10 PCIe-3 x16, max. 270mm @ CPU2	full-height slot
Slot 9 PCIe-3 x24, max. 198mm @ CPU2	low-profile slot
<i>Possibility to install PCIe riser with x8 and x16 slot or x16 double width</i>	
Slot 8 PCIe-3 x16, max. 198mm @ CPU2	low-profile slot
Slot 7 PCIe-3 x8, max. 198mm @ CPU2	low-profile slot
<i>Preferred slot for 3rd modular RAID-Controller</i>	
Slot 5 PCIe-3 x8, max. 270mm @ CPU1	full-height slot
Slot 4 PCIe-3 x16, max. 270mm @ CPU1	full-height slot
Slot 3 PCIe-3 x24, max. 198mm @ CPU1	low-profile slot
<i>Possibility to install PCIe riser with x8 and x16 slot or x16 double width</i>	
Slot 2 PCIe-3 x8, max. 198mm @ CPU1	low-profile slot
<i>Preferred slot for 1st modular RAID-Controller</i>	
Slot 1 PCIe-3 x8, max. 198mm @ CPU1	low-profile slot
<i>Preferred slot for 2nd modular RAID-Controller</i>	

G





Chapter 7 - SAS / RAID Controller

F

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

onboard SATA controller with SW-RAID

onboard controller for SATA HDD or SSD drives

4 ports 3, 6Gb/s SATA HDD/SSD	based on Intel chipset	No Cache	SW-RAID 0, 1	1x	onboard, included
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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	3x	S26361-F3842-E1	S26361-F3842-L501
PSAS CP400i HBA SAS Contr.	No Cache	HBA + RAID 0, 1	3x	S26361-F3842-E2	S26361-F3842-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander (PRAID CP400i: no expander support) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008					
PSAS CP403i HBA SAS Contr.	No Cache	HBA	3x	S26361-F3842-E3	S26361-F3842-L503
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; IT FW stack without RAID functionality; released for VMWare vSAN / vSphere in V104* (only combined with S26361-F2495-E108), V112, V216, V308, V408 (upgrade option S26361-F2495-E416 allowed), V424, V238, V884					

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	3x	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			3x	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		3x	S26361-F5243-E100	S26361-F5243-L100
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length		2x	S26361-F5243-E155	S26361-F5243-L115
PRAID EP420i RAID Contr.	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	3x	S26361-F5243-E12	S26361-F5243-L12
PRAID EP420i for SafeStore R. Contr.	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	3x	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			3x	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		3x	S26361-F5243-E200	S26361-F5243-L200
FBU Option for PRAID EP4xx:	Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length		2x	S26361-F5243-E155	S26361-F5243-L115

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

NVMe support for all EP5xxi tbd

internal drive RAID / SAS controllers for NVMe and SAS, SATA HDD or SSD drives

PRAID EP520i RAID Contr. LP	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	3x	S26361-F4042-E202	S26361-F4042-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander (NVMe support for EP520i on special release for this controller in this system) includes FastPath and SafeStore Advanced SW-Licence requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP540i RAID LP	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	2x	S26361-F4042-E204	S26361-F4042-L504
PRAID EP580i RAID LP	8GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	2x	S26361-F4042-E208	S26361-F4042-L508
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3516, without expander, up to 16 SAS/SATA devices or in mixed configuration up to 8 SAS/SATA devices and with the remaining 8 ports 8Gb/s NVMe PCIe, up to 2 x4 NVMe devices are supported. (the configuration for 4 x 4 NVMe drives require a different order number, please see below) 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 (FYI: S26361-F4042-E214 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)					
PRAID EP540i RAID NVMe LP	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	3x	S26361-F4042-E224	S26361-F4042-L504
PRAID EP580i RAID NVMe LP	8GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	3x	S26361-F4042-E228	S26361-F4042-L508
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3516, for Chassis Variant -V884 up to 4 x4 NVMe devices are supported. (the configuration for SAS/SATA only or mixed with up to 2 x 4 NVMe drives require a different order number, please see above) 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 (FYI: S26361-F4042-E214 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)					
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 55cm length		2x	S26361-F4042-E155	S26361-F4042-L110

base unit -V884: PRAID EP540/80i and PRAID EP540/80i NVMe

up to 3x PRAID EP540/80i NVMe for Hardware-RAID for up to 3x 4 NVMe drives, all other base units can use PRAID EP540/80i for SAS,SATA and up to 2 NVMe drives both numbers are identical hardware but allow to select dedicated usecase during ordering

maximum number of internal RAID + HBA (See also pictures on folder base / HDD cage):

- standard config: max. 1
- for -V216 only: max. 2x all HBA and RAID controller (mirrored mode)
- for -V238 only: max. 3x all HBA and RAID controller(tripple mode) but max. 2x EP540/80i
- for -V884 only: max. 4x = max. 3x NVMe by PRAID EP540/80i + additional PRAID EP520i or PRAID EP540i/80i for SAS/SATA
- for -V884 only: PRAID CP400i or EP4x0i for SAS/SATA not allowed

FBU cannot be combined with Advanced Thermal design.
up to 2x FBU can be integrated per System
for PRAID EP540i / 80i and NVMe drives, no FBU is allowed (performance)
for PRAID EP540i / 80i and NVMe drives, RHEL 7.5 is not supported

Expander configurations: Use PRAID EPxxxi for optimal performance,

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

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external SAS controller

HBA controller for ext. drives SAS, SATA HDD or SSD drives					
PSAS CP400e HBA SAS Contr. LP	No Cache	HBA, no RAID	4x	S26361-F3845-E201	S26361-F3845-L501
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3008					

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*	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	4x	S26361-F4063-E4	S26361-F4063-L504
PRAID EP540e RAID Contr. LP*	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	4x	S26361-F4063-E204	S26361-F4063-L504
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD) includes Fastpath and SafeStore Advanced SW-Licence 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 55cm length		2x	S26361-F4042-E155	S26361-F4042-L110

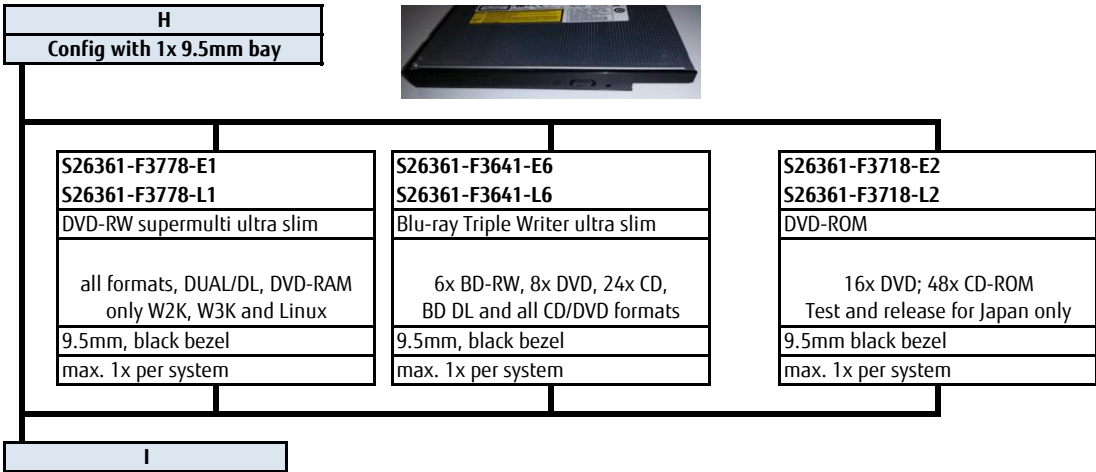
internal controllers for PCIe SSD SFF (2,5" NVMe PCIe) drives, no HW-RAID

retimer controller for internal 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe)					
PPCI CP x16 retimer	No Cache	No HW-RAID	3x	S26361-F4048-E201	S26361-F4048-L501
No HW RAID, No Cache, simple route-through incl. Signal enhancement; device management by INTEL VMD divides PCIe3.0 x16 lanes into 4x x4 lanes, supports up to 4x 2.5" PCIe-SSD SFF requires 1x LP PCIe 3.0 x16 (int.) slot					

H

Chapter 8 - ODD optical disk drives

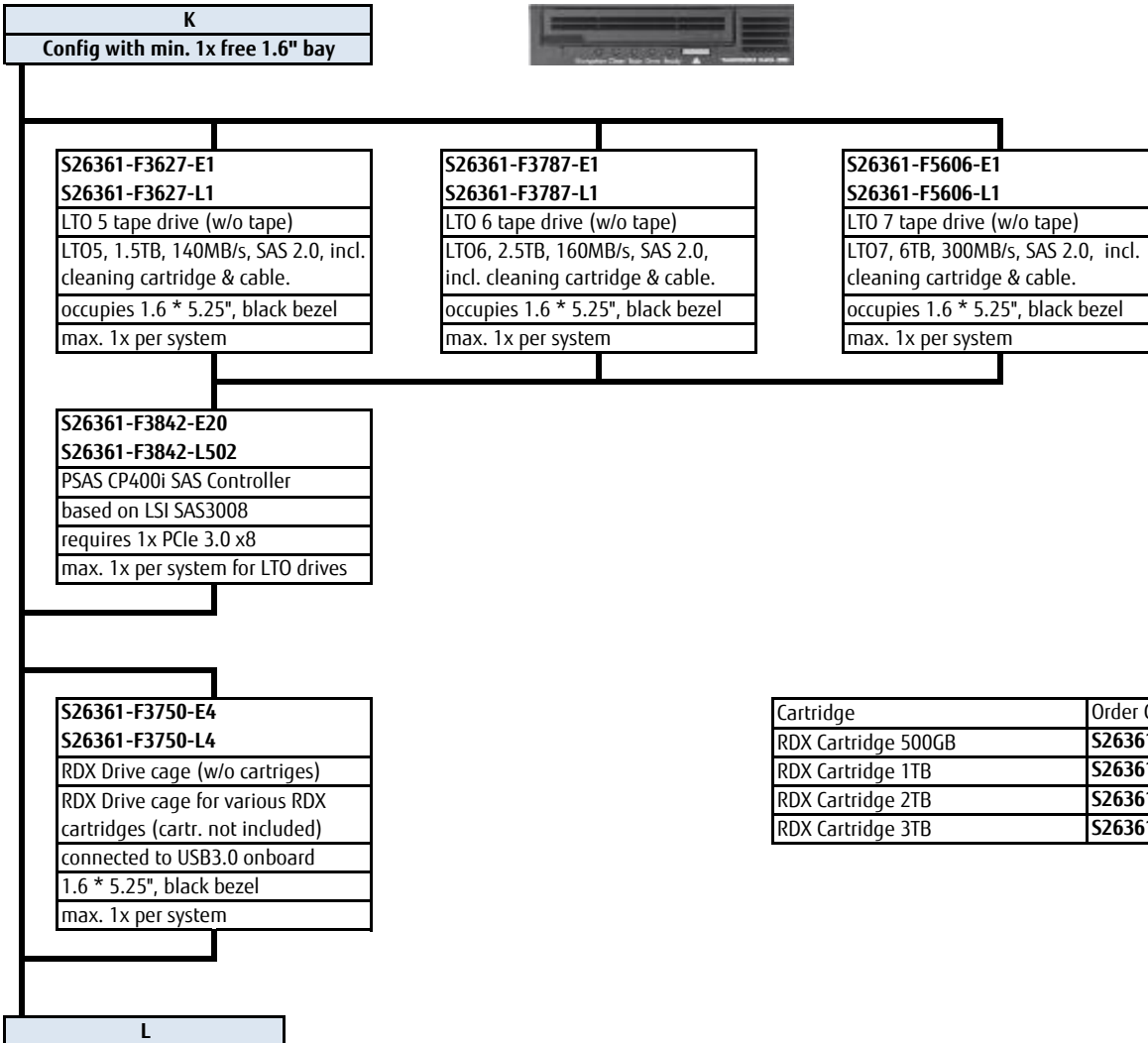
The base units with 12x 3.5" or 24x 2.5" HDD do not offer 1x 9.5mm optical drive bay!





Chapter 9 - backup drives

RX2540 M5 offers 1.6" bay for accessible drive for basic units with 8x or 16x 2.5" HDD only!





Chapter 10 - storage drives

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.
SATA drives can be connected to the onboard Controller (max. 8x).
SAS drives require a dedicated SAS / RAID Controller
Hard Disk Sector Format Information:
512n HDD: 512 byte sectors on the drive media.
512e (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 SS

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. 28x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Western Digital DC S5530 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-F5713-E400	S26361-F5713-L400
800GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5713-E800	S26361-F5713-L800
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5713-E160	S26361-F5713-L160
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5713-E320	S26361-F5713-L320
6.4TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		S26361-F5713-E640	S26361-F5713-L640

max. 28x - depending on base unit & configuration

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Western Digital DC S5530 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-F5715-E480	S26361-F5715-L480
960GB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5715-E960	S26361-F5715-L960
1.92TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5715-E192	S26361-F5715-L192
3.84TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5715-E384	S26361-F5715-L384
7.68TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5715-E768	S26361-F5715-L768
15.36TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		S26361-F5715-E153	S26361-F5715-L153

max. 28x - depending on base unit & configuration

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung SM883 drives							
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. 28x - depending on base unit & configuration

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. 28x - depending on base unit & configuration

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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-F530	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. 28x - depending on base unit & configuration

HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n		S26361-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. 28x - depending on base unit & configuration

HDD SAS 2.5" 10K 512e (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
600GB	10 000	SAS 12Gb/s	512e		S26361-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. 28x - 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. 28x - depending on base unit & configuration

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

max. 28x - depending on base unit & configuration

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

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

max. 28x - depending on base unit & configuration

3.5" (LFF) SAS and SATA SSD

SSD SAS 3.5" Write Intensive (LFF) 2.5" SSD Enterprise with 3.5" 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	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10	S26361-F5709-E400	S26361-F5709-L400
800GB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10	S26361-F5709-E800	S26361-F5709-L800
1.6TB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10	S26361-F5709-E160	S26361-F5709-L160

max. 12x - depending on base unit & configuration

SSD SAS 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray						
based on Western Digital DC S5530 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
400GB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3	S26361-F5712-E400	S26361-F5712-L400
800GB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3	S26361-F5712-E800	S26361-F5712-L800
1.6TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3	S26361-F5712-E160	S26361-F5712-L160
3.2TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3	S26361-F5712-E320	S26361-F5712-L320

max. 12x - depending on base unit & configuration

SSD SAS 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray						
based on Western Digital DC S5530 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
480GB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1	S26361-F5714-E480	S26361-F5714-L480
960GB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1	S26361-F5714-E960	S26361-F5714-L960
1.92TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1	S26361-F5714-E192	S26361-F5714-L192
3.84TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1	S26361-F5714-E384	S26361-F5714-L384
7.68TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1	S26361-F5714-E768	S26361-F5714-L768

max. 12x - depending on base unit & configuration

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SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray							
based on Samsung SM883 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5732-E240	S26361-F5732-L240
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5732-E480	S26361-F5732-L480
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5732-E960	S26361-F5732-L960
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5732-E192	S26361-F5732-L192
3.84TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3.6		S26361-F5589-E384	S26361-F5589-L384

max. 12x - depending on base unit & configuration

SSD SATA 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray							
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	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1.4		S26361-F5700-E240	S26361-F5700-L240
480GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E480	S26361-F5700-L480
960GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E960	S26361-F5700-L960
1.92TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.9		S26361-F5700-E192	S26361-F5700-L192
3.84TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1.0		S26361-F5700-E384	S26361-F5700-L384
7.68TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	0.5		S26361-F5700-E768	S26361-F5700-L768

max. 12x - depending on base unit & configuration

3.5" (LFF) Hard drives

HDD SAS 3.5" 15K (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n			S26361-F5726-E530	S26361-F5726-L530
600GB	15 000	SAS 12Gb/s	512n			S26361-F5726-E560	S26361-F5726-L560
900GB	15 000	SAS 12Gb/s	512n			S26361-F5532-E590	S26361-F5532-L590

max. 12x - depending on base unit & configuration

HDD SAS 3.5" 10K 512n (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
300GB	10 000	SAS 12Gb/s	512n			S26361-F5728-E130	S26361-F5728-L130
600GB	10 000	SAS 12Gb/s	512n			S26361-F5728-E160	S26361-F5728-L160
1.2TB	10 000	SAS 12Gb/s	512n			S26361-F5728-E112	S26361-F5728-L112

max. 12x - depending on base unit & configuration

HDD SAS 3.5" 10K 512e (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
1.8TB	10 000	SAS 12Gb/s	512e			S26361-F5731-E118	S26361-F5731-L118
2.4TB	10 000	SAS 12Gb/s	512e			S26361-F5569-E124	S26361-F5569-L124

max. 12x - depending on base unit & configuration

HDD SAS 3.5" 7.2K 512n (LFF) Enterprise Business critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
1TB	7 200	SAS 12Gb/s	512n			S26361-F5626-E100	S26361-F5626-L100
2TB	7 200	SAS 12Gb/s	512n			S26361-F5626-E200	S26361-F5626-L200
4TB	7 200	SAS 12Gb/s	512n			S26361-F5626-E400	S26361-F5626-L400

max. 12x - depending on base unit & configuration

HDD SAS 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
6TB	7 200	SAS 12Gb/s	512e			S26361-F5635-E600	S26361-F5635-L600
8TB	7 200	SAS 12Gb/s	512e			S26361-F5635-E800	S26361-F5635-L800
12TB	7 200	SAS 12Gb/s	512e			S26361-F5571-E120	S26361-F5571-L120
14TB	7 200	SAS 12Gb/s	512e			S26361-F5571-E140	S26361-F5571-L140
6TB	7 200	SAS 12Gb/s	512e	SED		S26361-F5584-E600	S26361-F5584-L600
8TB	7 200	SAS 12Gb/s	512e	SED		S26361-F5584-E800	S26361-F5584-L800
12TB	7 200	SAS 12Gb/s	512e	SED		S26361-F5624-E120	S26361-F5624-L120
14TB	7 200	SAS 12Gb/s	512e	SED		S26361-F5624-E140	S26361-F5624-L140

max. 12x - depending on base unit & configuration

HDD SATA 3.5" 7.2K 512n (LFF) Enterprise Business Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n			S26361-F5636-E100	S26361-F5636-L100
2TB	7 200	SATA 6Gb/s	512n			S26361-F5636-E200	S26361-F5636-L200
4TB	7 200	SATA 6Gb/s	512n			S26361-F5636-E400	S26361-F5636-L400

max. 12x - depending on base unit & configuration

HDD SATA 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray							
Capacity	RPM	Interface	Sector			order code E-part	order code L-part
6TB	7 200	SATA 6Gb/s	512e			S26361-F5638-E600	S26361-F5638-L600
8TB	7 200	SATA 6Gb/s	512e			S26361-F5638-E800	S26361-F5638-L800
12TB	7 200	SATA 6Gb/s	512e			S26361-F3904-E120	S26361-F3904-L120
14TB	7 200	SATA 6Gb/s	512e			S26361-F3904-E140	S26361-F3904-L140

max. 12x - depending on base unit & configuration

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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-F5707-E240	S26361-F5707-L240

M.2 drive is designed for use as a VMware ESXi boot drive.

2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.

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

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

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

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

M.2 drive is designed for use as a boot drive with the Endurance Spec. above.

2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.

max. 2x per Server; connector located on Motherboard (please see folder "description"). VMware is not supported.

Dual M.2

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

PRAID 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

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. Supported M.2 Modules : SSD SATA M.2 240GB (S26361-F5706-E240/L240 or S26361-F5707-E240/L240

for VMware ESXi) or SSD SATA M.2 480GB (S26361-F5706-E480/L480)

2x M.2 modules (S26361-F5706-E240/L240 or S26361-F5706-E480/L480 or S26361-F5707-E240/L240) need to be ordered separately.

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

Dual microSD

Dual microSD, PRAID 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 (please see folder "description"). VMware ESXi is only supported.

2.5" (SFF) PCIe-SSD

2.5" PCIe-SSDs require a RAID Controller or PCIe retimer card.

RAID Controller : PRAID EP520I/540I/580I

PCIe retimer : PPCI CP x16 retimer

*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. 4x/8x/12x - depending on base unit & configuration

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

based on Intel DC P4610 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	4.1	S26361-F5737-E160	S26361-F5737-L160
3.2TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3.7	S26361-F5737-E320	S26361-F5737-L320
6.4TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3.1	S26361-F5737-E640	S26361-F5737-L640

max. 4x/8x/12x - depending on base unit & configuration

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

based on Intel DC P4600 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3.0	S26361-F5648-E160	S26361-F5648-L160
3.2TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3.1	S26361-F5648-E320	S26361-F5648-L320
6.4TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3.2	S26361-F5648-E640	S26361-F5648-L640

max. 4x/8x/12x - depending on base unit & configuration

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

based on Intel DC P4510 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1.0	S26361-F5738-E100	S26361-F5738-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.7	S26361-F5738-E200	S26361-F5738-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.8	S26361-F5738-E400	S26361-F5738-L400

max. 4x/8x/12x - depending on base unit & configuration

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

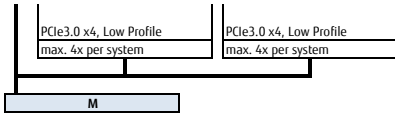
based on Intel DC P4501 drives						
Capacity	Formfactor	Interface	Endurance	DWPD	order code E-part	order code L-part
500GB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.7	S26361-F5649-E50	S26361-F5649-L50
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1.0	S26361-F5649-E100	S26361-F5649-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.6	S26361-F5649-E200	S26361-F5649-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0.6	S26361-F5649-E400	S26361-F5649-L400

max. 4x/8x/12x - depending on base unit & configuration

AIC PCIe-SSD

PCIe-SSD (occupies one PCIe slot)

S26361-F5697-L375	S26361-F5697-L750
S26361-F5697-E375	S26361-F5697-E750
PACC EP P4800X AIC 375GB	PACC EP P4800X AIC 750GB
P4800X series, NVMe	P4800X series, NVMe
30 DWPD	30 DWPD



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Chapter 11 - LAN Components

Default: 2x RJ45 1GbE ports on systemboard

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
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 S	2x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate L	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

Intel QuickAssist Technology Adapters

Intel QuickAssist Technology Adapters

This PCIe x16 adapter card adds QuickAssist technology to systems with Intel C624 LBG-4 chipset implementations, in order to provide feature-parity with Intel C627 LBG-T chipsets. QuickAssist accelerates compression ~65Gb/s, encryption ~100Gb/s, and RSA ~100 Ops/s. The adapter ships without any kind of drivers, end customers are responsible to develop, provide them themselves, or download from Intel as soon as available. The adapter card does not implement any kind of Ethernet network functionality, except that it accelerates Ethernet traffic from either DynamicLoM or Intel Ethernet adapter cards.

PACC EP QAT8970 with Full Height bracket	2x	Intel QuickAssist Technology Adapter 8970 PCIe x16	S26361-F4062-E100	S26361-F4062-L500
PACC EP QAT8970 with Low Profile bracket	2x	Intel QuickAssist Technology Adapter 8970 PCIe x16	S26361-F4062-E200	

Submitting a formal Release Request in order to activate shipment may apply for the time being to confirm with requestor: ships without drivers.

max. 2 adapters per system

1Gb Ethernet network components

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

Dual speed support, auto-sense: supports 1Gbps and 100Mbps line rate per-port.

PLAN CP 2x1Gbit Cu Intel I350-T2	4x	2 port, Intel	S26361-F4610-E2	S26361-F4610-L502
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	4x		S26361-F4610-E202	
PLAN CP 4x1Gbit Cu Intel I350-T4	4x	4 port, Intel	S26361-F4610-E4	S26361-F4610-L504
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	4x		S26361-F4610-E204	

max. 4 adapters per system

10Gb Ethernet network components

10GBASE-T

10Gb Ethernet network adapters with RJ45 interface (10GBASE-T)

Dual speed support, auto-sense: supports 10Gbps and 1Gbps line rate per-port.

Only Marvell FastLinQ® adapters provide RDMA capabilities, both iWARP and RoCE. Intel adapter don't.

PLAN EP QL41112 2x10GBASE-T	4x	2 port NIC with Universal RDMA,	S26361-F4068-E2	S26361-F4068-L502
PLAN EP QL41112 2x10GBASE-T LP	4x	Marvell FastLinQ® QL41112HLRJ	S26361-F4068-E202	
PLAN EP QL41134 4x10GBASE-T	4x	4 port NIC with Universal RDMA,	S26361-F4068-E4	S26361-F4068-L504

PLAN EP QL41134 4x10GBASE-T LP	4x	Marvell FastLinQ® QL41134HLRJ	S26361-F4068-E204	
PLAN EP X550-T2 2x10GBASE-T	4x	2 port NIC,	S26361-F3948-E2	S26361-F3948-L502
PLAN EP X550-T2 2x10GBASE-T LP	4x	Intel X550-T2	S26361-F3948-E202	
PLAN EP X710-T4 4x10GBASE-T	4x	4 port NIC,	S26361-F3948-E4	S26361-F3948-L504
PLAN EP X710-T4 4x10GBASE-T LP	4x	Intel X710-T4	S26361-F3948-E204	

max. 8x adapters per system

10G SFP+

10Gb 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 Marvell FastLinQ® adapters provide RDMA capabilities, both iWARP and RoCE. Intel adapters don't.				
For Converged Network Adapter features such as FCoE, iSCSI, iSCSI Offload please select the PCNA EP QL41262. Other adapters do not support CNA features.				
PLAN EP QL41132 2x10Gb SFP+	4x	2 port NIC with Universal RDMA,	S26361-F4069-E2	S26361-F4069-L502
PLAN EP QL41132 2x10Gb SFP+ LP	4x	Marvell FastLinQ® QL41132HLCU	S26361-F4069-E202	
PLAN EP QL41134 4x10Gb SFP+	4x	4 port NIC with Universal RDMA,	S26361-F4069-E4	S26361-F4069-L504
PLAN EP QL41134 4x10Gb SFP+ LP	4x	Marvell FastLinQ® QL41134HLCU	S26361-F4069-E204	
PLAN EP X710-DA2 2x10Gb SFP+	4x	2 port NIC,	S26361-F3640-E2	S26361-F3640-L502
PLAN EP X710-DA2 2x10Gb SFP+ LP	4x	Intel X710-DA2	S26361-F3640-E202	
PLAN EP X710-DA4 4x10Gb SFP+	4x	4 port NIC,	S26361-F3640-E4	S26361-F3640-L504
PLAN EP X710-DA4 4x10Gb SFP+ LP	4x	Intel X710-DA4	S26361-F3640-E204	
PCNA EP QL41262 2x10/25Gb SFP+/SFP28	4x	2 port CNA with Universal RDMA, iSCSI Offload, FCoE. Marvell FastLinQ®	S26361-F4070-E2	S26361-F4070-L502
PCNA EP QL41262 2x10/25Gb SFP+/SFP28 LP	4x	QL41262HLCU	S26361-F4070-E202	
Optional, 10Gb SFP+ optical transceiver module, one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	1x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Finisar	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	1x .. 4x	LC, SMF / LR SFP+ module, up to 10km, Finisar	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate S	1x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate L	1x .. 4x	LC, SMF / LR SFP+ module, up to 10km, Intel	S26361-F3986-E6	S26361-F3986-L6
"Virtual Connector" for Twinax cables	1x .. 4x	Enablement for System Architect	V:TWX CONNECTOR-PY	
SFP+ active Twinax Cable Fujitsu	1x .. 4x	Customized length. Best fitting length	S26361-F3989-E600	see table at the bottom of this page
SFP+ active Twinax Cable Brocade	1x .. 4x	selected at rack factory installation.	S26361-F3873-E500	
<i>Max. 4x SFP+, DAC, or Twinax Cable (DynamicLoM, QL41114, X710-DA4) per adapter, or max. 2x SFP+, DAC, or Twinax Cable (Dynamic LoM, QL4112, X710-DA2) per adapter</i>				
max. 8x adapters per system				

25/10Gb Ethernet network components

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	6x	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	6x	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	6x	Intel XXV710-DA2	S26361-F4055-E202	
PCNA EP QL41262 25Gb 2p SFP28 FH	4x	2 port CNA with Universal RDMA, iSCSI Offload, FCoE. Marvell FastLinQ®	S26361-F4070-E2	S26361-F4070-L502
PCNA EP QL41262 25Gb 2p SFP28 LP	6x	QL41262HLCU	S26361-F4070-E202	
Optional, 25Gb SFP28 optical transceiver module, one per cage				
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	1x .. 2x	MMF / SR SFP28 module, Mellanox. Max reach supported 100m	S26361-F4054-E701	S26361-F4054-L701
SFP28 Optical Transceiver 25G SR E25GSFP28SR	1x .. 2x	MMF / SR SFP28 module, Intel. Max reach supported 100m	S26361-F4055-E701	S26361-F4055-L701
"Virtual Connector" for DAC/AOC cables	1x .. 2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-25	

25G DAC - Cisco	1x .. 2x	DAC are not in Fujitsu's portfolio yet. Thus, purchase from switch vendors.	
25G DAC - Mellanox	1x .. 2x		
25G AOC - Cisco	1x .. 2x		
25G AOC - Mellanox	1x .. 2x		
<i>max. 2x SFP28 or DAC/AOC Cable per adapter</i>			
Optional Cisco Ethernet Direct Attach Copper Cables (DACs) - not introduced by Fujitsu; available for purchase at Cisco			
Cisco DAC Splitter Cable 100G to 4X25G, 1m	1x	Cisco 100GBase QSFP to 4xSFP25G Passive, 1m	Cisco P/N: QSFP-4SFP25G-CU1M
Cisco DAC Splitter Cable 100G to 4X25G, 2m	1x	Cisco 100GBase QSFP to 4xSFP25G Passive, 2m	Cisco P/N: QSFP-4SFP25G-CU2M
Cisco DAC Splitter Cable 100G to 4X25G, 3m	1x	Cisco 100GBase QSFP to 4xSFP25G Passive, 3m	Cisco P/N: QSFP-4SFP25G-CU3M
<i>One Cisco DAC Splitter cable connects up to 4 25G ports, i.e. 2x PLAN EP QL45212 cards to a single Cisco 100G Switch Port.</i>			
Optional 10Gb SFP+ Optical Transceivers with LC Connector, or Active or Passive Twinax Cables SFP+			
SFP+ Optical Transceiver 10G Single Rate SR	2x	LC, MMF / SR SFP+ module, up to 400m	S26361-F3986-E3 S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	LC, SMF / LR SFP+ module, up to 10km	S26361-F3986-E4 S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate S	1x .. 4x	LC, MMF / SR SFP+ module, up to 400m, Intel	S26361-F3986-E5 S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate L	1x .. 4x	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
Amphenol Active Twinax Cable SFP+ for 10G	2x	Amphenol 10G Active Twinax Cable, 2m	S26361-F3989-E600 Customized Cable Length
Amphenol Active Twinax Cable SFP+ for 10G	2x	Amphenol 10G Active Twinax Cable, 5m	
Amphenol Active Twinax Cable SFP+ for 10G	2x	Amphenol 10G Active Twinax Cable, 10m	
Brocade Active Twinax Cable SFP+ for 10G, 1	2x	Brocade 10G Active Twinax Cable, 1m	S26361-F3873-E500 Customized Cable Length
Brocade Active Twinax Cable SFP+ for 10G, 3	2x	Brocade 10G Active Twinax Cable, 3m	
Brocade Active Twinax Cable SFP+ for 10G, 5	2x	Brocade 10G Active Twinax Cable, 5m	
Cisco Passive Twinax Cable SFP+ for 10G, 1m	2x	Cisco 10G Passive Twinax Cable, 1m	Cisco P/N for: S26361-F4571-L101
Cisco Passive Twinax Cable SFP+ for 10G, 3m	2x	Cisco 10G Passive Twinax Cable, 3m	Cisco P/N for: S26361-F4571-L103
Cisco Passive Twinax Cable SFP+ for 10G, 5m	2x	Cisco 10G Passive Twinax Cable, 5m	Cisco P/N for: S26361-F4571-L105
Cisco Active Twinax Cable SFP+ for 10G, 7m	2x	Cisco 10G Active Twinax Cable, 7m	Cisco P/N for: S26361-F4571-L107
Cisco Active Twinax Cable SFP+ for 10G, 10m	2x	Cisco 10G Active Twinax Cable, 10m	Cisco P/N for: S26361-F4571-L110
<i>Max. 2x SFP+ or Twinax Cable per controller. Customized Cable Length means: best fitting cable length is defined during rack installation at the factory.</i>			
<i>max. 8x adapters per system</i>			

40/10Gb Ethernet network components

40Gb Ethernet controller with QSFP cage (requires DAC, AOC cables or optical transceiver QSFP modules)			
Supports 40Gbps line rate per-port			
PLAN EP MCX4-EN 40Gb 2p QSFP FH	4x	Dual Port NIC, RoCE RDMA, Mellanox ConnectX4-EN	S26361-F4053-E2
PLAN EP MCX4-EN 40Gb 2p QSFP LP	4x		S26361-F4053-E202
Optional, 40Gb QSFP Optical Transceiver module			
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	2x	Enablement for System Architect	V:DAC/AOC-CONNECTOR-40
40G DAC - Cisco	2x	DAC are not in Fujitsu's portfolio yet. Thus, purchase from switch vendors.	
40G DAC - Mellanox	2x		
40G AOC - Cisco	2x		
40G AOC - Mellanox	2x		
<i>rmax. 2x QSFP or DAC, AOC per PLAN EP MCX4-EN 40Gb 2p QSFP</i>			
<i>max. 8x adapters per system</i>			

100Gb Ethernet network components

100Gb Ethernet controller with 1x QSFP28 cage (requires twinax cables or optical transceiver QSFP28 modules)			
Each cage consumes 1x 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.			
Supports 100Gbps line rate			
PLAN EP QL45611 100Gb 1p QSFP28 FH	4x	Single Port NIC, RoCE RDMA, Marvell FastLinQ® QL45611HLCU	S26361-F4057-E1
PLAN EP QL45611 100Gb 1p QSFP28 LP	6x		S26361-F4057-E201
S26361-F4057-L501			

PLAN EP MCX4-EN 100Gb 1p QSFP28 FH	4x	Single Port NIC, RoCE RDMA, Mellanox ConnectX4-EN	S26361-F4052-E1	S26361-F4052-L501
PLAN EP MCX4-EN 100Gb 1p QSFP28 LP	6x		S26361-F4052-E201	
Optional, 100Gb QSFP28 Optical Transceiver module				
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, purchase from switch vendors.		
100G DAC - Mellanox	1x	DAC are not in Fujitsu's portfolio yet. Thus, purchase from switch vendors.		
100G AOC - Cisco	1x	AOC are not in Fujitsu's portfolio yet. Thus, purchase from switch vendors.		
100G AOC - Mellanox	1x	AOC are not in Fujitsu's portfolio yet. Thus, purchase from switch vendors.		
<i>Max. 1x QSFP28 or DAC/AOC Cable per adapter</i>				
max. 8x adapters per system				

Q

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Network cables for later upgrade

Fujitsu active SFP+ Twinax 10Gb cable

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

Brocade active SFP+ Twinax 10Gb cable

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

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Chapter 12 - Fibre Channel Controller

K

32Gb Fibre Channel 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	7x	1 port, full height, Broadcom Emulex®	S26361-F4044-E1	S26361-F4044-L501
PFC EP LPe32000 1x 32Gb LP	7x	1 port, low profile, Broadcom Emulex®	S26361-F4044-E201	
PFC EP LPe32002 2x 32Gb	7x	2 port, full height, Broadcom Emulex®	S26361-F4044-E2	S26361-F4044-L502
PFC EP LPe32002 2x 32Gb LP	7x	2 port, low profile, Broadcom Emulex®	S26361-F4044-E202	
PFC EP QLE2740 1x 32Gb	7x	1 port, full height, Marvell Qlogic®	S26361-F4043-E1	S26361-F4043-L501
PFC EP QLE2740 1x 32Gb LP	7x	1 port, low profile, Marvell Qlogic®	S26361-F4043-E201	
PFC EP QLE2742 2x 32Gb	7x	2 port, full height, Marvell Qlogic®	S26361-F4043-E2	S26361-F4043-L502
PFC EP QLE2742 2x 32Gb LP	7x	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	7x	1 port, full height, Broadcom Emulex®	S26361-F5596-E1	S26361-F5596-L501
PFC EP LPe31000 1x 16Gb LP	7x	1 port, low profile, Broadcom Emulex®	S26361-F5596-E201	
PFC EP LPe31002 2x 16Gb	7x	2 port, full height, Broadcom Emulex®	S26361-F5596-E2	S26361-F5596-L502
PFC EP LPe31002 2x 16Gb LP	7x	2 port, low profile, Broadcom Emulex®	S26361-F5596-E202	
PFC EP QLE2690 1x 16Gb	7x	1 port, full height, Marvell Qlogic®	S26361-F5580-E1	S26361-F5580-L501
PFC EP QLE2690 1x 16Gb LP	7x	1 port, low profile, Marvell Qlogic®	S26361-F5580-E201	
PFC EP QLE2692 2x 16Gb	7x	2 port, full height, Marvell Qlogic®	S26361-F5580-E2	S26361-F5580-L502
PFC EP QLE2692 2x 16Gb LP	7x	2 port, low profile, Marvell Qlogic®	S26361-F5580-E202	

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

Chapter 13 - Infiniband Controllers

Max. 2x Omni Path Card per System
(configuration of different
Controllers NOT supported)

Max. 2x IB Controller per System
(configuration of different Controllers
NOT supported)

S26361-F5717-E102/E202
IB HCA 100Gb 1 / 2channel EDR
100Gbit 1 / 2channel Infiniband Controller EDR technology (8.0GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen3 x16 low profile Card, 170mm
max. 2x per system

S26361-F5724-E102/E202
IB HCA 100Gb 1 / 2channel HDR
100Gbit 1 / 2channel Infiniband Controller HDR technology (8.0GT/s)
1x / 2x Q-SFP+ connector
PCIe Gen3 x16 low profile Card, 170mm
max. 2x per system

S26361-F5562-E10
POP EP 100Gb 1 Channel
100Gbit 1 channel Omni Path HFI Card (8.0GT/s)
1x Q-SFP+ connector
PCIe Gen3 x16 low profile Card, 170mm
max. 2x per system

S26361-F5549-E561/-E563
IB Cu Cable 100Gb
QSFP, 1 or 3m
max. 1/ 2x per Controller

S26361-F5748-E571
IB Cu Y-Cable 100Gb (To HDR SW)
QSFP, 1 m
max. 1/ 2x per Controller

S26361-F5563-E150/-E200/-E300
Omni Passive Cable 100Gb
QSFP, 1.5m or 2m or 3m
max. 1 per Controller

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

The following card can not be mixed with Infiniband card(S26361-F5562-E10)
S26361-F4054-E302/S26361-F4052-E201/S26361-F4052-E1/S26361-F4053-E2/S26361-F4053-E202

Network Components, Controller and cables for later upgrade

100Gbit/s 1ch Infiniband Controller	S26361-F5717-L102
100Gbit/s 2ch Infiniband Controller	S26361-F5717-L202
QSFP, IB 100Gb, 1m	S26361-F5549-L561
QSFP, IB 100Gb, 3m	S26361-F5549-L563

Omni Path	
100Gbit/s 1ch Omni Path HFI Card	S26361-F5562-L10
QSFP, Omni 100Gb, 1.5m	S26361-F5563-L150
QSFP, Omni 100Gb, 2m	S26361-F5563-L200
QSFP, Omni 100Gb, 3m	S26361-F5563-L300

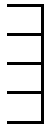
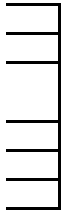
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Chapter 14 - Power supply unit, power cable, certifications, region kits

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Power supply unit

modular redundant Power Supply

2nd PSU for redundancy

occupies hot plug PSU slot, min. 1 / max. 2x per system

input nominal voltage (AC): 100V-240V, max: 90V-264V; input dropout 10ms/100% load, 47Hz-63Hz

450W platinum PSU	94% eff.		S26113-F575-E13	S26113-F575-L13
800W platinum PSU	94% eff.		S26113-F574-E13	S26113-F574-L13
800W titanium PSU	96% eff.	nom. 220-240V, max. 180-264V	S26113-F615-E10	S26113-F615-L10
1200W platinum PSU	94% eff.	100V: 1000W, 90V: 900W	S26113-F616-E10	S26113-F616-L10

DC PSU

800W PSU DC	92% eff.	48V DC, powercord see below	S26113-F624-E10	S26113-F624-L10
1300W PSU HVDC	94% eff.	380V DC as soon as available , powercord: PRIMERGY-PM	S26113-F626-E10	S26113-F626-L10

Dummy module instead PSU

Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped, max. 1x per system			S26113-F574-E99	
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Power cord option for Rack Server, 1x per PSU

Cable powercord rack, 1.8m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E180	T26139-Y1968-L180
Cable powercord rack, 2.5m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E250	T26139-Y1968-L250
Cable powercord rack, 4m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E100	T26139-Y1968-L10
Cable powercord (USA) 15A, 1.8m, black, NEMA 5-15 connector 498G -> C13 (plug), 15A, , rack or wall	T26139-Y1741-E90	T26139-Y1741-L90
Cable powercord (Taiwan), 1.8m, rack or wall	T26139-Y1757-E10	T26139-Y1757-L10
Cable powercord -48V DC, 3m, black	T26139-Y4024-E10	T26139-Y4024-L10
Cable powercord (D, A, B, F, NL, FIN, N, S, E, P, RUS, TR), 1.8m, grey		T26139-Y1740-L10
Cable powercord (UK, IR), 1.8m, grey		T26139-Y1744-L10
Cable powercord (I), 1.8m, grey		T26139-Y1745-L10
Cable powercord (DK), 1.8m, grey		T26139-Y1746-L10
Cable powercord (ISR), 2.5m, black		T26139-Y1747-L10
no power cord	T26139-Y3850-E10	

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	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	-	(Sales region for EMEA or
Region Kit China for CCC systems , Contains warranty sheet and safety instructions for China, need to be included always into the order from China country	S26361-F1452-E101	-	(Sales region for APAC onl
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 APAC onl

Certifications, Made in Germany Sticker, optional 1x per system

	build-in order code	loose delivery order code
Certification for China, (CCC), Reduced component selection possible, only with no power cord option	S26361-F3301-E120	-
Certification for India, (BIS), Reduced component selection possible, only with no power	S26361-F3301-E123	-

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Chapter 16 - others (ErP Lot 9 restriction)

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*Region kit Europe must be order for shipment to ship in EU and EFTA countries to apply ErP Lot9 restriction

Region Kits, 1x per System	
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 Kits, 1x per System	
Region Kit Europe*, Contains warranty sheet and safety instructions in German, English, French, Spanish, Italian, Polish, Russian and Welsh language	S26361-F1452-E140

ErP Lot9 Restriction for 1/2 CPU configuration, 1x per System	
ErP Lot 9 configuration for min 1 DIMM	S26361-F3776-E121

ErP Lot9 Restriction for 1/2 CPU configuration, 1x per System	
ErP Lot 9 configuration with min 4 DIMM	S26361-F3776-E122

ErP Lot9 Restriction for 2 CPU configuration, 1x per System	
ErP Lot 9 configuration for 2 CPUs with min 6 DIMM	S26361-F3776-E123

Restriction for ErP Lot 9 directive,
Not allowed are : (for 1CPU/2CPU variant)

- CPU Xeon Bronze 3204 / 3206R
- CPU Xeon Silver 4215R
- CPU Xeon Gold 5222, 6250, 6256
- 8 GB RAM Modules
- more than 9x 2.5"/3.5" HDD/SSD/PCIe SSD (max 8 is ok)
- more than 5x PCIe cards (max 4 is ok)

Restriction for ErP Lot 9 directive,
Not allowed are : (for 1CPU/2PCU variant)

- CPU Xeon Bronze 3204 / 3206R
- less than 4 RAM Modules (min 4 required)

No HDD/SSD qty restricted
No PCIe qty restricted

Restriction for ErP Lot 9 directive,
Not allowed are : (for 2CPUs variant only)

- less than 6 RAM Modules (min 6 required)

No CPU/DIMM type excluded
No HDD/SSD qty restricted
No PCIe qty restricted

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Chapter 16 - others

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

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

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

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

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

S26361-F3776-E445
Cool-safe [®] Advanced Thermal design 45°C
enables the PRIMERGY Server to cope with temperatures from 5-45° in operating mode due to extended Fan settings
this setting can be activated ex factory only
max. 1x per system

S26361-F3552-E100
S26361-F3552-L100
TPM 2.0 Module SPI
max. 1x per system

S26361-F3552-E101
TPM 1.2 Module SPI
max. 1x per system

S26361-F3120-E50
S26361-F3120-L50
Serial Port Option
RS-232-C
for a RS-232-C Serial Port Interface
does NOT occupy PCI slot
max. 1x per system

Your Server is ready

Accessories

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

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

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

External Ultra Slim Portable DVD Writer (Hitachi-LG)	S26341-F103-L142
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End PRIMERGY RX2540 M5

Date of change [dd.mm.yyyy]	Folder / order code / description	Name	What has been changed / comment
26.03.2020	PSU	Atsushi Iwata	added region kit China
24.03.2020	others Base	Tomokazu Tsuchiya	M4Y removed Added comment for S26361-K1655-V238
10.03.2020	ErP Lot9	Atsushi Iwata	updated ErP Lot9 restriction
04.03.2020	ErP Lot9	Atsushi Iwata	added ErP Lot9 restriction in new sheet ErP Lot9
18.02.2020	LAN_FC_IB	Takaoka Masanori	Change the cable S26361-F5549-E561/-E563 -> S26361-F5748-E571
14.02.2020	GFX_FPGA	Takayuki Sasaki	Modify GFX canrd - Options in "GFX_FPGA" tab. - Revise some wrong FTS order codes.
03.02.2020	CPU	Klaus-Dieter Ruf	Added Cascade Lake-SP Refresh SKUs
28.01.2020	HD_SSD / Dual M.2	Tatsuya Sudou	added 480GB as supported M.2 Modules
11.12.2019	HD cage	Robert Brunnbauer	added V238
06.12.2019	HD_SSD	Yuichi Sugiyama	updated the description about Hard Disk Sector Format Informa
08.11.2019	PSU / T26139-Y1748-L10 / removed	Y.Narita	Removed Cable powercord (AUS/NZ), 1.8m, grey
07.11.2019	S26391-F6048-L464	Y.Narita	New USB memory stick accessory device 64GB. No longe 32GB.
04.11.2019	PSU / T26139-Y4024-E10 / L10	J.Linne	length of -48V DC PSU cable changed to 3m length
30.10.2019	RAM	Klaus-Dieter Ruf	DCPMM section updated
27.09.2019	GFX_FPGA	Takayuki Sasaki	Modify GFX canrd - Options in "GFX_FPGA" tab. - add some condition for NVIDIA GRID SW and add item:
19.09.2019	CPU	Klaus-Dieter Ruf	Added Xeon Gold 5218B SKU
11.09.2019	GFX_FPGA	Takayuki Sasaki	Modify GFX canrd - Options in "GFX_FPGA" tab. - add some condition for Tesla T4 and support max,
09.09.2019	CPU	Klaus-Dieter Ruf	T-SKUs added for DTAG project
05.09.2019	LAN	Ulrich Lösch	Typo: PLAN EP QL41262 --> PCNA EP QL41262
13.08.2019	RAM	Klaus-Dieter Ruf	DCPMM configuration possibilities update
26.07.2019	HDD_SSD / S26361-F5571/F5624/F3904-E140/L140 /	Yuichi Sugiyama	removed the description as "as soon as available"
26.07.2019	HDD_SSD / S26361-F5738-* / updated	Yuichi Sugiyama	removed the description as "as soon as available"
17.07.2019	LAN	Ulrich Lösch	S26361-F4053-E703, -L703 Transceiver 40G added
05.07.2019	GFX_FPGA	Takayuki Sasaki	Modify GFX canrd - Options in "GFX_FPGA" tab. - add some condition for Tesla T4 /RTX4000/ RTX6000 a cable information.
02.07.2019	HDD_SSD / S26361-F5738-* / added	Yuichi Sugiyama	added PCIe-SSD 2.5" Read-Intensive
02.07.2019	HDD_SSD / S26361-F5571/F5624/F3904-E140/L140 /	Yuichi Sugiyama	added HDD SAS/SATA 3.5" 7.2K 512e 14TB
26.06.2019	LAN_FC_IB	Takaoka Masanori	Add ConnectX6(Infiniband card)
03.06.2019	Graphics	Robert Brunnbauer	Front VGA not -V112, V116, V238, V824, V428 or -V424
07.05.2019	CPU	Klaus-Dieter Ruf	Added missing Xeon Gold 6246 SKU
03.04.2019	RAM	Klaus-Dieter Ruf	DCPMM configuration possibilities update
24.04.2019	HDD_SSD / S26361-F5732/F5733-*	Yuichi Sugiyama	Removed the description as "or SM863a"
24.04.2019	HDD_SSD / S26361-F5737-*	Yuichi Sugiyama	Removed the description as "as soon as available"
03.04.2019	RAM	Klaus-Dieter Ruf	Rank sparing mode table updated
29.03.2019	base	Robert Brunnbauer	Update limitations for different base units
28.03.2019	LAN	Ulrich Lösch	Typo, where appropriate: 2 port NIC --> 4 port NIC
28.03.2019	LAN	Ulrich Lösch	Typo: QL41132 2X10G --> QL41112 2X10G
19.03.2019	RAID	Sven Pilz	CP403i added
12.03.2019	RAM	Sven Pilz	edited grey section at top, corrected 2048 --> 1920 capa
11.03.2019	RAM	Klaus-Dieter Ruf	Updated modes within released DCPMM configurations
07.03.2019	RAID	Johannes Linne	max # of RAID controllers for -V884 = 4 mix of EP5x0i with EP4x0i or PRAID CP400 not allowed added PRAID EP540/80i NVMe for -V884
06.03.2019	RAM	Klaus-Dieter Ruf	Added Memory Packages for easy AEP configuration
01.03.2019	HDD_SSD / S26361-F5737-E160* / added	Yuichi Sugiyama	added
25.02.2019	RAM	Klaus-Dieter Ruf	AEP configuration update including stepwise approach
22.02.2019	LAN	Ulrich Lösch	Cosmetic Cavium/Logic to: Marvell FastLinQ®
22.02.2019	FC	Ulrich Lösch	Cosmetic Cavium/Logic to: Marvell Qlogic®
22.02.2019	FC	Ulrich Lösch	Cosmetic Broadcom/Emulex to: Broadcom Emulex®
19.02.2019	CPU	M.Pentney-Schmidt	changed TDP on 4214Y
15.02.2019	LAN_FC_IB	Takaoka Masanori	update EDR card parts number
12.02.2019	HDD_SSD / S26361-F3907-* / added the exclusion	Yuichi Sugiyama	added the exclusion for HDD SATA 2.5" 7.2K 512e and PRAID EP
08.02.2019	LAN_FC_IB	Takaoka Masanori	removed FDR card and change EDR card parts number
04.02.2019	RAID	Johannes Linne	removed PRAID EP420e as PRAID EP540e is available
04.02.2019	HDD_SSD	Yuichi Sugiyama	removed the description as "as soon as available" because of
04.02.2019	HDD_SSD	Yuichi Sugiyama	added the description about Supplier / ModelName of SSD

01.02.2019	GFX_FPGA	Takayuki Sasaki	Add a comment about "Temperature Limitation" in "GFX_FPGA" tab.
10.01.2019	HDD_SSD / S26361-F5571/F5624/F3904-E140/L140 /	Yuichi Sugiyama	removed HDD SAS/SATA 3.5" 7.2K 512e 14TB
18.12.2018	RAM	M.Pentney-Schmidt	LRDIMM 3DS removed; minor update on description
13.12.2018	GFX_FPGA	Takayuki Sasaki	Add and modify NVIDIA Tesla T4
12.12.2018	CPU	M.Pentney-Schmidt	Xeon Gold 5222S changed to Xeon Gold 5220S
04.12.2018	CPU	M.Pentney-Schmidt	Updated
04.12.2018	RAM	M.Pentney-Schmidt	DDR4 rg 2666 xRx4 removed
03.12.2018	HDD_SSD / S26361-F5734/F5735-* / removed	Yuichi Sugiyama	removed
28.11.2018	CPU	M. Pentney-Schmidt	Further update of CPU page
27.11.2018	CPU	M. Pentney-Schmidt	CPU page updated
22.11.2018	S26361-F2495-E824	Robert Brunnbauer	AFA Upgrade Kit added
20.11.2018		Robert Brunnbauer	Update base unit V238
19.11.2018	HDD_SSD / S26361-F5735-* / add the order codes	Yuichi Sugiyama	add the order codes for PCIe-SSD 2.5" Read Intensive
19.11.2018	HDD_SSD / S26361-F5734-* / add the order codes	Yuichi Sugiyama	add the order codes for PCIe-SSD 2.5" Mixed Use
19.11.2018	HDD_SSD / S26361-F5571/F5624/F3904-E140/L140 /	Yuichi Sugiyama	add the order codes for HDD SAS/SATA 3.5" 14TB
19.11.2018	HDD_SSD / HDD SAS 3.5" 10K 512e / changed order	Yuichi Sugiyama	changed from F5569-* to F5731-* w/o 2.4TB for WS2019SDDC-/
19.11.2018	HDD_SSD / HDD SAS 3.5" 10K 512n / changed order	Yuichi Sugiyama	changed from F5568-* to F5728-* for WS2019SDDC-AQ cert
19.11.2018	HDD_SSD / HDD SAS 3.5" 15K / changed order codes	Yuichi Sugiyama	changed from F5532-* to F5726-* w/o 900GB for WS2019SDDC-
19.11.2018	HDD_SSD / SSD SATA 3.5" Mixed Use / changed order	Yuichi Sugiyama	changed from F5673/F5589-* to F5732-* w/o 3.84TB for
19.11.2018	HDD_SSD / HDD SAS 2.5" 10K 512e / changed order	Yuichi Sugiyama	changed from F5543-* to F5730-* w/o 2.4TB for WS2019SDDC-/
19.11.2018	HDD_SSD / HDD SAS 2.5" 10K 512n / changed order	Yuichi Sugiyama	changed from F5550-* to F5729-* for WS2019SDDC-AQ cert
19.11.2018	HDD_SSD / HDD SAS 2.5" 15K / changed order codes	Yuichi Sugiyama	changed from F5531-* to F5727-* w/o 900GB for WS2019SDDC-
19.11.2018	HDD_SSD / SSD SATA 2.5" Mixed Use / changed order	Yuichi Sugiyama	changed from F5675/F5588-* to F5733-* w/o 3.84TB for
16.11.2018		Robert Brunnbauer	Update limitations for different base units
29.10.2018	HD_SSD / S26361-F5635/F5638/F5584-E800/L800	Yuichi Sugiyama	added
22.10.2018	GFX	Takayuki Sasaki	Add and modify NVIDIA GRID license SKU.
04.10.2018		Robert Brunnbauer	Update AFA bu
20.09.2018	RAID folder	J.Linne	changed # of RAID controllers for -V216 and -V238, see comments in orange, folder RAID
26.09.2018	HD_SSD / S26361-F5650-*	Yuichi Sugiyama	removed PACC EP P4600 AIC 2/4TB
26.09.2018	HD_SSD / PCIe-SSD 2.5" Mixed Use	Yuichi Sugiyama	added PCIe SSD 2.5" MU 1.6/3.2/6.4TB
26.09.2018	HD_SSD / PCIe-SSD Low Power 2.5" Read-Int.	Yuichi Sugiyama	added PCIe SSD 2.5" RI 960GB/1.92TB/3.85TB
26.09.2018	HD_SSD / S26361-F5694/F5692-*	Yuichi Sugiyama	removed SSD SATA MU S4600
26.09.2018	HD_SSD / S26361-F5588/F5589-E384/L384	Yuichi Sugiyama	added SSD SATA MU 3.84TB
20.09.2018	RAID folder	J.Linne	changed # of RAID controllers for tripple -v238
18.09.2018	GFX_FPGA	Takayuki Sasaki	Modify Graphic Card - Options in "GFX" tab. - add "DP- DVI/D" adapter
12.09.2018	RAM	M. Pentney-Schmidt	Further update of Memory page
28.08.2018	S26113-F624-E10	J.Linne	update efficiency -48V DC PSU 92%
21.08.2018	HD_SSD	Yuichi Sugiyama	Updated
21.08.2018	HD_SSD	Yuichi Sugiyama	Updated
02.08.2018	HD_SSD	Yuichi Sugiyama	Updated
01.08.2018	GFX_FPGA	Takayuki Sasaki	Modify GFX canrd - Options in "GFX_FPGA" tab.
04.07.2018	RAID	Linne, Johannes	Updated : 4x EP540e changed max # of external HBA, RAID generally to 4
22.05.2018	RAID	Linne, Johannes	Updated according to RX2540 M4
11.05.2018	RAID, PSU	Linne, Johannes	Updated
07.05.2018	LAN	Ulrich Lösch	Typo QL41112 --> QL41132, QL41114 --> QL41134
26.04.2018	HD_SSD	Sudou, Tatsuya	Updated
05.04.2018	FC - First Draft reviewed	Ulrich Lösch	No change
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Deleted: PLAN EP QL45212 2x25Gb
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PCNA EP QL41262 2x10/25Gb
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Deleted: PCNA EP OCe14102 2x10Gb
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PLAN EP QL41114 4x10Gb SFP+
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PLAN EP QL41112 2x10GbSFP+
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Deleted: PLAN EP OCe14102 2x10Gb
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PLAN EP X710-T4 4x10GBASE-T
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PLAN EP QL41114 4x10GBASE-T
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Added: PLAN EP QL41112 2x10GBASE-T
05.04.2018	LAN - Corrections on first draft	Ulrich Lösch	Deleted: PLAN EP OCe14102 2x 10GBase-T
04.04.2018		Robert Brunnbauer	First Draft

