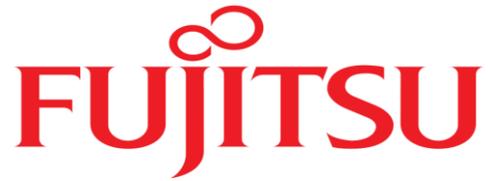


PRIMERGY RX2540 M6
2U Rack Server



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1		describes base unit of RX2540 M6
2	Base	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	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 Components
12	LAN_FC_IB	Fibre Channel Controller
13		Infiniband Controller
14	PSU	Power supply units, power cables, country specific opt.
15	USB devices	Keyboards, Mice, USB devices
16	Energy Star	Energy Star limitation
17	Erp Lot9	Erp Lot9 limitation
18	Thermal Rule	Thermal Rule
19	others	System Management, ATD, CTD, RS232 port, TPM module

Instructions

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

In any case we recommend to use the WebArchitect 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 WebArchitect.

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, ...)

Conventional order code

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

New order code

PYBVAP05
PY-VAP05
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
Not for 12x3.5", 24x2.5", 64xEDSFF base unit.
max. 1x per system

<-- "PYB" order code (bold) for BTO(Built to Order) part
 <-- "PY-" order code (bold) for Loose delivery part
 <-- "name" of this part
 <--description of this part, in same cases as well description of content

 <-- Limitation for this part
 <--indicates how many this part can be configured in the related Server

For further information see:

Link to datasheet:

<https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-py-rx2540-m6.pdf>

<https://www.fujitsu.com/fts/products/computing/servers/primergy/index.h>

(internet)

<https://extranet.ts.fujitsu.com/com/tools/configure/server/Pages/default.aspx>

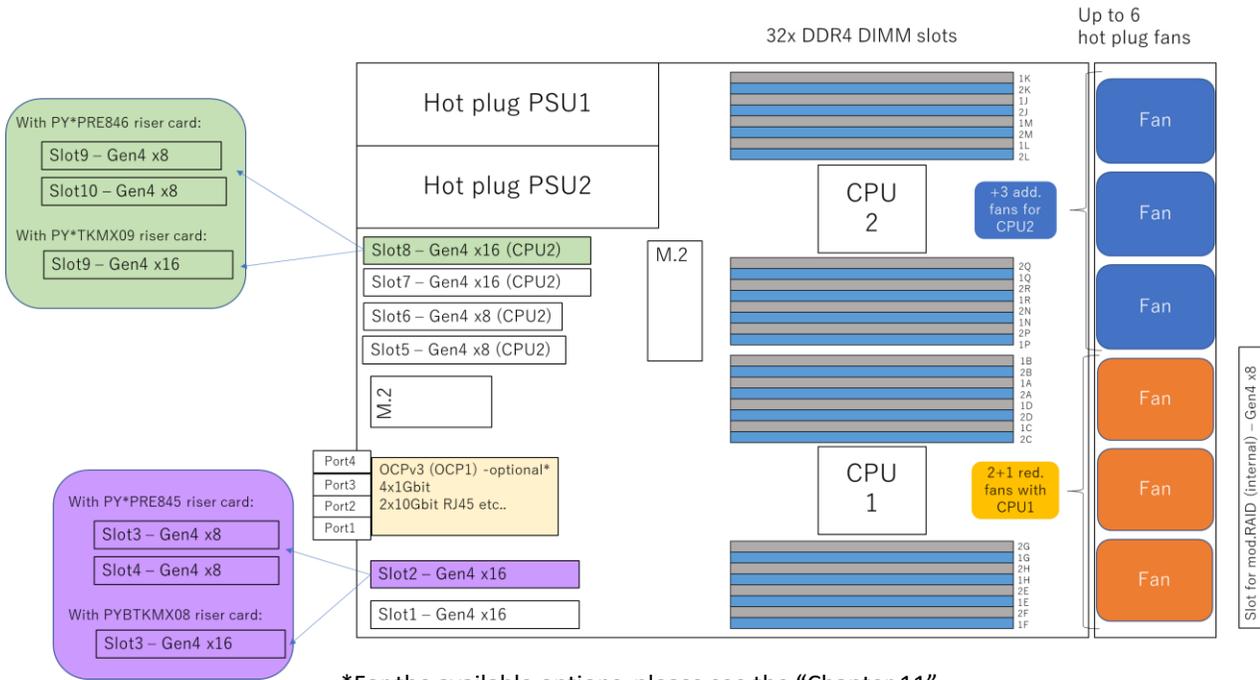
(extranet)

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

Abbreviations

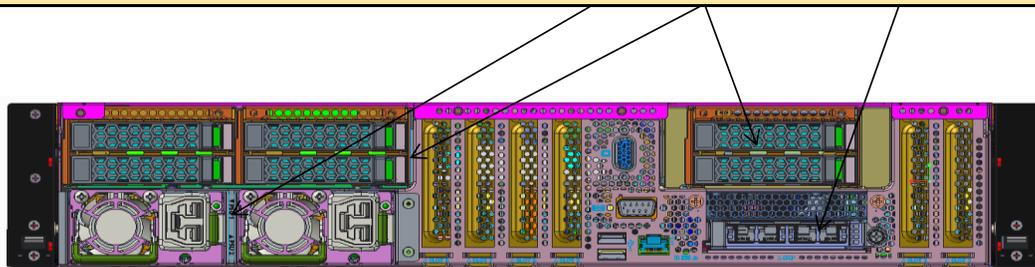
SAS	Drives, RAID	Serial attached SCSI Device (HDD, SSD, LTO drives); SAS2.0 = 6GBit/s; SAS3.0 = 12GBit/s
SATA	Drives, RAID	Serial ATA (HDD, SSD) current SATA speed = 6GBit/s
HDD	Drives	Hard disk drive (Non volatile storage device), 2.5" (SFF) or 3.5" (LFF)
SSD	Drives	Solid state disk (Non volatile storage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

PRIMERGY RX2540 M6 schematics of the System board and fans



*For the available options, please see the "Chapter 11".

PRIMERGY RX2540 M6 rear view with 2x PSU, 6x rear SFF and OCPv3



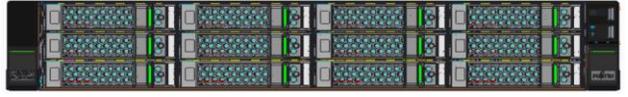
PRIMERGY RX2540 M6 front view with drives and operation panel

3.5-inch hot plug SAS/SATA

10x HDDs/SSDs



12x HDDs/SSDs

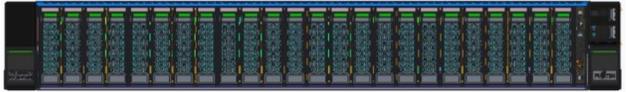


2.5-inch hot plug SAS/SATA/NVMe

16x HDDs/SSDs



24x HDDs/SSDs



EDSFF hot plug NVMe

64x EDSFF NVMe



recommended components for RX2540 M6	#
Independant Mode installation	1x
PLAN CP I350-T4 4X 1000BASE-T OCPv3	1x
iRMC advanced pack	1x
embedded Lifecycle Management (eLCM)	1x
Modular PSU 900W platinum hot plug	2x

Chapter 1 - base unit

Start

Power supply units & cooling
 The PRIMERGY RX2540 M6 offers bays for 1x or 2x direct attached hot plug (opt. redundant) power supply units of 500W, 900W, 1600W and 2200W with up to 96% efficiency. The PRIMERGY RX2540 M6 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 controller. With the integrated onboard indicators and controls you can easily highlight failed components via LEDs. The LEDs can be displayed during service even without mains connection by simply pressing the "indicate CSS" button.

Platform
 Fujitsu Systemboard D3891-A based on Chipset Intel® C621A (Lewisburg)

- > 3 serial UPI(Intel® Ultra Path Interconnect)links
- > Up to two Intel® Xeon® Processor Scalable Family CPUs (Ice Lake)

Slots: per default, 7 PCIe slots are on board - please see schematics in "Description"

- > 2 PCIe slots low profile, 198 mm length @ first CPU:
 - Internal RAID slot PCIe-Gen4 x8 - only for modular RAID/SAS controller
 - Slot 1 PCIe-Gen4 x16
 - Slot 2 PCIe-Gen4 x16
- > 4 PCIe slot low profile, 198 mm length @ second CPU:
 - Slot 5 PCIe-Gen4 x16
 - Slot 6 PCIe-Gen4 x8
 - Slot 7 PCIe-Gen4 x8
 - Slot 8 PCIe-Gen4 x16

Maximum 8 PCIe 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 DDR4-3200 MHz

8TB memory with 32x DDR4 RDIMMs (16 per CPU)

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

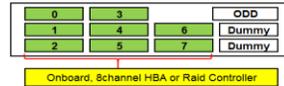
LAN
 No onboard LAN, optional OCPv3 cards are available.

Software
 * ServerView Suite Software option

Connectivity

<p><u>Interfaces at rear side</u></p> <ul style="list-style-type: none"> - 1 service LAN RJ45 (1 Gbit) - 1x VGA (15 pins) - 2x USB 3.0 UHCI - 1x serial 16550 interface - Slot for interface OCPv3 cards up to 4 LAN ports 	<p><u>Interfaces at front</u></p> <ul style="list-style-type: none"> - 2x USB 3.0 on COP(Common Operation Panel) - for base units with less HDD: front VGA option <p><u>Interfaces internal</u></p> <ul style="list-style-type: none"> - 2x USB 3.0 - 2x M.2 - 2x 4" SATA 6G
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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 10x 3.5" bays PYR2546R3N Without SAS expander No Rear Bay option possible! [Thermal Restriction] Refer to Thermal Rule	
12x 3.5" bays PYR2546RAN Without SAS expander No Rear Bay option possible! [Thermal Restriction] Refer to Thermal Rule	
12x 3.5" bays PYR2546RBN Including SAS expander No-Rear-Bay-option-possible! [Thermal Restriction] Refer to Thermal Rule	
Basic units SFF with 16x 2.5" bays PYR2546R2N 16x 2.5" bays with PFR function PYR2546RCN Without SAS expander 4x rear SFF option 2x rear SFF option (required 4x rear SFF option) [Thermal Restriction] Refer to Thermal Rule	



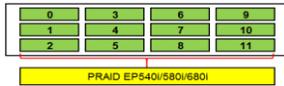
No Rear Bay option

Onboard SATA or
 PSAS CP503i / CP 2100-8i or
 PRAID CP500i / EP520i / EP640i (in internal RAID slot)



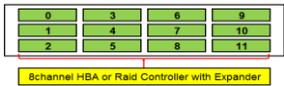
No Rear Bay option

PSAS CP600i or
 PRAID EP540i / EP580i / EP680i (in internal RAID slot)



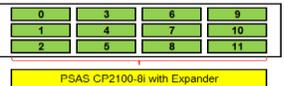
No Rear Bay option

PSAS CP600i or
 PRAID EP540i / EP580i / EP680i (in internal RAID slot)



No Rear Bay configuration

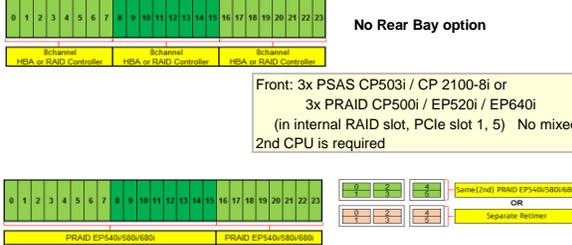
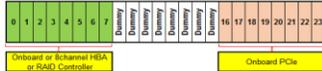
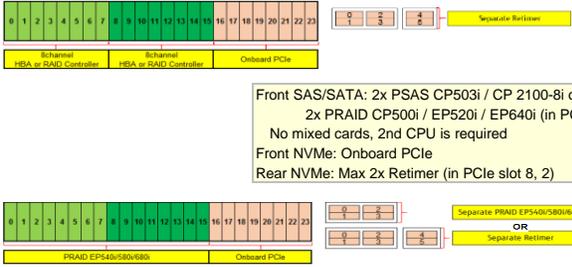
PSAS CP503i / CP 2100-8i or
 PRAID CP500i / EP520i / EP640i or
 PSAS CP600i (in internal RAID slot)

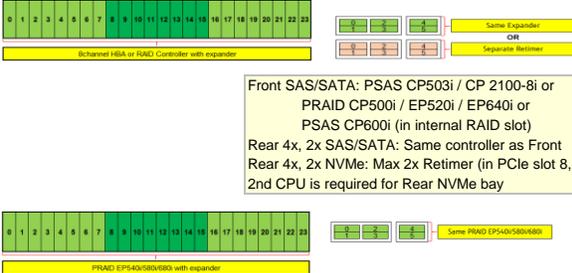
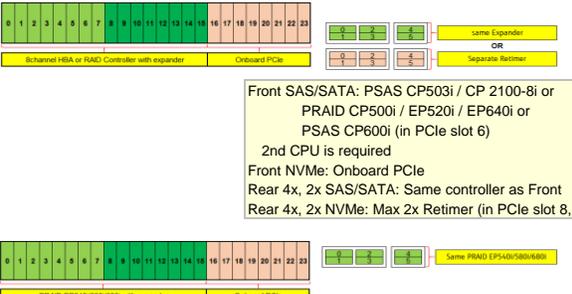


Rear Bay configuration (Available in May/2023)

2nd PSAS CP2100-8i
 Front: PSAS CP 2100-8i (in internal RAID slot)
 Rear 4xSAS/SATA: 2nd PSAS CP2100-8i (in PCIe slot 6)
 2nd CPU is required for Rear SAS/SATA bay

Upgrade kit for Front bays (Default Configuration)	
<p>Front: Onboard SATA Rear 4x NVMe: PRAID EP540i / EP580i / EP680i NVMe (in PCIe slot 6) 2nd CPU is required for Rear NVMe bay</p>	
<p>Front: PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i (in internal RAID slot) Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required for Rear NVMe bay</p>	
<p>Front: PRAID EP540i / EP580i / EP680i (in internal RAID slot) Rear 4x NVMe: PRAID EP540i / EP580i / EP680i NVMe (in PCIe slot 6) Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required for Rear NVMe bay</p>	
Upgrade kit for dual RAID SAS/SATA HDD/SSD PYBCBS077	
<p>Front: 2x PSAS CP503i / CP 2100-8i or 2x PRAID CP500i / EP520i / EP640i (in internal RAID slot, PCIe slot 1) No mixed cards Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required for Rear NVMe bay</p>	

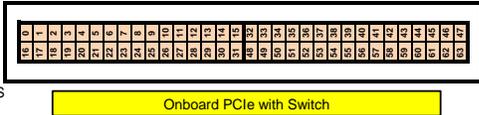
<p>16x 2.5" bays 16x 2.5" bays with PFR function Including SAS expander 4x rear SFF option 2x rear SFF option (required 4x rear SFF option)</p> <p>[Thermal Restriction] Refer to Thermal Rule</p>	<p>PYR2546RDN Upgrade kit for Front bays PYR2546REN (Default Configuration)</p>  <p>Front: PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i (in internal RAID slot) Rear 4x, 2x SAS/SATA: Same controller as Front Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required for Rear NVMe</p>
<p>24x 2.5" bays Without SAS expander 4x rear SFF option 2x rear SFF option (required 4x rear SFF option)</p> <p>[Thermal Restriction] Refer to Thermal Rule</p>	<p>PYR2546RFN Upgrade kit for Front bays (Default Configuration)</p> <p>No Rear Bay option</p>  <p>Front: 3x PSAS CP503i / CP 2100-8i or 3x PRAID CP500i / EP520i / EP640i (in internal RAID slot, PCIe slot 1, 5) No mixed cards 2nd CPU is required</p> <p>Front: 2x PSAS CP600i or 2x PRAID EP540i / EP580i / EP680i (in internal RAID slot, PCIe slot 6) No mixed cards Rear 4x, 2x SAS/SATA: Same controller as Front (2nd card) Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required</p>
	<p>Upgrade kit for Front 8x PCIe SSD with 8x SAS/SATA HDD/SSD PYBCBE014</p> <p>No Rear Bay option</p>  <p>Front SAS/SATA: Onboard SATA or PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i (in PCIe slot 1) Front NVMe: Onboard PCIe, 2nd CPU is required</p>
	<p>Upgrade kit for Front 8x PCIe SSD with 16x SAS/SATA HDD/SSD PYBCBE015</p>  <p>Front SAS/SATA: 2x PSAS CP503i / CP 2100-8i or 2x PRAID CP500i / EP520i / EP640i (in PCIe slot 1, 5) No mixed cards, 2nd CPU is required Front NVMe: Onboard PCIe Rear NVMe: Max 2x Retimer (in PCIe slot 8, 2)</p> <p>Front SAS/SATA: PRAID EP540i / EP580i / EP680i (in PCIe slot 1) Front NVMe: Onboard PCIe, 2nd CPU is required Rear 4x NVMe: PRAID EP540i / EP580i / EP680i NVMe (in PCIe slot 6) Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2)</p>

<p>24x 2.5" bays Including SAS Expander 4x rear SFF option 2x rear SFF option (required 4x rear SFF option)</p> <p>[Thermal Restriction] Refer to Thermal Rule</p>	<p>PYR2546RGN Upgrade kit for Front bays (Default Configuration)</p>  <p>Front SAS/SATA: PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i (in internal RAID slot) Rear 4x, 2x SAS/SATA: Same controller as Front Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2) 2nd CPU is required for Rear NVMe bay</p> <p>Type 4-15 Front SAS/SATA: PRAID EP540i / EP580i / EP680i (in internal RAID slot) Rear 4x, 2x SAS/SATA: Same controller as Front</p> <p>PYBCBE015 Upgrade kit for Front 8x PCIe SSD with 16x SAS/SATA HDD/SSD</p>  <p>Front SAS/SATA: PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i (in PCIe slot 6) 2nd CPU is required Front NVMe: Onboard PCIe Rear 4x, 2x SAS/SATA: Same controller as Front Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2)</p> <p>Front SAS/SATA: PRAID EP540i / EP580i / EP680i (in PCIe slot 6) 2nd CPU is required Front NVMe: Onboard PCIe Rear 4x, 2x SAS/SATA: Same controller as Front</p>
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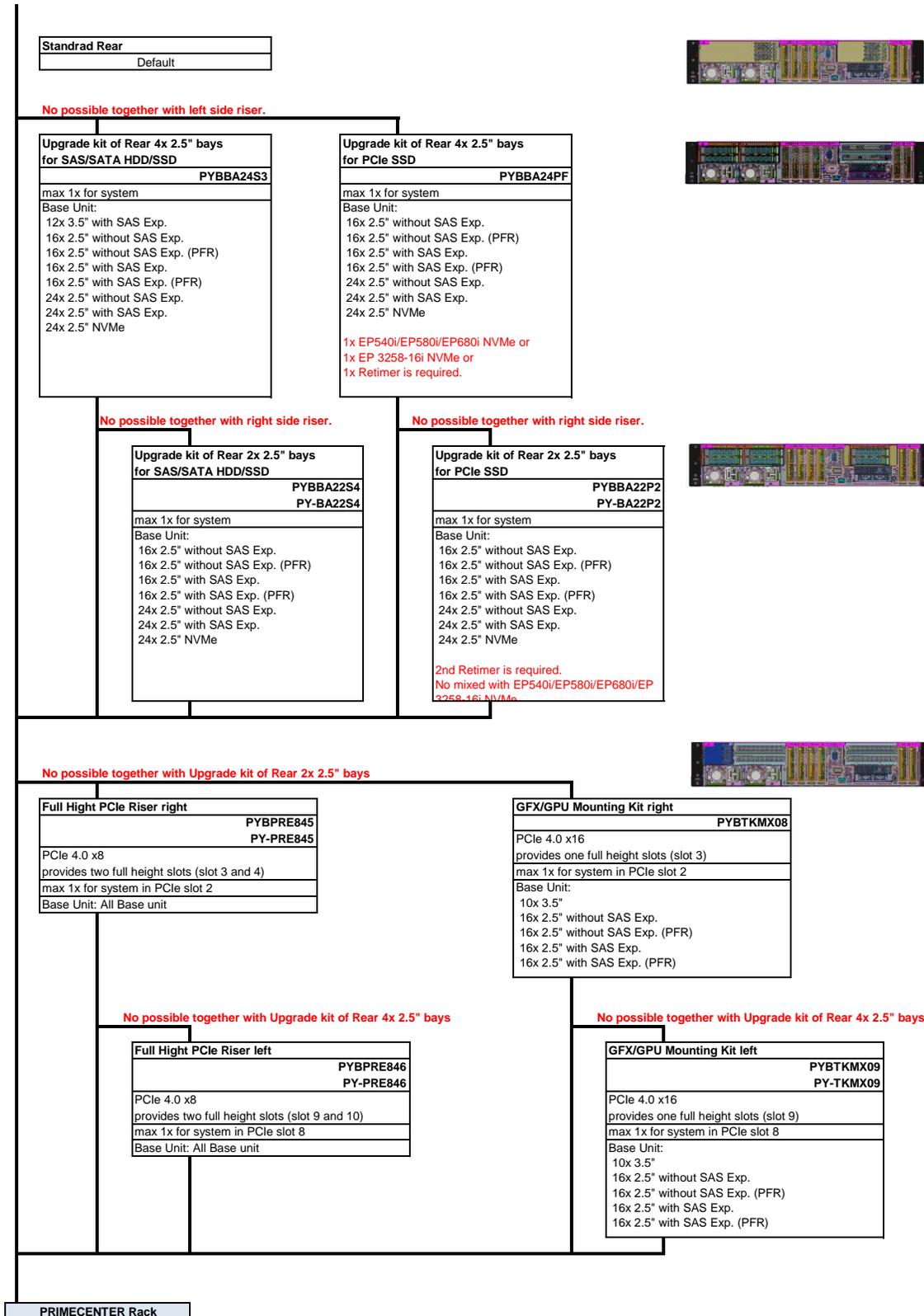
<p>24x 2.5" NVMe bays Onboard PCIe with switch board 4x rear SFF option 2x rear SFF option (required 4x rear SFF option)</p> <p>[Thermal Restriction] Refer to Thermal Rule</p>	<p>PYR2546RHN Upgrade kit for Front bays (Default Configuration)</p>  <p>Front NVMe: Onboard PCIe 2nd CPU is required Rear 4x, 2x SAS/SATA: PSAS CP503i / CP 2100-8i or PRAID CP500i / EP520i / EP640i or PSAS CP600i or PRAID EP540i / EP580i / EP680i (in PCIe slot 6) Rear 4x, 2x NVMe: Max 2x Retimer (in PCIe slot 8, 2)</p>
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Basic units EDSFF with EOL in June/2023
64x EDSFF NVMe bays **PYR2546R6N**
Onboard PCIe with switch
No Rear Bay option possible!
 33 or more EDSFFs require 2nd CPU.
 49 or more EDSFFs require the setting of "VMD disabled" in the BIOS

[Thermal Restriction]
 Refer to Thermal Rule



No Rear Bay option



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	1x	RMK for server w/max. 2U	PYBRR0B	PY-RR0B	precondition
Rack Mount Kit, slide-in rail	1x	Slide-in rail for server w/max. 2U	PYBRRS8S	PY-RRS8S	*CMA is not supported.
Rack Cable Arm 2U	1x	Cable mgmt. arm for 2U or higher	PYBRA05	PY-RA05	No possible together with 1600W PSU HVDC.
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

B

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 OCPv3, iRMC, 2x PCIe low profile slots Internal RAID card slot and 16x DIMM slots are available
 >> With **two** processors all 32x DIMM slots, 6x PCIe low profile slots are available.
 >> To configure 2nd CPU an additional cooler kit is required.
 * HT = Hyper Threading

** Liquid cooling is required.

CPU Group for Thermal condition	
10x3.5" /12x3.5" /16x2.5" /24x2.5"	64xEDSFF

Xeon Silver 43xx No Barlow pass support				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s				
Xeon Silver 4309Y 8C 2.8GHz 105W, Speed Select feature	PYBCP62XG	PY-CP62XG	A	A
Xeon Silver 4310 12C 2.1GHz 120W	PYBCP62XH	PY-CP62XH	A	A
Xeon Silver 4316 20C 2.3GHz 150W	PYBCP62XK	PY-CP62XK	B	B
Xeon Silver 43xx				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 10.4 GT/s				
Xeon Silver 4314 16C 2.4GHz 135W	PYBCP62XJ	PY-CP62XJ	A	A
Xeon Gold 53xx				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 5318Y 24C 2.1GHz 165W, Speed Select feature	PYBCP62XP	PY-CP62XP	B	B
Xeon Gold 5320 26C 2.2GHz 185W	PYBCP62XQ	PY-CP62XQ	C	C
Xeon Gold 53xx - Optimized Performance				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 5315Y 8C 3.2GHz 140W, Speed Select feature	PYBCP62XL	PY-CP62XL	B	B
Xeon Gold 5317 12C 3.0GHz 150W	PYBCP62XM	PY-CP62XM	B	B
Xeon Gold 63xx				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 / 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 6336Y 24C 2.4GHz 185W, Speed Select feature	PYBCP62XV	PY-CP62XV	C	C
Xeon Gold 6330 28C 2.0GHz 205W	PYBCP62X3	PY-CP62X3	C	C
Xeon Gold 6338 32C 2.0GHz 205W	PYBCP62X4	PY-CP62X4	C	C
Xeon Gold 63xx - Optimized Performance				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 6326 16C 2.9GHz 185W	PYBCP62XT	PY-CP62XT	C	C
Xeon Gold 6334 8C 3.6GHz 165W	PYBCP62XU	PY-CP62XU	D	F
Xeon Gold 6346 16C 3.1GHz 205W	PYBCP62X5	PY-CP62X5	C	F
Xeon Gold 6354 18C 3.0GHz 205W	PYBCP62X7	PY-CP62X7	C	F
Xeon Gold 6342 24C 2.8GHz 220W	PYBCP62XR	PY-CP62XR	D	F
Xeon Gold 6348 28C 2.6GHz 235W	PYBCP62X6	PY-CP62X6	D	E
Xeon Platinum 83xx				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Platinum 8352Y 32C 2.2GHz 205W, Speed Select feature	PYBCP62X9	PY-CP62X9	C	C
Xeon Platinum 83xx - Optimized Performance				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Platinum 8358 32C 2.6GHz 250W	PYBCP62XA	PY-CP62XA	D	E
Xeon Platinum 8360Y 36C 2.4GHz 250W, Speed Select feature	PYBCP62XC	PY-CP62XC	D	E
Xeon Platinum 8362 32C 2.8GHz 265W	PYBCP64X1	PY-CP64X1	D	F
Xeon Platinum 8368 38C 2.4GHz 270W	PYBCP62XD	PY-CP62XD	D	E
Xeon Platinum 8380 40C 2.3GHz 270W	PYBCP62XF	PY-CP62XF	D	E
Xeon Gold 63xxT - NEBS/Long Life				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933 MHz & UPI Bus @ xx GT/s				
Xeon Gold 6338T 24C 2.1GHz 165W	PYBCP62XW	PY-CP62XW	B	B
Xeon Gold 63xxN - NFV Optimized				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2666 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 6330N 28C 2.2GHz 165W	PYBCP62XY	PY-CP62XY	B	B
Xeon Gold 63xxU - Single Socket				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933/3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Gold 6312U 24C 2.4GHz 185W	PYBCP62XS	-	C	C
Xeon Gold 6314U 32C 2.3GHz 205W	PYBCP62X2	-	C	C
Xeon Platinum 83xxV/P - Colud/VM Optimized				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 2933/3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Platinum 8352V 36C 2.1GHz 195W, Speed Select feature	PYBCP62X8	PY-CP62X8	C	C
Xeon Platinum 8358P 32C 2.6GHz 240W	PYBCP62XB	PY-CP62XB	D	F
Xeon Platinum 83xxQ - Liquid Cooling				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Platinum 8368Q 38C 2.6GHz 270W <i>as soon as available</i>	PYBCP62XE	PY-CP62XE	**	**
Xeon - SGX enclave				
64-bit Intel Xeon processor supporting HT*, DDR4 @ xxxx MHz & UPI Bus @ xx GT/s				
Xeon Gold 5318S 24C 2.1GHz 165W	PYBCP62XN	PY-CP62XN	B	B
Xeon - Media and AI Optimized				
64-bit Intel Xeon processor supporting HT*, DDR4 @ 3200 MHz & UPI Bus @ 11.2 GT/s				
Xeon Platinum 8352M 32C 2.3GHz 185W	PYBCP64X2	PY-CP64X2	C	C

For configuring a 2nd CPU, please order the required cooling kit with this order code.

Cooler Kit		
Cooling Kit 2nd CPU	S26361-F3849-E100	-
Cooling kit including 2U heat sink for the configuration without GFX/GPU mounting kit, 3x Dual Rotor FAN	-	PY-TKCPC83
Cooling kit including 1U EVAC heatsink for the configuration with GFX/GPU mounting kit, 3x Dual Rotor FAN	-	PY-TKCPC84
When upgrading 2nd GFX/GPU card by loose delivery, this cooler kit is required.	-	

CPU Dummy module instead 2nd CPU		
CPU Dummy module for 1x CPU configuration, max 1x per system. For improving the thermal condition of 1x CPU configuration. Refer to Thermal Rule.	PYBDMC03	-
iRMC FW 3.49P or later version is required. CPU Dummy module for 1x CPU configuration, max 1x per system. Including 3x Dual Rotor FAN For improving the thermal condition of 1x CPU configuration. Refer to Thermal Rule.	-	PY-DMC03 Special Release

Cooler Kit for upgrading 2nd CPU from CPU Dummy module.		
Cooling kit including 2U heat sink for the configuration without GFX/GPU mounting kit	-	PY-TKCPC98
Cooling kit including 1U EVAC heatsink for the configuration with GFX/GPU mounting kit When upgrading 2nd GFX/GPU card by loose delivery, this cooler kit is required.	-	PY-TKCPC97

C

Chapter 4 - DDR4 System memory

C

Each CPU offers 16 Slots for DDR4 Memory Modules organised in 2 Banks and 8 Channels with 4 Memory Controllers (2 Channels each).
 If you need more than 16 Slots you have to configure 2nd CPU.
 Depending on the amount of memory configured you can decide Normal Memory RAS mode or Mirroring Memory RAS Mode.

There are different kinds of DDR4 Memory Modules available: RDIMM x4, RDIMM x8, RDIMM 3DS x4, LRDIMM.
 Mix of these different kind of memories is not allowed.
 On ex factory (BTO), all memory modules must be identical in their product number and capacity.
 In addition, DCPMM is available and can be mixed with all kind of memory modules.

Supported memory capacities per CPU:
 Up to 4TB using DDR4 RDIMM (16x 256GB DDR4 RDIMM 3DS)
 Up to 2TB using DDR4 LRDIMM (16x 128GB DDR4 LRDIMM)
 Up to 6TB using DCPMM + DDR4 DIMM (8x 512GB DCPMM + 8x 256GB DDR4 RDIMM 3DS)
 Up to 5TB using DCPMM + DDR4 DIMM (8x 512GB DCPMM + 8x 128GB DDR4 LRDIMM)

Supported memory capacities per System (with 2CPU configuration):
 Up to 8TB using DDR4 RDIMM (32x 256GB DDR4 RDIMM 3DS)
 Up to 4TB using DDR4 LRDIMM (32x 128GB DDR4 LRDIMM)
 Up to 12TB using DCPMM + DDR4 DIMM (16x 512GB DCPMM + 16x 256GB DDR4 RDIMM 3DS)
 Up to 10TB using DCPMM + DDR4 DIMM (16x 512GB DCPMM + 16x 128GB DDR4 LRDIMM)

The memory speed depends on configuration restricted by the CPU SKU (max. 3,200 MT/s).
 DDR4 memory is operated at 1.2V

Memory Mode ; either one of follwoig memory modes must be selected.

Independent Mode	Requires 1, 2, 4, 6, 8, 12 or 16 memory Module per CPU	1x per CPU	PYBMMD2
Independent Mode required to be the best performance. ADDDC Sparing is available in case system configured by DDR4xRx4 DIMM only.			
Mirroring Mode	Requires 8 or 16 memory Module per CPU	1x per CPU	PYBMMC4
BIOS preconfiguration for Mirroring mode. 8x identical memory modules are always equipped on same bank across all channel to use the mirrored channel mode. Half of the modules contain active data, the remaining modules contain mirrored data. min/max 1x per CPU; max 2x for System			

DDR4 DIMM only configuration section

Min 1x DIMM per CPU is required.
 Only one type of order code is selectable with BTO order code.
 Mix of different type of order code within same type DIMM (RDIMMx8, RDIMMx4, RDIMM 3DS or LRDIMM) is allowed with loose delivery order code.

DDR4 Registered DIMM 3200MHz 1R/2R x8			
8GB (1x8GB) 1Rx8 DDR4-3200 R ECC	max 16x per CPU	PYBME08SJ	PY-ME08SJ
16GB (1x16GB) 2Rx8 DDR4-3200 R ECC	max 16x per CPU	PYBME16SJ	PY-ME16SJ
max 16x per CPU; max 32x for System			
DDR4 Registered DIMM 3200MHz 1R/2R x4			
16GB (1x16GB) 1Rx4 DDR4-3200 R ECC	max 16x per CPU	PYBME16SJ2	PY-ME16SJ2
32GB (1x32GB) 2Rx4 DDR4-3200 R ECC	max 16x per CPU	PYBME32SJ	PY-ME32SJ
64GB (1x64GB) 2Rx4 DDR4-3200 R ECC	max 16x per CPU	PYBME64SJ	PY-ME64SJ
max 16x per CPU; max 32x for System			
DDR4 Registered DIMM 3200MHz 3DS 4R/8R x4			
128GB (1x128GB) 4Rx4 DDR4-3200 R 3DS ECC	max 16x per CPU	PYBME12SJ	PY-ME12SJ
256GB (1x256GB) 8Rx4 DDR4-3200 R 3DS ECC	max 16x per CPU	PYBME25SJ	PY-ME25SJ
max 16x per CPU; max 32x for System			
DDR4 LR Registered DIMM 3200MHz 4R x4			
64GB (1x64GB) 4Rx4 DDR4-3200 LR ECC	max 16x per CPU	PYBME64EH	PY-ME64EH
128GB (1x128GB) 4Rx4 DDR4-3200 LR ECC	max 16x per CPU	PYBME12EH	PY-ME12EH
max 16x per CPU; max 32x for System			

Optane PMem configuration section

Only one type of Optane PMem is allowed per system
 (to be checked) Only one Optane PMem package and one Memory package is allowed per CPU
 Every CPU has to have the same Optane PMem & Memory configuration
 (to be checked) Liquid cooling base unit does not support Optane PMem

Optane PMem (Barlow pass)		order code (BTO)	order code (loose delivery)
128GB (1x128GB) Optane PMem-3200	max 8x per CPU	-	PY-ME12PAQ
256GB (1x256GB) Optane PMem-3200	max 8x per CPU	-	PY-ME25PAQ
512GB (1x512GB) Optane PMem-3200	max 8x per CPU	-	PY-ME51PAQ
max 8x per CPU; max 16x for System			

Optane PMem 128GB (Barlow pass)		order code (BTO)	order code (loose delivery)
128GB (1x128GB) Optane PMem-3200	max 1x per CPU	PYBME12PAK	-
max 1x per CPU; max 2x for System			

Available Memory Packages (6pcs package)		order code (BTO)	order code (loose delivery)
96GB (6x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME96SJ	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
max 1x per CPU; max 2x for System			

Optane PMem 256GB (Barlow pass)		order code (BTO)	order code (loose delivery)
256GB (1x256GB) Optane PMem-3200	max 1x per CPU	PYBME25PAK	-
max 1x per CPU; max 2x for System			

Available Memory Packages (6pcs package)		order code (BTO)	order code (loose delivery)
96GB (6x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME96SJ	-
192GB (6x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME19SJ	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
max 1x per CPU; max 2x for System			

Optane PMem 512GB (Barlow pass)		order code (BTO)	order code (loose delivery)
512GB (1x512GB) Optane PMem-3200	max 1x per CPU	PYBME51PAK	-
max 1x per CPU; max 2x for System			

Available Memory Packages (6pcs package)		order code (BTO)	order code (loose delivery)
96GB (6x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME96SJ	-
192GB (6x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME19SJ	-
384GB (6x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME38SJ	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
max 1x per CPU; max 2x for System			

Optane PMem 128GB (Barlow pass)		order code (BTO)	order code (loose delivery)
256GB (2x128GB) Optane PMem-3200	max 1x per CPU	PYBME25PAL	-
max 1x per CPU; max 2x for System			

Available Memory Packages (12pcs package)		order code (BTO)	order code (loose delivery)
192GB (12x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME19SJ2	-
max 1x per CPU; max 2x for System			

Optane PMem 256GB (Barlow pass)		order code (BTO)	order code (loose delivery)
512GB (2x256GB) Optane PMem-3200	max 1x per CPU	PYBME51PAL	-
max 1x per CPU; max 2x for System			
Available Memory Packages (12pcs package)		order code (BTO)	order code (loose delivery)
192GB (12x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME19SJ2	-
384GB (12x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME38SJ2	-
max 1x per CPU; max 2x for System			
Optane PMem 512GB (Barlow pass)		order code (BTO)	order code (loose delivery)
1024GB (2x512GB) Optane PMem-3200	max 1x per CPU	PYBME10PAL	-
max 1x per CPU; max 2x for System			
Available Memory Packages (12pcs package)		order code (BTO)	order code (loose delivery)
192GB (12x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME19SJ2	-
384GB (12x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME38SJ2	-
768GB (12x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME76SJ2	-
max 1x per CPU; max 2x for System			
Optane PMem 128GB (Barlow pass)		order code (BTO)	order code (loose delivery)
512GB (4x128GB) Optane PMem-3200	max 1x per CPU	PYBME51PAM	-
max 1x per CPU; max 2x for System			
Available Memory Packages (4pcs package)		order code (BTO)	order code (loose delivery)
64GB (4x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME64SJ2	-
128GB (4x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ3	-
256GB (4x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ3	-
512GB (4x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME51SJ2	-
max 1x per CPU; max 2x for System			
Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
max 1x per CPU; max 2x for System			
Optane PMem 256GB (Barlow pass)		order code (BTO)	order code (loose delivery)
1024GB (4x256GB) Optane PMem-3200	max 1x per CPU	PYBME10PAM	-
max 1x per CPU; max 2x for System			
Available Memory Packages (4pcs package)		order code (BTO)	order code (loose delivery)
64GB (4x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME64SJ2	-
128GB (4x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ3	-
256GB (4x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ3	-
512GB (4x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME51SJ2	-
1024GB (4x256GB) 8Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ2	-
max 1x per CPU; max 2x for System			
Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
1024GB (8x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ	-
max 1x per CPU; max 2x for System			

Optane PMem 512GB (Barlow pass)		order code (BTO)	order code (loose delivery)
2048GB (4x512GB) Optane PMem-3200	max 1x per CPU	PYBME20PAM	-
max 1x per CPU; max 2x for System			

Available Memory Packages (4pcs package)		order code (BTO)	order code (loose delivery)
128GB (4x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ3	-
256GB (4x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ3	-
512GB (4x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME51SJ2	-
1024GB (4x256GB) 8Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ2	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
1024GB (8x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ	-
2048GB (8x256GB) 8Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME20SJ	-
max 1x per CPU; max 2x for System			

Optane PMem 128GB (Barlow pass)		order code (BTO)	order code (loose delivery)
1024GB (8x128GB) Optane PMem-3200	max 1x per CPU	PYBME10PAP	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
1024GB (8x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ	-
max 1x per CPU; max 2x for System			

Optane PMem 256GB (Barlow pass)		order code (BTO)	order code (loose delivery)
2048GB (8x256GB) Optane PMem-3200	max 1x per CPU	PYBME20PAP	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
128GB (8x16GB) 1Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME12SJ2	-
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
1024GB (8x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ	-
2048GB (8x256GB) 8Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME20SJ	-
max 1x per CPU; max 2x for System			

Optane PMem 512GB (Barlow pass)		order code (BTO)	order code (loose delivery)
4096GB (8x512GB) Optane PMem-3200	max 1x per CPU	PYBME40PAP	-
max 1x per CPU; max 2x for System			

Available Memory Packages (8pcs package)		order code (BTO)	order code (loose delivery)
256GB (8x32GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME25SJ2	-
512GB (8x64GB) 2Rx4 DDR4-3200 R ECC	max 1x per CPU	PYBME51SJ	-
1024GB (8x128GB) 4Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME10SJ	-
2048GB (8x256GB) 8Rx4 DDR4-3200 3DS ECC	max 1x per CPU	PYBME20SJ	-
max 1x per CPU; max 2x for System			

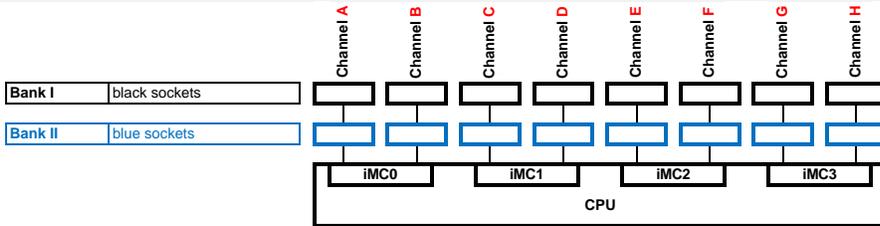
D

Detailed information

RAS feature	Memory Mode	RDIMM	RDIMM	BIOS setting
			LRDIMM	
		x8	x4	
ECC	Independent Mode/Mirroring Mode	yes	yes	always enabled.
SDDC	Independent Mode/Mirroring Mode	no	yes	always enabled in case x4 DIMM configred.
ADDDC Sparing	Independent Mode	no	yes	disabled as default.
Mirroring channel	Mirroring Mode	yes	yes	enabled in case Mirroring Mode ordered.

	Configuration		Available Capacity	
	DIMM	CPU	Normal Mode	Mirroring Mode
Min. Memory	1 Module / CPU	with one CPU	8GB: 8GB x1	-
	8 Module / CPU	with one CPU	-	32GB: 8GBx8x50%
Max. Memory per CPU	16 Modules / CPU	with two CPU	4TB: 256GB x16	2TB: 256GBx16x50%
Max. Memory per System	32 Modules / System	with two CPU	8TB: 256GB x32	4TB: 256GBx32x50%

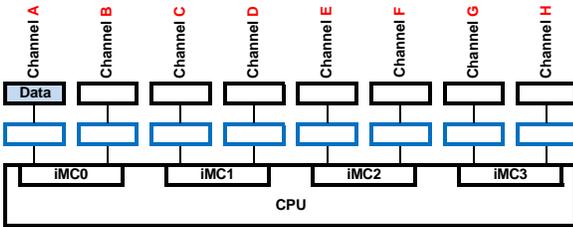
The memory sockets on the Systemboards are color coded



Normal Mode population DDR4 DIMM only

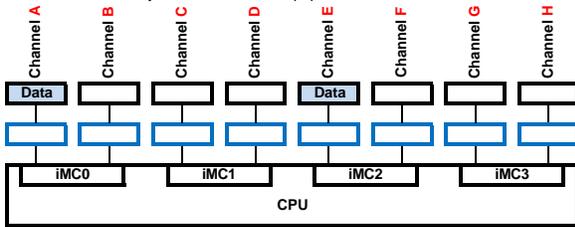
Normal Mode requires 1x, 2x, 4x, 6x, 8x, 12x or 16x DIMM configuration per CPU.
 for 2x or more than 2x DIMM configuration,
 Between Chanel A-E/C-G/B-F/D-H, balanced configuration is required. same bank of each chanel need to be populatd.
 Between Chanel A-C-E-G/B-D-F-H, each chanel capacity need to be same if DIMM populatd in each Chanel.

1 DIMMs for 1CPU



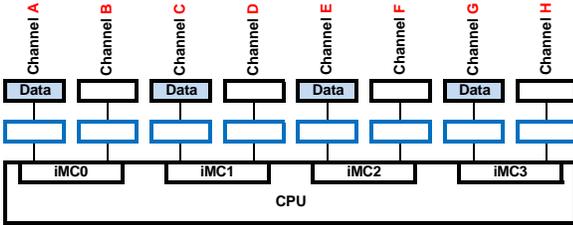
2 DIMMs for 1CPU

2x identical memory modules need to be populated.



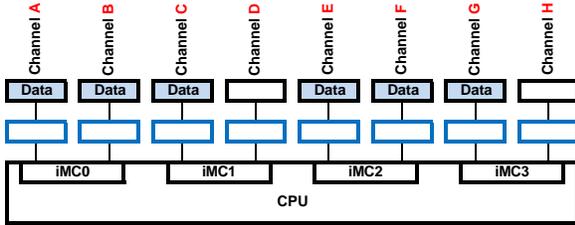
4 DIMMs for 1CPU

4x identical memory modules need to be populated.



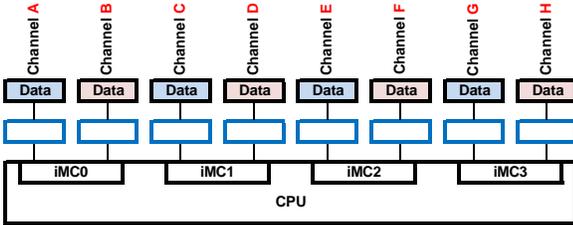
6 DIMMs for 1CPU

6x identical memory modules need to be populated.



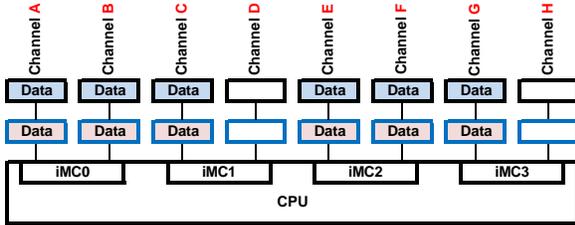
8 DIMMs for 1CPU

4x identical memory modules need to be populated.



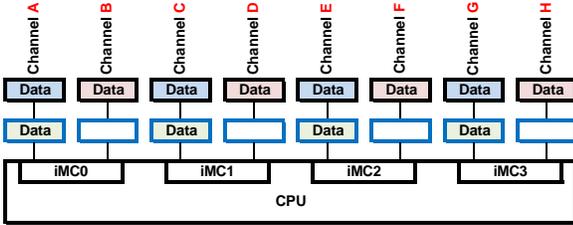
12 DIMMs for 1CPU

6x identical memory modules need to be populated.



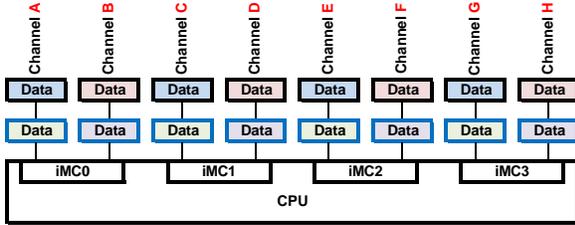
12 DIMMs for 1CPU

4x identical memory modules need to be populated.



16 DIMMs for 1CPU

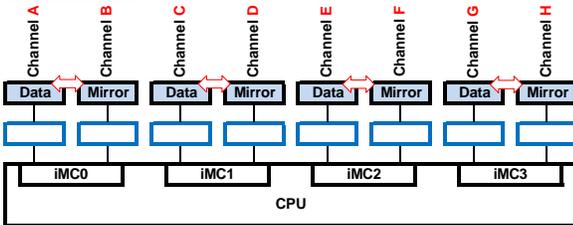
4x identical memory modules need to be populated.



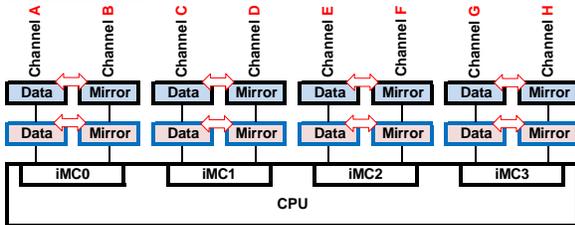
Mirroring Mode population DDR4 DIMM only

Mirroring Mode requires 8x or 16x DIMM configuration per CPU.
 in addition to Normal Mode Memory population rules,
 Between Chanel A-B/C-D/E-F/G-H, identical DIMM need to be populated in same bank.

8 DIMMs for 1CPU

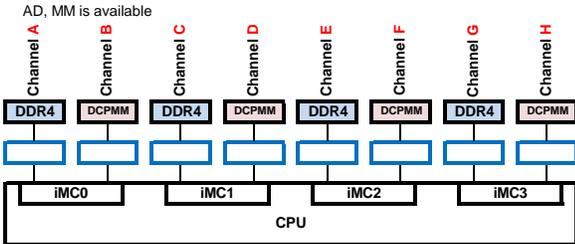


16 DIMMs for 1CPU

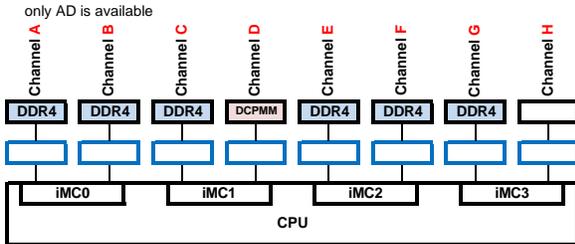


Normal Mode population DDR4 DIMM with DCPMM

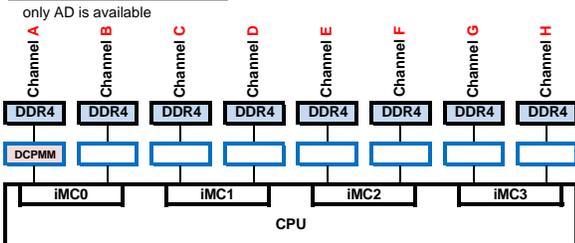
4x DDR4 + 4x DCPMM for 1CPU



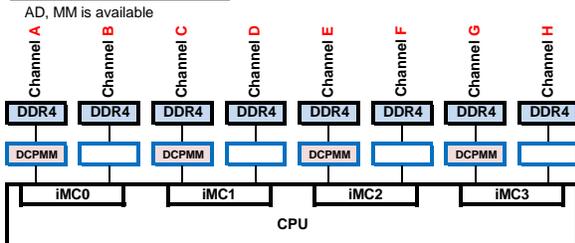
6x DDR4 + 1x DCPMM for 1CPU



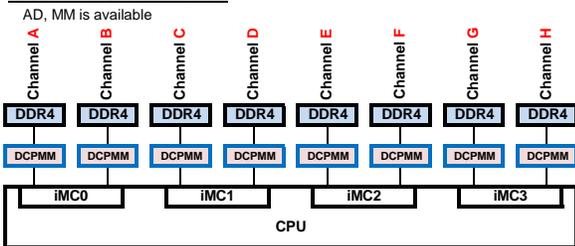
8x DDR4 + 1x DCPMM for 1CPU



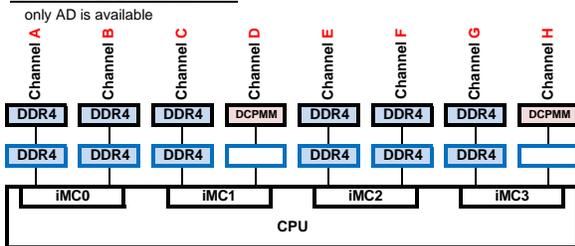
8x DDR4 + 4x DCPMM for 1CPU



8x DDR4 + 8x DCPMM for 1CPU



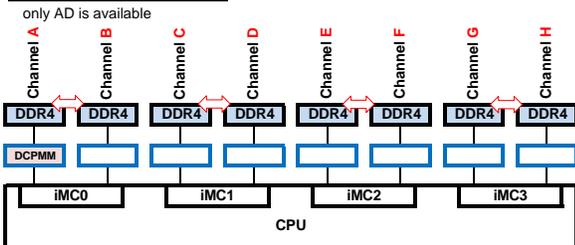
12x DDR4 + 2x DCPMM for 1CPU



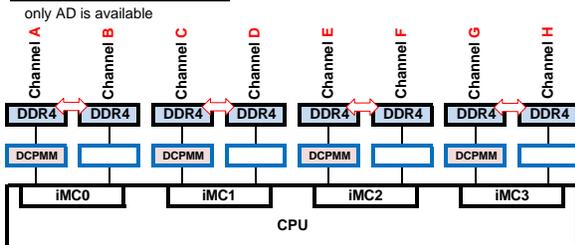
Mirroring Mode population DDR4 DIMM with DCPMM

DCPMM is not supported full Mirroring Mode. When DCPMM is installed in system, Address range mirroring is supported in App Direct Mode. DDR4 DIMM is only mirrored and DCPMM is not mirrored.

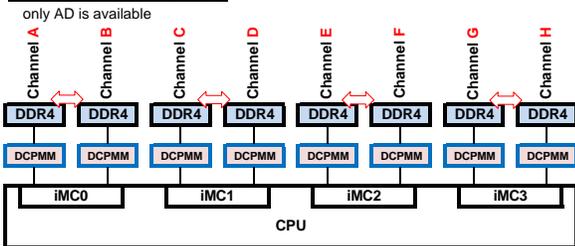
8x DDR4 + 1x DCPMM for 1CPU



8x DDR4 + 4x DCPMM for 1CPU



8x DDR4 + 8x DCPMM for 1CPU



Chapter 6 - Drive cage and PCIe riser options

F

Rear HDD/SSD cage option

rear 4x2.5" SAS/SATA HDD/SSD SFF *as soon as available*

PYBBA24S3 Option REAR SAS/SATA HDD/SSD
Provides 4 rear hot-plug bays for SAS/SATA HDD/SSD SFF
Note: SSD SAS 24G (based on Kioxia PM7) is not possible.
Note: Temperature Max 30°C and CPU TDP Max 165W
Note: Not support with 10x3.5", 12x3.5" w/o, 64xEDSFF base unit
Note: Consumes space for PCIe riser x8 left
max. 1x per system
Includes all necessary cage, backplane and cables

rear 4x2.5" PCIe-SSD SFF *as soon as available*

PYBBA24PF Option REAR PCIe SSD SFF
Provides 4 rear hot-plug bays for PCIe-SSD SFF devices
Note: 2nd CPU is required. Separate Retimer card or EP540i/EP580i/EP680i NVMe or EP 3258-16i NVMe is required. Retimer card occupies PCIe slot#2. EP540i/EP580i/EP680i/EP 3258-16i occupies PCIe slot#6. If rear 2x2.5" PCIe-SSD SFF is ordered, separate Retimer card is required for this option and EP540i/EP580i/EP680i/EP 3258-16i is not allowed.
Note: Temperature Max 30°C and CPU TDP Max 165W
Note: Not support with 10x3.5", 12x3.5", 64xEDSFF base unit
Note: Consumes space for PCIe riser x8 left
max. 1x per system
Includes all necessary cage, backplane and cables

rear 2x2.5" SAS/SATA HDD/SSD SFF *as soon as available*

PYBBA22S4 Option REAR SAS/SATA HDD/SSD
PY-BA22S4 Upgrade REAR SAS/SATA HDD/SSD
Provides 2 rear hot-plug bays for SAS/SATA HDD/SSD SFF
Note: rear 4x2.5" SAS/SATA HDD/SSD SFF is required. SSD SAS 24G (based on Kioxia PM7) is not possible.
Note: Consumes space for PCIe riser x8 right
max. 1x per system
Includes all necessary cage, backplane and cables

rear 2x2.5" PCIe-SSD SFF *as soon as available*

PYBBA22P2 Option REAR PCIe SSD SFF
PY-BA22P2 Upgrade REAR PCIe SSD SFF
Provides 2 rear hot-plug bays for PCIe-SSD SFF devices
Note: rear 4x2.5" PCIe-SSD SFF is required. 2nd Retimer card is required. Retimer card occupies PCIe slot#2.
Note: Consumes space for PCIe riser x8 right
max. 1x per system
Includes all necessary cage, backplane and cables

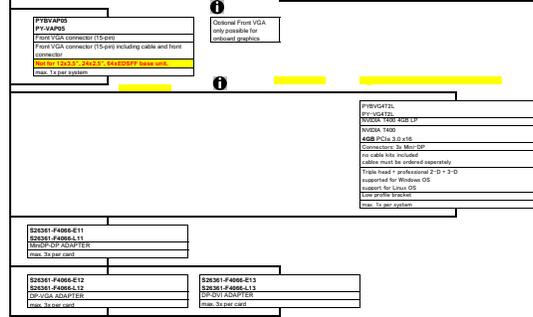
Detailed PCIe slot description:

Slot 10 PCIe-4 x8, max. 270mm @ CPU2	full-height slot
Slot 9 PCIe-4 x8, max. 270mm @ CPU2	full-height slot
Slot 8 PCIe-4 x16, max. 198mm @ CPU2	low-profile slot
<i>Possibility to install PCIe riser with x8</i>	
<i>Slot for 1st Retimer card</i>	
Slot 7 PCIe-4 x16, max. 198mm @ CPU2	low-profile slot
Slot 6 PCIe-4 x8, max. 198mm @ CPU2	low-profile slot
<i>Preferred slot for 3rd modular RAID-Controller (3x configuration)</i>	
<i>Preferred slot for 2nd modular RAID-Controller (2x configuration)</i>	
Slot 5 PCIe-4 x8, max. 198mm @ CPU2	low-profile slot
<i>Preferred slot for 2nd modular RAID-Controller (3x configuration)</i>	
Slot 4 PCIe-4 x8, max. 270mm @ CPU1	full-height slot
Slot 3 PCIe-4 x8, max. 270mm @ CPU1	full-height slot
Slot 2 PCIe-4 x16, max. 198mm @ CPU1	low-profile slot
<i>Possibility to install PCIe riser with x8</i>	
<i>Slot for 2nd Retimer card</i>	
Slot 1 PCIe-4 x16, max. 198mm @ CPU1	low-profile slot

G

Chapter 5 - Graphics options

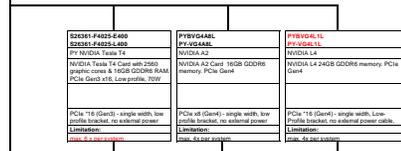
The different GPU mixed configuration does not support.



The optional NVIDIA Quadro T400 graphics card offers triple head operation and full 3D video support. The cable kit is not included. It is necessary to order cable kit. Remote Video direction via BMC must be disabled.

NVIDIA T4 / NVIDIA A2 / NVIDIA L4

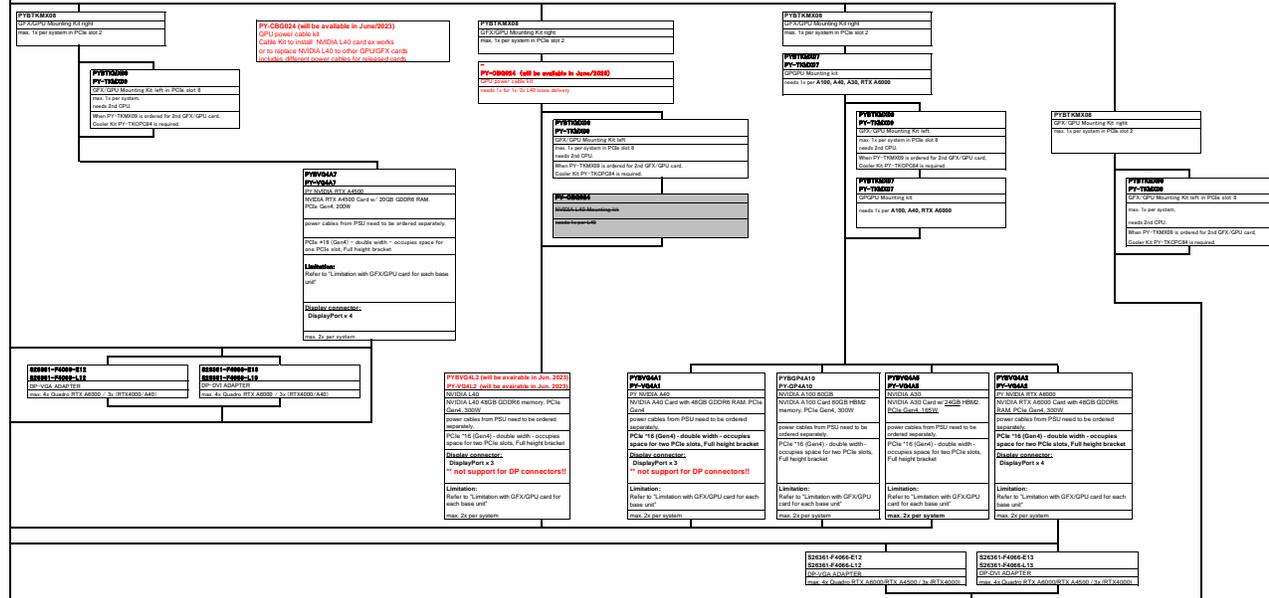
The different GPU mixed configuration does not support.



NVIDIA RTX A4500 / RTX A6000

NVIDIA L40 / A30 / A40 / A100 80GB / H100

The different GPU mixed configuration does not support.



Limitation with GFPGPU card for each base unit.

- A10/A40/A100RTX A4000/RTX A4500: refer to the configuration including GFPGPU Mount Kit in Chapter 18 - Thermal Rule
- NVIDIA T4: refer to the configuration including Nvidia T4 in Chapter 18 - Thermal Rule

Supported for GPU pass through and vGPU (except GPU under Citrix XenServer 7.x & 8.2LTS) and Non-Desktop. Workload depends on application. Ideal for virtualized GPU or shared GPU workload like "Power User" or "Knowledge Worker", including "Designer" as full power graphics USER. Supported for VMware ESXi 6 (under discussion in VMware) & 7.x shared (vSGA) & dedicated (vGSA) virtual graphics support. All power GPUs are supported if listed at OS vendors' HCL. NOT certified for CAD/CAM/CAE type of applications using dedicated GPU.

The different GPU mixed configuration does not support

NVIDIA RTX A6000						
NVIDIA T4/T2/T3/A30/A40/A50/A6000/RTX A6000/RTX A5000						
RTX A6000 RTX A5000 NVIDIA Tesla T4 Card with 24GB Graphics Memory & 16GB GDDR6 SDRAM PCIe Gen4 x16, Low-profile, 20W PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system	RTX A6000 RTX A5000 NVIDIA A2 Card 11GB GDDR6 HBM2e, PCIe Gen4 PCIe 16 (Gen4) - single width, low profile bracket, no external power cables Limitation: Refer to "Limitation with GFPGPU card for each base unit" Max. 24 per system

For NVIDIA GRID SaaS Licenses to use the virtual graphics (vGPU) functionality, a SW activation key and support license key is to be purchased additionally. Please refer to additional license (stripes for Virtual Applications), Virtual PC Virtual Workstation plus SaaS (Support, License & Maintenance) (sub-stripes). In addition, it is possible to use as vGPU in the case, there is no NVIDIA GRID SW License.

Cards physically is not to graphic card location.

Perpetual Software license						
RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU	RTX A6000 RTX A5000 NVIDIA GRID Virtual Applications (stripes) Perpetual License, 1 COU

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

RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.	RTX A6000 RTX A5000 NVIDIA SUMS License (6 months) for renewal - Loose Delivery NVIDIA GRID vGPU Pool SUMS 6 months Renewal, 1 COU NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMS.
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This license model is NOT requirement for SUMS (Support license), it is including it.

Subscription Software license

Table of Subscription Software licenses including categories like GRID Visual Applications, GRID VDI, and various subscription durations (6 months, 1 year, 2 years, 3 years).

Education Software license

Table of Education Software licenses including Perpetual license and Subscription license for GRID EDU.

NVIDIA EDU SUMS Licenses (6 months) for renewal - Lose Delivery

Table of NVIDIA EDU SUMS Licenses for renewal, including 6 months, 1 year, 2 years, 3 years, 4 years, and 5 years.

NVIDIA Subscription Licenses (6 months) for renewal - Lose Delivery

Table of NVIDIA Subscription Licenses for renewal, including 6 months, 1 year, 2 years, 3 years, 4 years, and 5 years.

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

Table of NVIDIA Subscription License for renewal, including 6 months, 1 year, 2 years, 3 years, 4 years, and 5 years.

Converged Accelerator card

Table of Converged Accelerator cards including P7E7X000, P7E7X001, P7E7X002, P7E7X003, P7E7X004, P7E7X005, P7E7X006, P7E7X007, P7E7X008, P7E7X009, P7E7X010, P7E7X011, P7E7X012, P7E7X013, P7E7X014, P7E7X015, P7E7X016, P7E7X017, P7E7X018, P7E7X019, P7E7X020, P7E7X021, P7E7X022, P7E7X023, P7E7X024, P7E7X025, P7E7X026, P7E7X027, P7E7X028, P7E7X029, P7E7X030, P7E7X031, P7E7X032, P7E7X033, P7E7X034, P7E7X035, P7E7X036, P7E7X037, P7E7X038, P7E7X039, P7E7X040, P7E7X041, P7E7X042, P7E7X043, P7E7X044, P7E7X045, P7E7X046, P7E7X047, P7E7X048, P7E7X049, P7E7X050, P7E7X051, P7E7X052, P7E7X053, P7E7X054, P7E7X055, P7E7X056, P7E7X057, P7E7X058, P7E7X059, P7E7X060, P7E7X061, P7E7X062, P7E7X063, P7E7X064, P7E7X065, P7E7X066, P7E7X067, P7E7X068, P7E7X069, P7E7X070, P7E7X071, P7E7X072, P7E7X073, P7E7X074, P7E7X075, P7E7X076, P7E7X077, P7E7X078, P7E7X079, P7E7X080, P7E7X081, P7E7X082, P7E7X083, P7E7X084, P7E7X085, P7E7X086, P7E7X087, P7E7X088, P7E7X089, P7E7X090, P7E7X091, P7E7X092, P7E7X093, P7E7X094, P7E7X095, P7E7X096, P7E7X097, P7E7X098, P7E7X099, P7E7X100.

The different GPU mixed configuration does not support

It is necessary the "DataMatrix" reader or cell phone with "DataMatrix" reader application in order to read BMC addresses from two-dimensional code label. It is requirements a "TCP/IP server" when BMC Ethernet (RJ45 connector) connects. Because the default setting is "dhcp", so there is no static IP address in default.

Chapter 7 - SAS / RAID Controller

F

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

onboard SATA controller with SW-RAID

max number of drives depends on base units

For Support OS, please check "PRIMERGY Release Matrix" at <https://support.ts.fujitsu.com/>

onboard controller for SATA HDD or SSD drives

8 ports 3, 6Gb/s SATA HDD/SSD	based on Intel chipset	No Cache	SW-RAID 0, 1, 10	2x	onboard, included
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internal HBA and RAID controller, no 2nd Level cache

internal RAID / HBA controllers for SAS, SATA HDD or SSD drives

PRAID CP500i RAID Contr.	No Cache	RAID 0, 1, 10, 5, 50	3x	PYBSR3FBL	PY-SR3FB
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					
PSAS CP503i HBA SAS Contr.	No Cache	HBA, no RAID	3x	PYBSC3FBL	PY-SC3FB
Windows 2016/2019 support: Driver for PSAS CP50x 2.61.29.00 or later is required 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality					
PSAS CP503i HBA SAS Contr. for vSAN	No Cache	HBA, no RAID	3x	PYBSC3FBVL	PY-SC3FBV
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality; released for VMWare vSAN / vSphere in PYR2546RFN / PYR2546RGN / PYR2546R2N / PYR2546RCN / PYR2546RDN / PYR2546REN					
internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP600i LP -Cancelled-	No Cache	RAID 0, 1, 10	3x	PYBSR4FAL	PY-SR4FA
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3808					
PSAS CP600i LP	No Cache	HBA, no RAID	1x	PYBSC4FAL	PY-SC4FA
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3816; IT FW stack without RAID functionality					
PSAS CP600i LP for vSAN available from 2024/03	No Cache	HBA, no RAID	1x	PYBSC4FAVL	PY-SC4FAV
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3816; IT FW stack without RAID functionality; released for VMWare vSAN / vSphere in PYR2546RFN / PYR2546RGN / PYR2546R2N / PYR2546RDN					

internal RAID / HBA controllers for SAS, SATA HDD or SSD drives

PSAS CP 2100-8i LP	No Cache	HBA + RAID 0, 1, 10, 5	3x	PYBSC3MA2L	-
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 3.0 x8 (int.) slot					
PSAS CP 2100-8i LP for vSAN	No Cache	HBA, no RAID	3x	PYBSC3MAVL	-
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 3.0 x8 (int.) slot, released for VMWare vSAN / vSphere in PYR2546RFN / PYR2546RGN / PYR2546R2N / PYR2546RDN					

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

internal RAID controllers for 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 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-E214	S26361-F4042-L514
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, supports up to 16 SAS/SATA devices without expander (the configuration for up to 4 x4 NVMe drives requires 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)					
internal RAID controllers for SAS, SATA HDD or SSD drives					
PRAID EP640i RAID LP	4GB Cache	RAID 0,1,10,5,50,6,60	3x	PYBSR4C63L	PY-SR4C63
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3908					
PRAID EP680i RAID LP	8GB Cache	RAID 0,1,10,5,50,6,60	2x	PYBSR4C6L	PY-SR4C6
For PY-SR4C6, to support SAS SSD, Firmware 52.15.0-4112 or later is required. PYBSR4C6L is shipped with the required Firmware 16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 16 SAS/SATA devices without expander (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6L and PYBSR4C62L 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 / EP6xx in rear PCIe slot:	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 NVMe RAID controller with 2nd Level cache 4GB, 8GB

internal drive RAID / SAS controllers for NVMe and SAS, SATA HDD or SSD drives					
PRAID EP540i RAID NVMe LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E224	S26361-F4042-L514
PRAID EP580i RAID NVMe LP	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E228	S26361-F4042-L508
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3516, for Chassis Variant PYR2546R2N, PYR2546RCN and PYR2546RFN up to 4 x4 NVMe devices are supported. (the configuration for SAS/SATA only requires 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 explicite ordering and cabling)					
PRAID EP680i RAID NVMe LP	8GB Cache	RAID 0,1,10,5,50,6,60	1x	PYBSR4C62L	PY-SR4C6
For PY-SR4C6, to support NVMe devices, Firmware 52.15.0-4045 or later is required. PYBSR4C62L is shipped with the required Firmware 16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3916, for Chassis Variant PYR2546R2N, PYR2546RCN and PYR2546RFN up to 4 x4 NVMe devices are supported. (the configuration for SAS/SATA only requires a different order number, please see above) includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6L and PYBSR4C62L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					

internal RAID controllers for SAS, SATA HDD or SSD drives -Cancelled-					
PRAID EP 3252-8i LP	2GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	3x	PYBSR4MA1L	PY-SR4MA1
PRAID EP 3254-8i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	3x	PYBSR4MA2L	PY-SR4MA2
8 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot					
PRAID EP 3258-16i LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	2x	PYBSR4MA3L	PY-SR4MA3
16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) requires 1x LP PCIe 4.0 x8 (int.) slot (FYI: PYBSR4MA3L and PYBSR4MA4L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
optional Flash Backup Unit (FBU)					
FBU Option for PRAID EP325x in internal RAID slot: Supercap securing the power supply of the RAID controller in case of power failure including cable with 80cm length.			1x	PYBFBM013	PY-FBM01
FBU Option for PRAID EP325x in rear PCIe Slot: Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length.			2x	PYBFBM012	PY-FBM01

internal RAID controllers for PCIe SSD drives -Cancelled-					
PRAID EP 3258-16i NVMe LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	PYBSR4MA4L	PY-SR4MA3
for Chassis Variant PYR2546R2N, PYR2546RCN and PYR2546RFN up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above) requires 1x LP PCIe 4.0 x8 (int.) slot (FYI: PYBSR4MA3L and PYBSR4MA4L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
optional Flash Backup Unit (FBU)					
FBU Option for PRAID EP325x in rear PCIe Slot#6: Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length.			1x	PYBFBM012	PY-FBM01

- PSAS CP 2100-8i and PSAS CP503i for LTO / CP600i for LTO / CP503i / CP600i / PRAID CP500i / CP600i / EP520i / EP540i / EP540i NVMe / EP580i / EP580i NVMe / EP640i / EP680i / EP680i NVMe cannot be mixed
- PSAS CP 2100-8i for LTO and PSAS CP503i / CP600i cannot be mixed
- FBU cannot be combined with Advanced Thermal design. up to 2x FBU can be integrated per System
- Expander configurations: Use PRAID EPxxi for optimal performance
- Cable kit for upgrade cards: For upgrade of L-parts RAID/HBA controller card, L-parts Cable kit is required.
Cable Kit for EP5xxi/CP5xxi: PY-CBS081
Cable Kit for EP6xxi/CP6xxi: PY-CBS082
- PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i and PSAS CP503i / CP600i / PRAID CP500i / CP600i / EP520i / EP540i / EP540i NVMe / EP580i / EP580i NVMe / EP640i / EP680i / EP680i NVMe cannot be mixed
- PRAID EP 3258-16i NVMe and PSAS CP503i / CP600i / PRAID CP500i / CP600i / EP520i / EP540i / EP580i / EP640i / EP680i cannot be mixed

G

external SAS controller

external HBA controllers for SAS HDD or SSD drives

PSAS CP500e HBA SAS Contr. FH	No Cache	HBA, no RAID	2x	PYBSC3FBE	PY-SC3FBE
PSAS CP500e HBA SAS Contr. LP	No Cache	HBA, no RAID	2x	PYBSC3FBEL	
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD) requires 1x FH or LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					
external HBA controllers for SAS HDD or SSD drives					
PSAS CP600e FH	No Cache	HBA, no RAID	2x	PYBSC4FAE	PY-SC4FAE
PSAS CP600e LP	No Cache	HBA, no RAID	2x	PYBSC4FAEL	
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 4x SFF8644 (external Mini-SAS HD) requires 1x FH or LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3816					

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	
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD) includes Fastpath and SafeStore Advanced SW-Licence requires 1x FH or LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP680e RAID Contr. FH	8GB Cache	RAID 0,1,10,5,50,6,60	2x	PYBSR4C6E	PY-SR4C6E
PRAID EP680e RAID Contr. LP	8GB Cache	RAID 0,1,10,5,50,6,60	2x	PYBSR4C6EL	
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD) includes Fastpath and SafeStore Advanced SW-Licence requires 1x FH or LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916					
optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included					
FBU Option for PRAID EP5xx / EP6xx:	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 controller for PCIe SSD SFF (2,5" NVMe SSD), no HW-RAID

VMD feature is not supported on VMware ESXi. In the BIOS Setup Utility, [Configuration] menu - [VMD Configuration] cannot be "Enabled".
VMD feature supports up to 48x drives. In case more than 48x drives are installed, [VMD Configuration] needs to be "Disabled" in the BIOS Setup Utility.

internal controller for PCIe SSD SFF (2,5" NVMe SSD)

PCIe 4.0	Intel CPU	No Cache	No HW-RAID	-	onboard, included
optional Licence Activation Key for Intel VROC (VMD NVMe RAID)					
Intel VROC Upgrade Key Premium	Intel CPU	No Cache	SW-RAID 0, 1, 10, 5	1x	PYBRLVR02 PY-RLVR02

Retimer card for 2,5" NVMe SSD PCIe SSD SFF (2,5" NVMe PCIe) in rear bay.

PCIe x16 Retimer	No Cache	No HW-RAID	2x	PYBPC404L	PY-PC404L
No HW RAID, No Cache, simple route-through; device management by INTEL VMD divides PCIe4.0 x16 lanes into 4x x4 lanes, supports up to 4x 2.5" PCIe-SSD SFF requires 1x LP PCIe 4.0 x16 (int.) slot. 1st card in PCIe slot 8, 2nd card in PCIe slot 2. requires 2nd CPU. 1x Retimer configuration requires at least 1x PCIe SSD, 2x Retimer configuration requires at least 5x PCIe SSDs.					

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!

H
Config with 1x 9.5mm bay



S26361-F3778-E1 S26361-F3778-L1 DVD-RW supermulti ultra slim all formats, DUAL/DL, DVD-RAM only W2K, W3K and Linux 9.5mm, black bezel max. 1x per system	S26361-F3641-E6 S26361-F3641-L6 Blu-ray Triple Writer ultra slim 6x BD-RW, 8x DVD, 24x CD, BD DL and all CD/DVD formats 9.5mm, black bezel max. 1x per system	S26361-F3718-E2 S26361-F3718-L2 DVD-ROM ultra slim 16x DVD; 48x CD-ROM 9.5mm black bezel max. 1x per system
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Chapter 9 - backup drives

RX2540 M6 offers 1.6" bay for accessible drive for basic units with 8x or 16x 2.5" HDD only!

K
Config with min. 1x free 1.6" bay



S26361-F5789-E1 S26361-F5789-L1
LTO 8 tape drive (w/o tape)
LTO8, 12TB, 300MB/s, SAS 2.0, incl. cleaning cartridge & cable.
occupies 1.6 * 5.25", black bezel
max. 1x per system

PYBLT911 PY-LT911
LTO 9 tape drive (w/o tape)
LTO9, 18TB, 300MB/s, SAS 3.0, incl. cleaning cartridge & cable.
occupies 1.6 * 5.25", black bezel
max. 1x per system

S26361-F5606-E1 S26361-F5606-L1
LTO 7 tape drive (w/o tape)
LTO7, 6TB, 300MB/s, SAS 2.0, incl. cleaning cartridge & cable.
occupies 1.6 * 5.25", black bezel
max. 1x per system

PYBSC3FB1L PY-SC3FB
PSAS CP503i HBA SAS Controller based on LSI SAS3408
Windows 2016/2019 support: Driver PSAS CP50x 2.61.29.00 or later is
requires 1x LP PCIe 3.0 x8
max. 1x per system for LTO drives

PYBSC4FA2L PY-SC4FA
PSAS CP600i LP for LTO
SAS HBA Controller
requires 1x LP PCIe 4.0 x8
max. 1x per system for LTO drives

PYBSC3MA4L -Cancelled-
-
PSAS CP 2100-8i LP for LTO
SAS HBA Controller
requires 1x LP PCIe 3.0 x8
max. 1x per system for LTO drives

S26361-F3750-E4 S26361-F3750-L4
RDX Drive cage (w/o cartriges)
RDX Drive cage for various RDX cartridges (cartr. not included)
connected to USB3.0 onboard
1.6 * 5.25", black bezel
max. 1x per system

Cartridge	Order Code
RDX Cartridge 500GB	S26361-F3857-L500
RDX Cartridge 1TB	S26361-F3857-L600
RDX Cartridge 2TB	S26361-F3857-L700
RDX Cartridge 4TB	S26361-F3857-L900

L

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 SSD

SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Seagate Nytro3732 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS40NGA	PY-SS40NGA
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS80NGA	PY-SS80NGA
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS16NGA	PY-SS16NGA
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS40NGW	PY-SS40NGW
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS80NGW	PY-SS80NGW
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS16NGW	PY-SS16NGW

max. 30x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Seagate Nytro3532 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
800GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS80NPF	PY-SS80NPF
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS16NPF	PY-SS16NPF
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS32NPF	PY-SS32NPF
6.4TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS64NPF	PY-SS64NPF

max. 30x - depending on base unit & configuration

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Seagate Nytro3332 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
960GB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS96NNJ	PY-SS96NNJ
1.92TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS19NNH	PY-SS19NNH
3.84TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS38NNH	PY-SS38NNH
7.68TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS76NNH	PY-SS76NNH
15.36TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS15NNG	PY-SS15NNG

max. 30x - depending on base unit & configuration

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Kioxia PM7 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
7.68TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		PYBSS76NNM	PY-SS76NNM
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		PYBSS15NNL	PY-SS15NNL
7.68TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	PYBSS76NNN	PY-SS76NNN
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	PYBSS15NNM	PY-SS15NNM

max. 24x - depending on base unit & configuration. **this SSD is not available in Rear Bay**

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray (EOL)							
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. 30x - depending on base unit & configuration

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

max. 30x - depending on base unit & configuration

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM897 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		PYBSS48NKQ	PY-SS48NKQ
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		PYBSS96NKQ	PY-SS96NKQ
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		PYBSS19NKQ	PY-SS19NKQ
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3		PYBSS38NKQ	PY-SS38NKQ

max. 30x - depending on base unit & configuration

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

max. 30x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray (EOL) EMEA only							
based on Samsung PM883 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E240	S26361-F5802-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E480	S26361-F5802-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E960	S26361-F5802-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E192	S26361-F5802-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E384	S26361-F5802-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5802-E768	S26361-F5802-L768

max. 30x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM893 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS24NMD	PY-SS24NMD
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS48NMD	PY-SS48NMD
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS96NMD	PY-SS96NMD
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS19NMD	PY-SS19NMD
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS38NMD	PY-SS38NMD
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0		PYBSS76NMD	PY-SS76NMD

max. 30x - depending on base unit & configuration

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2.5" (SFF) Hard drives

EOL, as long as stock available

HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray						
Capacity	RPM	Interface	Sector		order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n		S26361-F5727-E530	S26361-F5727-L530
600GB	15 000	SAS 12Gb/s	512n		S26361-F5727-E560	S26361-F5727-L560
900GB	15 000	SAS 12Gb/s	512n		S26361-F5531-E590	S26361-F5531-L590

max. 30x - 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
600GB	10 000	SAS 12Gb/s	512n	[EOL]	PYBSH601EB	PY-SH601EB
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
1.2TB	10 000	SAS 12Gb/s	512n	[EOL]	PYBSH121EB	PY-SH121EB
300GB	10 000	SAS 12Gb/s	512n	SED	PYBSH301EU	PY-SH301EU
600GB	10 000	SAS 12Gb/s	512n	SED	PYBSH601EU	PY-SH601EU
600GB	10 000	SAS 12Gb/s	512n	SED [EOL]	PYBSH601EV	PY-SH601EV
1.2TB	10 000	SAS 12Gb/s	512n	SED	PYBSH121EU	PY-SH121EU
1.2TB	10 000	SAS 12Gb/s	512n	SED [EOL]	PYBSH121EV	PY-SH121EV

max. 30x - 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
900GB	10 000	SAS 12Gb/s	512e		S26361-F5730-E190	S26361-F5730-L190
1.8TB	10 000	SAS 12Gb/s	512e		S26361-F5730-E118	S26361-F5730-L118
1.8TB	10 000	SAS 12Gb/s	512e		PYBSH181D8	PY-SH181D8
2.4TB	10 000	SAS 12Gb/s	512e		S26361-F5543-E124	S26361-F5543-L124
2.4TB	10 000	SAS 12Gb/s	512e		PYBSH241D8	PY-SH241D8
1.8TB	10 000	SAS 12Gb/s	512e	SED	PYBSH181DU	PY-SH181DU
1.8TB	10 000	SAS 12Gb/s	512e	SED	PYBSH181DV	PY-SH181DV
2.4TB	10 000	SAS 12Gb/s	512e	SED	S26361-F5582-E124	S26361-F5582-L124
2.4TB	10 000	SAS 12Gb/s	512e	SED	PYBSH241DV	PY-SH241DV

max. 30x - depending on base unit & configuration

EOL, as long as stock available

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. 30x - depending on base unit & configuration

EOL, as long as stock available

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. 30x - 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 Seagate Nytro3732 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		PYBTS40NG9	PY-TS40NG9
800GB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		PYBTS80NG9	PY-TS80NG9
1.6TB	3.5" (LFF)	SAS 12Gb/s	Write Intensive	10		PYBTS16NG9	PY-TS16NG9

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 Seagate Nytro3532 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
800GB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		PYBTS80NPF	PY-TS80NPF
1.6TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		PYBTS16NPF	PY-TS16NPF
3.2TB	3.5" (LFF)	SAS 12Gb/s	Mixed Use	3		PYBTS32NPF	PY-TS32NPF

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 Seagate Nytro3532 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
960GB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		PYBTS96NNE	PY-TS96NNE
1.92TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		PYBTS19NNE	PY-TS19NNE
3.84TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		PYBTS38NNE	PY-TS38NNE
7.68TB	3.5" (LFF)	SAS 12Gb/s	Read Intensive	1		PYBTS76NNE	PY-TS76NNE

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 Kioxia PM7 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
7.68TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1		PYBTS76NNJ	PY-TS76NNJ
15.36TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1		PYBTS15NN	PY-TS15NN
7.68TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	PYBTS76NNK	PY-TS76NNK
15.36TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	PYBTS15NN2	PY-TS15NN2

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 [EOL]							
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" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray							
based on Micron 5300 MAX drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E240	S26361-F5775-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E480	S26361-F5775-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E960	S26361-F5775-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E192	S26361-F5775-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,5		S26361-F5775-E384	S26361-F5775-L384

max. 12x - depending on base unit & configuration

SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray							
based on Samsung PM897 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS48NK8	PY-TS48NK8
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS96NK8	PY-TS96NK8
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS19NK8	PY-TS19NK8
3.84TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS38NK8	PY-TS38NK8

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 5300 PRO drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5782-E240	S26361-F5782-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5782-E480	S26361-F5782-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5782-E960	S26361-F5782-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		S26361-F5782-E192	S26361-F5782-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,2		S26361-F5782-E384	S26361-F5782-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,6		S26361-F5782-E768	S26361-F5782-L768

max. 12x - depending on base unit & configuration

EMEA only

SSD SATA 3.5" Read Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray [EOL]							
based on Samsung PM883 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E240	S26361-F5801-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E480	S26361-F5801-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E960	S26361-F5801-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E192	S26361-F5801-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E384	S26361-F5801-L384
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,7		S26361-F5801-E768	S26361-F5801-L768

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 Samsung PM893 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS24NM9	PY-TS24NM9
480GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS48NM9	PY-TS48NM9
960GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS96NM9	PY-TS96NM9
1.92TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS19NM9	PY-TS19NM9
3.84TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS38NM9	PY-TS38NM9
7.68TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0		PYBTS76NM9	PY-TS76NM9

max. 12x - depending on base unit & configuration

3.5" (LFF) Hard drives

EOL, as long as stock available

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
600GB	10 000	SAS 12Gb/s	512n	[EOL]	PYBTH601E7	PY-TH601E7
1.2TB	10 000	SAS 12Gb/s	512n		S26361-F5728-E112	S26361-F5728-L112
1.2TB	10 000	SAS 12Gb/s	512n	[EOL]	PYBTH121E7	PY-TH121E7

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
1.8TB	10 000	SAS 12Gb/s	512e		PYBTH181D7	PY-TH181D7
2.4TB	10 000	SAS 12Gb/s	512e		S26361-F5569-E124	S26361-F5569-L124
2.4TB	10 000	SAS 12Gb/s	512e		PYBTH241D7	PY-TH241D7

max. 12x - depending on base unit & configuration

EOL, as long as stock available

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
2TB	7 200	SAS 12Gb/s	512n		PYBCH2T7G4	PY-CH2T7G4
4TB	7 200	SAS 12Gb/s	512n		PYBCH4T7G4	PY-CH4T7G4

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		PYBCH6T7B9	PY-CH6T7B9
8TB	7 200	SAS 12Gb/s	512e		S26361-F5635-E800	S26361-F5635-L800
12TB	7 200	SAS 12Gb/s	512e		PYBCHCT7B7	PY-CHCT7B7
12TB	7 200	SAS 12Gb/s	512e	[EOL]	PYBCHCT7B6	PY-CHCT7B6
14TB	7 200	SAS 12Gb/s	512e		PYBCHET7B6	PY-CHET7B6
16TB	7 200	SAS 12Gb/s	512e		S26361-F5571-E160	S26361-F5571-L160
18TB	7 200	SAS 12Gb/s	512e		PYBCHJT7B2	PY-CHJT7B2
6TB	7 200	SAS 12Gb/s	512e	SED	PYBCH6T7BU	PY-CH6T7BU
8TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5584-E800	S26361-F5584-L800
12TB	7 200	SAS 12Gb/s	512e	SED	PYBCHCT7BW	PY-CHCT7BW
12TB	7 200	SAS 12Gb/s	512e	SED [EOL]	PYBCHCT7BV	PY-CHCT7BV
14TB	7 200	SAS 12Gb/s	512e	SED	PYBCHET7BV	PY-CHET7BV
16TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5624-E160	S26361-F5624-L160
18TB	7 200	SAS 12Gb/s	512e	SED	PYBCHJT7BT	PY-CHJT7BT

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		PYBBH1T7B9	PY-BH1T7B9
2TB	7 200	SATA 6Gb/s	512n		PYBBH2T7B9	PY-BH2T7B9
4TB	7 200	SATA 6Gb/s	512n		PYBBH4T7B9	PY-BH4T7B9

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		PYBBH6T7E9	PY-BH6T7E9
8TB	7 200	SATA 6Gb/s	512e		S26361-F5638-E800	S26361-F5638-L800
12TB	7 200	SATA 6Gb/s	512e		PYBBHCT7E4	PY-BHCT7E4
14TB	7 200	SATA 6Gb/s	512e		PYBBHET7E4	PY-BHET7E4
16TB	7 200	SAS 12Gb/s	512e		S26361-F3904-E160	S26361-F3904-L160
18TB	7 200	SAS 12Gb/s	512e		PYBBHJT7E2	PY-BHJT7E2

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	1,5	Boot	S26361-F5816-E240	S26361-F5816-L240

M.2 drive is designed for use as a VMware ESXi boot drive.
 2x M.2 drive for any Hypervisor by the onboard chipset Software RAID is not supported.
 max. 1x per Server; in case M.2 drive is installed in connector located on Motherboard (please see folder "description"), VMware ESXi is only supported.
 2x M.2 drives required; in case M.2 drives are used with PDUAL CP100 or CP300.

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

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

Capacity	Formfactor	Interface	DWPD	Category	order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s	1,5	Boot	S26361-F5787-E240	S26361-F5787-L240
480GB	M.2	SATA 6Gb/s	1,5	Boot	S26361-F5787-E480	S26361-F5787-L480
960GB	M.2 2280	SATA 6Gb/s	1,5	Boot	PYBMF96YN	PY-MF96YN

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; in case M.2 drive is installed in connector located on Motherboard (Port1: 2242 or 2280; Port2: 2280 or 22110). VMware is not supported.
 2x M.2 drives required; in case M.2 drives are used with PDUAL CP100 or CP300.

Dual M.2

Dual microSD, PDUAL CP100, PDUAL CP300 and M.2 drive on Motherboard cannot be mixed

PDUAL CP100, 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	PYBDMCP24L	PY-DMCP24

PDUAL CP100 is a carrier 2x M.2 SATA modules and offers RAID1 with 2x M.2 modules.
 PDUAL CP100 is designed for use as a Hardware-mirrored (RAID1) boot device for Hypervisor, which cannot be supported by M.2 via the onboard chipset Software RAID.
 Supported RAID level : RAID1 only, 2x M.2 modules need to be ordered separately.
 Supported M.2 Modules : SSD SATA M.2 240GB/480GB, and 240GB for VMware ESXi. (S26361-F5787- E240/L240/E480/L480 or S26361-F5816-E240/L240)
 Windows 2022 support:
 For PY-DMCP24, Firmware Package 2.3.21.2009 or later is required. PYBDMCP24L is shipped with the required Firmware Package
 To manage the CP100 in Windows 2022, iRMC 3.39P or later is required
 max. 1x per Server, requires 2x SSD SATA M.2 drives.

RAID PRESET option

Component	order code E-part	order code L-part
pre-config. RAID1 Array for M.2 in PDUAL	S26361-F5659-E13	-

This option allows pre-configuration of 2x M.2 modules to a RAID1 Array with PDUAL CP100 ex factory.
 max. 1x per Server, requires 1x PDUAL CP100.

PDUAL CP100, PDUAL CP300 and M.2 drive on Motherboard cannot be mixed

PDUAL CP300, dual M.2 for booting, non hot-plug -Cancelled-

Capacity	Formfactor	Interface	Category	order code E-part	order code L-part
n/a	AIC	PCIe	Boot LP	PYBDMCP35L	PY-DMCP35

PDUAL CP300 is a carrier of 2x SSD SATA M.2 drives, which offers RAID1 with the 2x SSD M.2 drives.
 PDUAL CP300 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 levels : RAID1 and 0 (optional), 2x same type of SSD M.2 drives need to be ordered separately.
 Supported M.2 drives : SSD SATA M.2 240GB/480GB/960GB or 240GB for VMware ESXi. (S26361-F5787- E240/L240/E480/L480, PY*MF96YN or S26361-F5816-E240/L240)
 max. 1x per Server, requires 2x SSD 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 -EOL-

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

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

2.5" (SFF) PCIe-SSD

2.5" PCIe-SSDs are either connected directly via onboard connector or indirectly via RAID Controller card
 *hot plug support : supported with VMD excluding VMware
 VMware ESXi 7.0 can support the Native PCI hotplug with non VMD

PCIe-SSD 2.5" P5800X (SFF) Enterprise with hot plug/hot replace tray							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	2.5" (SFF)	PCIe4.0 x4	Write Intensive	100		PYBBS40PF	PY-BS40PF
800GB	2.5" (SFF)	PCIe4.0 x4	Write Intensive	100		PYBBS80PF	PY-BS80PF
1.6TB	2.5" (SFF)	PCIe4.0 x4	Write Intensive	100		PYBBS16PF	PY-BS16PF

max. 30x - depending on base unit & configuration

EOL, as long as stock 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	Write Intensive	30		S26361-F5719-E750	S26361-F5719-L750

max. 30x - depending on base unit & configuration

limitation : can not support VMD / VROC

PCIe-SSD 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray based on Kioxia CM7-V drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		PYBBS16PDB	PY-BS16PDB
3.2TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		PYBBS32PDB	PY-BS32PDB
6.4TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		PYBBS64PDB	PY-BS64PDB
12.8TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		PYBBS12PDB	PY-BS12PDB

max. 30x - depending on base unit & configuration

PCIe-SSD 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray based on Kioxia CM6-V drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS16PD6	PY-BS16PD6
3.2TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS32PD6	PY-BS32PD6
6.4TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS64PD6	PY-BS64PD6
12.8TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS12PD6	PY-BS12PD6

max. 30x - depending on base unit & configuration

PCIe-SSD 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray [EOL] as long as stock available 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. 30x - depending on base unit & configuration

limitation : can not support VMD / VROC

PCIe-SSD 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray based on Kioxia CM7-R drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.92TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		PYBBS19PEA	PY-BS19PEA
3.84TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		PYBBS38PEA	PY-BS38PEA
7.68TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		PYBBS76PEA	PY-BS76PEA
15.36TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		PYBBS15PEB	PY-BS15PEB

max. 30x - depending on base unit & configuration

PCIe-SSD 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray based on Kioxia CM6-R drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
960GB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS96PE6	PY-BS96PE6
1.92TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS19PE6	PY-BS19PE6
3.84TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS38PE6	PY-BS38PE6
7.68TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS76PE6	PY-BS76PE6
15.36TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS15PE6	PY-BS15PE6

max. 30x - depending on base unit & configuration

PCIe-SSD Low Power 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray* [EOL] as long as stock available 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. 30x - depending on base unit & configuration

EDSFF SSD

EDSFF PCIe-SSDs are not connected via RAID Controller card
 PYBE140PE/PY-E140PE support the WindowsServer 2016 with VMD=enable setting

EOL, as long as stock available

PCIe-SSD E1.S Read Intensive (SFF) Enterprise with hot plug/hot replace tray based on Intel DC P4511 drives							
Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
4TB	E1.S	PCIe3.0 x4	Read Intensive	0,46		PYBE140PE	PY-E140PE

max. 64x - depending on base unit & configuration

AIC PCIe-SSD

P

Chapter 11 - LAN Components

OCPv3 LoM Adapter

Refer to Thermal Rule for thermal restriction

Broadcom 1GbE BASE-T for OCPv3

PLAN CP N41T 4X 1000BASE-T OCPv3 PT	1x	Broadcom, 1GTx4port	PYBLA284U	PY-LA284U
max. 1 adapters per system				

Intel 1GbE BASE-T for OCPv3

PLAN CP I350-T4 4X 1000BASE-T OCPv3 PT	1x	Intel, 1GTx4port *WoL cannot be supported.	PYBLA274U	PY-LA274U
max. 1 adapters per system				

Broadcom 10GbE BASE-T for OCPv3

PLAN EP N210TP 2X 10GBASE-T OCPv3 PT	1x	Broadcom, 10GTx2port	PYBLA3K2U	PY-LA3K2U
max. 1 adapters per system				

Intel 10GbE BASE-T for OCPv3

PLAN EP X710-T2L 2X 10GBASE-T OCPv3 PT	1x	Intel, 10GTx2port	PYBLA342U	PY-LA342U
PLAN EP X710-T4L 4X 10GBASE-T OCPv3 PT	1x	Intel, 10GTx4port	PYBLA344U	PY-LA344U
max. 1 adapters per system				

Broadcom 10GbE for OCPv3

Each cage consumes 1x optical SFP+ transceiver per port.
Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.
All ports on this card need to install the same Parts Number of optical module.

PLAN EP N210P 2X 10G SFP+ OCPv3 PT	1x	Broadcom, 10Gx2port	PYBLA3J2U	PY-LA3J2U
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Optional, 10Gb SFP+ optical transceiver module, select one per cage

SFP+ Optical Transceiver 10G Single Rate SR	2x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				

max. 1 adapters per system

Intel 10GbE for OCPv3

Each cage consumes 1x optical SFP+ transceiver per port.
Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.
All ports on this card need to install the same Parts Number of optical module.

PLAN EP X710-DA2 2X 10G SFP+ OCPv3 PT	1x	Intel, 10Gx2port	PYBLA352U	PY-LA352U
PLAN EP X710-DA4 4X 10G SFP+ OCPv3 PT	1x	Intel, 10Gx4port	PYBLA354U	PY-LA354U

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

SFP+ Optical Transceiver 10G Single Rate SR	4x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	4x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	4x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				

max. 1 adapters per system

Intel 25GbE for OCPv3				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. Intel adapters support 1Gbps line rate per-port in addition, with the Intel-branded 10G/1G Dual Rate SFP+ Optical Transceiver Modules. All ports on this card need to install the same Parts Number of optical module. 10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN EP E810-XXVDA2 2X 25G SFP28 OCPv3 PT	1x	Intel, 25Gx2port *AOC and 10G SFP cannot be supported.	PYBLA402U	PY-LA402U
PLAN EP E810-XXVDA4 4X 25G SFP28 OCPv3 PT	1x	Intel, 25Gx4port *AOC and 10G SFP cannot be supported.	PYBLA404U	PY-LA404U
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	4x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 25G LR E25GSFP28LRX LC	4x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09
<i>max. 1x per port</i>				
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+		S26361-F3986-L6 as soon as available
Optional, DAC cable				
Cisco 25G DAC SFP-H25G-CUxM (x:1,2,3,5)	4x	Test only and purchase from switch vendors.		
Mellanox 25G DAC MCP2M00-A0x (x:0A,01,1A,02,2A,03)	4x	Test only and purchase from switch vendors.		
Juniper 25G DAC JNP-SFP-25G-DAC-xM (x:1,3,5)	4x			E:JNPSFP-25GDACxML (x:
Cisco 100G to 25Gx4 Breakout DAC QSFP-4SFP25G-CU-xM (x:1,2,3,5)	4x	Test only and purchase from switch vendors.		
Cisco 10G DAC SFP-H10GB-CUxM (x:1,2,3,5,7,10)	4x	Test only and purchase from switch vendors.		
Brocade 10G DAC 10G-SFPP-TWX-0x01 (x:3,5)	4x	Test only and purchase from switch vendors.		
Juniper 10G DAC QFX-SFP-DAC-xML (x:1,3)	4x			E:QFX-SFP-DAC-xML (x:1,3
<i>max. 1x per port</i>				
<i>max. 1 adapters per system</i>				
Mellanox 25GbE for OCPv3				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. All ports on this card need to install the same Parts Number of optical module. 10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN EP MCX4-LX 2X 25G SFP28 OCPv3 PT	1x	Mellanox, 25Gx2port *cannot be selected with IB HCA 200Gb[S26361-F5756-L102/S26361-F5756-E102/PY-HC402/PYBHC402] *AOC and SFP cannot be supported.	PYBLA3F2U	PY-LA3F2U
Optional, DAC cable				
Cisco 25G DAC SFP-H25G-CUxM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.		
Mellanox 25G DAC MCP2M00-A0x (x:0A,01,1A,02,2A,03)	2x	Test only and purchase from switch vendors.		
Juniper 25G DAC JNP-SFP-25G-DAC-xM (x:1,3,5)	2x			E:JNPSFP-25GDACxML (x:
Cisco 100G to 25Gx4 Breakout DAC QSFP-4SFP25G-CU-xM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.		
Cisco 10G DAC SFP-H10GB-CUxM (x:1,2,3,5,7,10)	2x	Test only and purchase from switch vendors.		
Brocade 10G DAC 10G-SFPP-TWX-0x01 (x:3,5)	2x	Test only and purchase from switch vendors.		
Juniper 10G DAC QFX-SFP-DAC-xML (x:1,3)	2x			E:QFX-SFP-DAC-xML (x:1,3
<i>max. 1x per port</i>				
<i>max. 1 adapters per system</i>				
Intel 100GbE for OCPv3				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. The QSFP will not ship on the card because it will interfere with the shipping box. All ports on this card need to install the same Parts Number of optical module.				
PLAN EP E810-CQDA2 2X 100G QSFP28 OCPv3 PT	1x	Intel, 100Gx2port *AOC cannot be supported.	PYBLA432U	PY-LA432U
Optional, 100Gb QSFP28 Optical Transceiver module				
QSFP28 100G SR4 E100QSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54
QSFP28 100G LR4 FTLC1154RDPL LC *1	2x	II-VI, 100G LR4 QSFP28	PYBSFPL08	PY-SFPL08
<i>max. 1x per port</i>				
Optional, DAC cable				
Cisco 100G DAC QSFP-100G-CUxM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.		
Mellanox 100G DAC MCP1600-C0x (x:0A,01,1A,02,2A,03)	2x	Test only and purchase from switch vendors.		
<i>max. 1x per port</i>				
<i>max. 1 adapters per system</i>				

*1 CPU equal or more than 270W must NOT be used and max RAM size in a system must be up to 64GB when using this optics due to thermal restri

PCIe Adapter				
Broadcom 1GbE BEASE-T for PCIe				
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe FH	4x	Broadcom, 1GTx4port	PYBLA284	PY-LA284
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe LP	4x		PYBLA284L	
max. 4 adapters per system				
Intel 1GbE BEASE-T for PCIe				
PLAN CP 4x1Gbit Cu Intel I350-T4 FH	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				
Broadcom 10GbE BEASE-T for PCIe				
PLAN EP P210TP 2X 10GBASE-T PCIe FH	4x	Broadcom, 10GTx2port	PYBLA3K2	PY-LA3K2
PLAN EP P210TP 2X 10GBASE-T PCIe LP	4x		PYBLA3K2L	
max. 4x adapters per system				
Intel 10GbE BEASE-T for PCIe				
PLAN EP X710-T2L 2X 10GBASE-T FH	4x	Intel, 10GTx2port	PYBLA342	PY-LA342
PLAN EP X710-T2L 2X 10GBASE-T LP	4x		PYBLA342L	
PLAN EP X710-T4L 4X 10GBASE-T FH	4x	Intel, 10GTx4port	PYBLA344	PY-LA344
PLAN EP X710-T4L 4X 10GBASE-T LP	4x		PYBLA344L	
max. 4x adapters per system				
Broadcom 10GbE for PCIe				
Each cage consumes 1x optical SFP+ transceiver per port. Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules. All ports on this card need to install the same Parts Number of optical module.				
PLAN EP P210P 2x10Gb SFP PCIe FH	4x	Broadcom, 10Gx2port	PYBLA3J2	PY-LA3J2
PLAN EP P210P 2x10Gb SFP PCIe LP	4x		PYBLA3J2L	
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	2x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				
max. 4x adapters per system				
Intel 10GbE for PCIe				
Each cage consumes 1x optical SFP+ transceiver per port. Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules. All ports on this card need to install the same Parts Number of optical module.				
PLAN EP X710-DA2 2x10Gb SFP+ FH	4x	Intel, 10Gx2port	S26361-F3640-E2	S26361-F3640-L502
PLAN EP X710-DA2 2x10Gb SFP+ LP	4x		S26361-F3640-E202	
PLAN EP X710-DA4 4x10Gb SFP+ FH	4x	Intel, 10Gx4port	S26361-F3640-E4	S26361-F3640-L504
PLAN EP X710-DA4 4x10Gb SFP+ LP	4x		S26361-F3640-E204	
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	4x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	4x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	4x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				
max. 4x adapters per system				

Intel 25GbE for PCIe						
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. Intel adapters support 1Gbps line rate per-port in addition, with the Intel-branded 10G/1G Dual Rate SFP+ Optical Transceiver Modules. All ports on this card need to install the same Parts Number of optical module. 10G SFP BTO is not available for 25G cards, please select L parts.						
PLAN EP E810-XXVDA2 2X 25G SFP28 FH	4x	Intel, 25Gx2port	PYBLA402	PY-LA402		
PLAN EP E810-XXVDA2 2X 25G SFP28 LP	6x	*AOC and 10G SFP cannot be supported.	PYBLA402L			
PLAN EP E810-XXVDA4 4X 25G SFP28 LP	6x	Intel, 25Gx4port *AOC and 10G SFP cannot be supported.	PYBLA404L	PY-LA404		
Optional, 25Gb SFP28 optical transceiver module, select one per cage						
SFP28 25G SR E25GSFP28SRX LC	4x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56		
SFP28 25G LR E25GSFP28LRX LC	4x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09		
<i>max. 1x per port</i>						
Optional, DAC cable						
Cisco 25G DAC SFP-H25G-CUxM (x:1,2,3,5)	4x	Test only and purchase from switch vendors.	E:JNPSFP-25GDACxML (x:1,3)			
Mellanox 25G DAC MCP2M00-A0x (x:0A,01,1A,02,2A,03)	4x	Test only and purchase from switch vendors.				
Juniper 25G DAC JNP-SFP-25G-DAC-xM (x:1,3,5)	4x					
Cisco 100G to 25Gx4 Breakout DAC QSFP-4SFP25G-CU-xM (x:1,2,3,5)	4x	Test only and purchase from switch vendors.				
Cisco 10G DAC SFP-H10GB-CUxM (x:1,2,3,5,7,10)	4x	Test only and purchase from switch vendors.				
Brocade 10G DAC 10G-SFPP-TWX-0x01 (x:3,5)	4x	Test only and purchase from switch vendors.				
Juniper 10G DAC QFX-SFP-DAC-xML (x:1,3)	4x					
<i>max. 1x per port</i>						
max. 6x adapters per system						

Mellanox 25GbE for PCIe						
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. All ports on this card need to install the same Parts Number of optical module. 10G SFP BTO is not available for 25G cards, please select L parts.						
PLAN EP MCX4-LX 2X 25G SFP28 FH	4x	Mellanox, 25Gx2port *cannot be selected with IB HCA	S26361-F4054-E2	S26361-F4054-L502		
PLAN EP MCX4-LX 2X 25G SFP28 LP	6x	200Gb[S26361-F5756-L102/S26361-F5756-E102/PY-HC402/PYBHC402] *AOC and SFP cannot be supported.	S26361-F4054-E202			
Optional, DAC cable						
Cisco 25G DAC SFP-H25G-CUxM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.	E:JNPSFP-25GDACxML (x:1,3)			
Mellanox 25G DAC MCP2M00-A0x (x:0A,01,1A,02,2A,03)	2x	Test only and purchase from switch vendors.				
Juniper 25G DAC JNP-SFP-25G-DAC-xM (x:1,3,5)	2x					
Cisco 100G to 25Gx4 Breakout DAC QSFP-4SFP25G-CU-xM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.				
Cisco 10G DAC SFP-H10GB-CUxM (x:1,2,3,5,7,10)	2x	Test only and purchase from switch vendors.				
Brocade 10G DAC 10G-SFPP-TWX-0x01 (x:3,5)	2x	Test only and purchase from switch vendors.				
Juniper 10G DAC QFX-SFP-DAC-xML (x:1,3)	2x					
<i>max. 1x per port</i>						
max. 6x adapters per system						

Intel 100GbE for PCIe				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port. All ports on this card need to install the same Parts Number of optical module.				
PLAN EP E810-CQDA2 2X 100G QSFP28 LP	6x	Intel, 100Gx2port *AOC and QSFP cannot be supported.	PYBLA432L	PY-LA432
Optional, DAC cable				
Cisco 100G DAC QSFP-100G-CUxM (x:1,2,3,5)	2x	Test only and purchase from switch vendors.	E:QFX-SFP-DAC-xML (x:1,3)	
Mellanox 100G DAC MCP1600-C0x (x:0A,01,1A,02,2A,03)	2x	Test only and purchase from switch vendors.		
<i>max. 1x per port</i>				
max. 6x adapters 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 Low Profile bracket	2x	Intel QuickAssist Technology Adapter 8970 PCIe x16	S26361-F4062-E200	S26361-F4062-L500
Submitting a formal Release Request in order to activate shipment may apply for the time being to confirm with requestor: ships without drivers.				
<i>max. (tbd) adapters per system</i>				

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Chapter 12 - Fibre Channel Controller

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64G Fibre Channel adapters with LC interface for optical cables				
PFC EP LPe36000 1X 32GFC PCIe v4	4x	Broadcom, 64GFCx1port	PYBFC441	PY-FC441
PFC EP LPe36000 1X 32GFC PCIe v4 LP	6x		PYBFC441L	
PFC EP LPe36002 2X 32GFC PCIe v4	4x	Broadcom, 64GFCx2port	PYBFC442	PY-FC442
PFC EP LPe36002 2X 32GFC PCIe v4 LP	6x		PYBFC442L	
PFC EP QLE2870 1X 32GFC PCIe v4	4x	Marvell, 64GFCx1port	PYBFC431	PY-FC431
PFC EP QLE2870 1X 32GFC PCIe v4 LP	6x		PYBFC431L	
PFC EP QLE2872 2X 32GFC PCIe v4	4x	Marvell, 64GFCx2port	PYBFC432	PY-FC432
PFC EP QLE2872 2X 32GFC PCIe v4 LP	6x		PYBFC432L	
32G Fibre Channel adapters with LC interface for optical cables				
PFC EP LPe35000 1X 32GFC PCIe v4	4x	Broadcom, 32GFCx1port	PYBFC421	PY-FC421
PFC EP LPe35000 1X 32GFC PCIe v4 LP	6x		PYBFC421L	
PFC EP LPe35002 2X 32GFC PCIe v4	4x	Broadcom, 32GFCx2port	PYBFC422	PY-FC422
PFC EP LPe35002 2X 32GFC PCIe v4 LP	6x		PYBFC422L	
PFC EP QLE2770 1X 32GFC PCIe v4	4x	Marvell, 32GFCx1port	PYBFC411	PY-FC411
PFC EP QLE2770 1X 32GFC PCIe v4 LP	6x		PYBFC411L	
PFC EP QLE2772 2X 32GFC PCIe v4	4x	Marvell, 32GFCx2port	PYBFC412	PY-FC412
PFC EP QLE2772 2X 32GFC PCIe v4 LP	6x		PYBFC412L	
16G Fibre Channel adapters with LC interface for optical cables				
PFC EP LPe31000 1x 16Gb FH	4x	Broadcom, 16GFCx1port	S26361-F5596-E1	S26361-F5596-L501
PFC EP LPe31000 1x 16Gb LP	6x		S26361-F5596-E201	
PFC EP LPe31002 2x 16Gb FH	4x	Broadcom, 16GFCx2port	S26361-F5596-E2	S26361-F5596-L502
PFC EP LPe31002 2x 16Gb LP	6x		S26361-F5596-E202	
PFC EP QLE2690 1x 16Gb FH	4x	Marvell, 16GFCx1port	S26361-F5580-E1	S26361-F5580-L501
PFC EP QLE2690 1x 16Gb LP	6x		S26361-F5580-E201	
PFC EP QLE2692 2x 16Gb FH	4x	Marvell, 16GFCx2port	S26361-F5580-E2	S26361-F5580-L502
PFC EP QLE2692 2x 16Gb LP	6x		S26361-F5580-E202	

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

Chapter 13 - Infiniband Controllers

S26361-F5756-L102 S26361-F5756-E102 IB HCA 200Gb 1channel HDR 200Gbit 1channel Infiniband Controller HDR technology (8.0GT/s) with PCI short riser *cannot be selected with PLAN EP MCX4-LX 25Gb[S26361-F4054-L502/S26361-F4054-E2/S26361-F4054-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot besupported 1x Q-SFP+ connector PCIe Gen4 x16 LP Card, 170mm max. 2x per system	PY-HC402 PYBHC402 IB HCA 200Gb 2channel HDR 200Gbit 2channel Infiniband Controller HDR technology (8.0GT/s) *cannot be selected with PLAN EP MCX4-LX 25Gb[S26361-F4054-L502/S26361-F4054-E2/S26361-F4054-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot besupported 2x Q-SFP+ connector PCIe Gen4 x16 LP Card, 170mm max. 2x per system
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For loose delivery and in Rack customizing

Cables for Mellanox 200Gbit Controller: S26361-F5747-L671 MELLANOX COP. CABLE, 200GB/S, QSFP, LSZH, 1M S26361-F5747-L672 MELLANOX COP. CABLE, 200GB/S, QSFP, LSZH, 2M

S26361-F5724-L102 S26361-F5724-E102 IB HCA 100Gb 1channel HDR 100Gbit 1channel Infiniband Controller HDR technology (8.0GT/s) with PCI short riser *cannot be selected with PLAN EP MCX4-LX 25Gb[S26361-F4054-L502/S26361-F4054-E2/S26361-F4054-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot besupported 1x Q-SFP+ connector PCIe Gen4 x16 LP Card, 170mm max. 2x per system	S26361-F5724-L202 S26361-F5724-E202 IB HCA 100Gb 2channel HDR 100Gbit 2channel Infiniband Controller HDR technology (8.0GT/s) *cannot be selected with PLAN EP MCX4-LX 25Gb[S26361-F4054-L502/S26361-F4054-E2/S26361-F4054-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot besupported 2x Q-SFP+ connector PCIe Gen4 x16 LP Card, 170mm max. 2x per system
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For loose delivery and in Rack customizing

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

L

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

M

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

500W platinum PSU	94% eff.	Connector type: C13	PYBPU501	PY-PU501
500W titanium PSU	96% eff.	Connector type: C13, nom. 220-240V, max. 180-264V	PYBPU503	PY-PU503
900W platinum PSU	94% eff.	Connector type: C13	PYBPU902	PY-PU902
900W titanium PSU	96% eff.	Connector type: C13, nom. 220-240V, max. 180-264V	PYBPU901	PY-PU901
1600W platinum PSU	94% eff.	Connector type: C13	PYBPU163	PY-PU163
1600W titanium PSU	96% eff.	Connector type: C13, nom. 220-240V, max. 180-264V	PYBPU165	PY-PU165
2200W platinum PSU	94% eff.	Connector type: C19	PYBPU221	PY-PU221
2400W Titanium PSU	96% eff.	Connector type: C19, nom. 220-240V, max. 180-264V	PYBPU243	PY-PU243

DC PSU

1300W PSU DC	94% eff.	48V DC, powercode see below as soon as available	PYBPU131D	PY-PU131D
1600W PSU HVDC	94% eff.	380V DC, Connector type: Anderson Power Products Saf-D-Grid® Plug type APAC/JAPAN region only	PYBPU163D	PY-PU163D

Dummy module instead PSU

Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped, max. 1x per system			PYBDMPO3	
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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 as soon as available		PYBCBPDC4	PY-CBPDC4
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
Power cord 16A IEC320 C19->C20, 3.5m for 2200W PSU		S26361-F3151-E300	S26361-F3151-L300
Power cord IEC320 C19 -> US NEMA L6-20p, 4m for 2200W PSU		S26361-F3151-E500	S26361-F3151-L500
Power cord 16A IEC320 C19->CEE 7/7, 2.5m for 2200W PSU			S26361-F3151-L100
no power cord		T26139-Y3850-E10	

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 need to be included always into the order from EU and EFTA (Sales region for EMEA only)	S26361-F1452-E140	
Region Kit APAC/EMEA/India, Contains warranty sheet and safety instructions for APAC, EMEA and India	S26361-F1452-E100	
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	S26361-F1452-E130	
Region Kit China for CCC systems, Contains warranty sheet and safety instructions for China, need to be included always into the order from China country (Sales region for APAC only)	S26361-F1452-E101	
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 (Sales region for APAC only)	S26361-F1452-E130	

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

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 cord option	S26361-F3301-E123	

N

Chapter 15 - Accessories

N

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

USB Optical Disc Drive

External Ultra Slim Portable DVD Writer (Hitachi-LG)

S26341-F103-L142

O

Chapter 16 - Energy Star

O

as soon as available

as soon as available

S26361-F3301-E541
RX2540 Mx E-Star Fam1
Limits configuration in accordance with Energy Star requirements for systems with 1 CPU
max. 1x per system

S26361-F3301-E542
RX2540 Mx E-Star Fam2
Limits configuration in accordance with Energy Star requirements for systems with 2 CPU
max. 1x per system

1 CPU Variant
not allowed are: limitations for E-Star Fam1 certification

- 2 CPU configuration
- 8GB DIMM
- less than 4 DIMMs(min 4 is ok)
- DCPMM (Barlow Pass) Memory Modules
- EDSFF SSD(64x EDSFF base unit PYR2546R6N)
- Rear Bay option(PYBBA24S3/PYBBA22S4/PYBBA24PF/PYBBA22P2)
- more than 16x 2.5" HDD/SSD/PCIe SSD (max 16 is ok)
- Configuration Thermal Design 2.5"HDD(PYBETA3)
- more than 4x PCIe cards /OCPv3 cards (i.e. Raid, LAN, Fiberchannel, Infiniband card, ...)
- Graphics cards / GPGPU cards

2 CPU Variant
not allowed are: limitations for E-Star Fam2 certification

- 1 CPU configuration
- 8GB DIMM
- less than 8 DIMMs (min 8 is ok)
- DCPMM (Barlow Pass) Memory Modules
- EDSFF SSD(64x EDSFF base unit PYR2546R6N)
- Rear Bay option(PYBBA24S3/PYBBA22S4/PYBBA24PF/PYBBA22P2)
- more than 16x 2.5" HDD/SSD/PCIe SSD (max 16 is ok)
- Configuration Thermal Design 2.5"HDD(PYBETA3)
- more than 9x PCIe cards /OCPv3 cards (i.e. Raid, LAN, Fiberchannel, Infiniband card, ...)
- Graphics cards / GPGPU cards

ENERGY STAR-configurations with one CPU will be labeled:
ENERGY STAR-configurations with two CPU will be labeled:
non ENERGY STAR-configurationen will be labeled:

PRIMERGY RX2540 M6 E-Star Fam1
PRIMERGY RX2540 M6 E-Star Fam2
PRIMERGY RX2540 M6

P

Chapter 17 - ErP Lot 9 restriction

P

*Region kit Europe must be ordered for shipment to ship in EU and EFTA

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

Restriction for Erp Lot9 directive,

Not allowed: (For all base unit)
- 8GB DIMM

Not allowed : (For 24x2.5"NVMe base unit)
- 16GB/32GB DIMM
- more than 3x External RAID/SAS controller card
CP500e/EP540e/EP680e

Not allowed : (For 64x EDSFF base unit)
- 16GB, 32GB DIMM

ErP Lot9 Restriction for 16GB DIMM with 2.5"/3.5" base unit (w/o 24x 2.5" NVMe), 1x per System	
Erp Lot9 configuration 1	PYBETL1

ErP Lot9 Restriction for >=32GB DIMM with 2.5"/3.5" base unit (w/o 24x 2.5" NVMe), 1x per System	
ErP Lot 9 configuration 2	PYBETL2

Restriction for ErP Lot 9 directive,

Not allowed: (For 2.5"/3.5" base unit w/o 24x 2.5"NVMe)
- 32GB or greater DIMM
- 3 or more External RAID/SAS controller
CP500e/EP540e/EP680e
- 3x Internal RAID/SAS controller

Restriction for ErP Lot 9 directive,

Not allowed: (For 2.5"/3.5" base unit w/o 24x2.5"NVMe)
'- 16GB DIMM

Q

Chapter 18 - Thermal Rule

Q

For CPU group, refer to Chapter3- CPU

*-High-speed-network-card
MCX6-DX-PLAN-EP-MCX6-DX-2X-100G-QSFP28-LP(PYBLA412L)
2x200Gb-IB-IB-HCA-200Gb-2channel-HDR(PYBHC402)

3.5" base unit (not including GFX/GPU mount kit , NVIDIA 14/A2/L4/L400 High-speed-network-card*)

CPU	Memory Type	Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.		
		DDR4	DCPMM			10x3.5"	12x3.5"		PCIe	OCP
1CPU configuration w/o CPU dummy	CPU A 128GB LRDIMM, CPU B 8GB - 64GB	128GB	128GB	Front: 6	Front: 6	0	0	Level1-3	Tier1-7	35C
2CPU configuration, 1CPU configuration w/ CPU dummy***	CPU A 8GB - 256GB, CPU B 8GB - 256GB, CPU C 128GB	128GB - 512GB	128GB	Front: 6	Front: 6	0	0	Level1-3	Tier1-7	35C
	CPU A 8GB - 256GB, CPU B 8GB - 256GB, CPU C 128GB	128GB	128GB	Front:6	Front: 6	0	0	Level1-6	Tier1-8	30C*
	CPU A 8GB - 256GB, CPU B 8GB - 256GB, CPU C 128GB	128GB - 512GB	128GB	Front:7-10**	Front: 7-12**	0	0	Level1-3	Tier1-5	35C
	CPU A 8GB - 256GB, CPU B 8GB - 256GB, CPU C 128GB	128GB	128GB	Front:7-10**	Front: 7-12**	0	0	Level1-4	Tier1-5	30C*

* Need to select Configuration Thermal Design 30°C(PYBETA1)
** Need to select Configuration Thermal Design 3.5"HDD(PYBETA2) for more than 6 drives.
*** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

Update 3.5" base unit (including Rear drive bay)

CPU	Memory Type	Front / Rear drive bay (Rear 4 pcs)		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP	Option Card		Ambient Temp.	
		DDR4	DCPMM			10x3.5"	12x3.5"		PCIe
1CPU configuration w/o CPU dummy	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
2CPU configuration, 1CPU configuration w/ CPU dummy***	CPU A 128G, CPU B 128G, CPU C 128G, CPU D Not support	Not support	Not support	Front : 6 Rear : 4	0	0	Level1-4	Tier1-5	30C*
	CPU A 128G, CPU B 128G, CPU C 128G, CPU D Not support	Not support	Not support	Front : 7-12** Rear : 4 pcs	0	0	Level1-4	Tier1-5	30C*

* Need to select Configuration Thermal Design 30°C(PYBETA1)
** Need to select Configuration Thermal Design 3.5"HDD(PYBETA2) for more than 6 drives.
*** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

3.5" base unit (including NVIDIA T4/A2/L4/T400 or High-speed-network-card*)

CPU	Memory Type	Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.			
		DDR4	DCPMM			10x3.5"	12x3.5"		PCIe	OCP	
1CPU configuration w/o CPU dummy	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.										
2CPU configuration, 1CPU configuration w/ CPU dummy**	CPU A 8GB -256GB, CPU B 8GB -256GB, CPU C 128GB	128GB	128GB	Front: 6	Front: 6	0	0	L4/A2: 1-4 T4: 1-6 T400: 1 MCX6-DX:1-6 2x200Gb-IB:1-2	Level1-6	Tier1-8	30C*
	CPU D	Not support.									

* Need to select Configuration Thermal Design 30°C(PYBETA1) only
** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

3.5" base unit (ATD40)

CPU	Memory Type	Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.		
		DDR4	DCPMM			10x3.5"	12x3.5"		PCIe	OCP
1CPU configuration w/o CPU dummy	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.									
2CPU configuration, 1CPU configuration w/ CPU dummy*	CPU A 8GB - 128GB, CPU B 128GB, CPU C Not support, CPU D Not support.	128GB	128GB	Front: 6	Front: 6	0	0	Level1-3	Tier1-5	40C

* Need to select CPU dummy(PYBDMC03) for 1CPU configuration

3.5" base unit (ATD45)

CPU		Memory Type		Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	10x3.5"	12x3.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
	CPU B									
	CPU C									
	CPU D									
2CPU configuration 1CPU configuration w/ CPU dummy *	CPU A	8GB - 64GB	Not support	Front: 6	Front: 6	0	0	Level1-2	Tier1-4	45C
	CPU B	Not support.								
	CPU C									
	CPU D									

* Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5"/3.5" base unit (including GFX/GPU mount kit)

CPU		Memory Type		Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	10x3.5"	16x2.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
	CPU B									
	CPU C									
	CPU D									
2CPU configuration, 1CPU configuration w/ CPU dummy **	CPU A	8GB - 64GB	128GB - 512GB	Front: 6	Front: 16	1-2	0	Level1-6	Tier1-8	30C*
	CPU B									
	CPU C									
	CPU D	Not support.								

** Need to select Configuration Thermal Design 30°C(PYBETA1)

*** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5" base unit (not including GFX/GPU mount kit , NVIDIA 14/A2/High-speed network-card*, Rear drive bay)

CPU		Memory Type		Front / Rear drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	16x2.5"	24x2.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A	128GB LRDIMM,	128GB	Front: 16	Front: 16	0	0	Level1-4	Tier1-8	35C
	CPU B	8GB - 64GB		Rear:0	Rear:0					
	CPU C									
	CPU D									
2CPU configuration, 1CPU configuration w/ CPU dummy ***	CPU A	128GB LRDIMM,	128GB		Front:17-24**	0	0	Level1-4	Tier1-8	35C
	CPU B	8GB - 64GB			Rear:0					
	CPU C									
	CPU D									
2CPU configuration, 1CPU configuration w/ CPU dummy ***	CPU A	8GB - 256GB	128GB - 512GB	Front: 16	Front: 16	0	0	Level1-4	Tier1-8	35C
	CPU B			Rear:0	Rear:0					
	CPU C	8GB - 128GB	128GB	Front: 16	Front: 16	0	0	Level1-6	Tier1-8	30C*
	CPU D			Rear:0	Rear:0					
2CPU configuration, 1CPU configuration w/ CPU dummy ***	CPU A	8GB - 256GB	128GB - 512GB		Front:17-24	0	0	Level1-4	Tier1-8	35C
	CPU B				Rear:0					
	CPU C									
	CPU D									
2CPU configuration, 1CPU configuration w/ CPU dummy ***	CPU A	8GB - 128GB	128GB		Front:17-24**	0	0	Level1-6	Tier1-8	30C*
	CPU B				Rear:0					
	CPU C									
	CPU D									

* Need to select Configuration Thermal Design 30°C(PYBETA1)

** Need to select Configuration Thermal Design 2.5"HDD(PYBETA3) more than 16 drives.

*** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5" base unit (including Rear drive bay)

CPU		Memory Type		Front / Rear drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	16x2.5"	24x2.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A CPU B CPU C CPU D	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
2CPU configuration, 1CPU configuration w/ CPU dummy **	CPU A CPU B CPU C CPU D	64GB RDIMM, 8GB - 32GB	128GB	Front: 16 Rear:1-6	Front: 24 Rear:1-6	0	0	Level1-5	Tier1-3	30C*

* Need to select Configuration Thermal Design 30°C(PYBETA1)

** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5" base unit (including NVIDIA 14/A2/L4/1400 High-speed network-card*)

CPU		Memory Type		Front / Rear drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	16x2.5"	24x2.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A CPU B CPU C CPU D	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
2CPU configuration, 1CPU configuration w/ CPU dummy **	CPU A CPU B CPU C CPU D	8GB - 64GB	128GB	Front: 16 Rear:0	Front: 24 Rear:0	0	L4/A2: 1-4 T4: 1-6 T400: 1 MCX6-DX:4-6 2x200Gb-IB:1-2	Level1-5	Tier1-3	30C*

* Need to select Configuration Thermal Design 30°C(PYBETA1)

** Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5" base unit (ATD40)

CPU		Memory Type		Front / Rear drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	16x2.5"	24x2.5"			PCIe	OCP	
1CPU configuration w/o CPU dummy	CPU A CPU B CPU C CPU D	Not support, Only 2CPU or 1CPU w/ CPU dummy configuration available.								
2CPU configuration, 1CPU configuration w/ CPU dummy *	CPU A CPU B CPU C CPU D	8GB - 128GB	128GB	Front: 16 Rear:0	Front: 16 Rear:0	0	0	Level1-3	Tier1-5	40C

* Need to select CPU dummy(PYBDMC03) for 1CPU configuration

2.5" base unit (ATD45)

CPU		Memory Type		Front drive bay		GFX/GPU Mount Kit (FH GPGPU)	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High-speed network-card	Option Card		Ambient Temp.
		DDR4	DCPMM	16x2.5"	24x2.5"			PCIe	OCP	
1CPU configuration	CPU A CPU B CPU C CPU D	Not support, Only 2CPU configuration available.								
2CPU configuration, 1CPU configuration w/ CPU dummy *	CPU A CPU B CPU C CPU D	8GB - 64GB	Not support	Front: 16	Front: 16	0	0	Level1-2	Tier1-4	45C

* Need to select CPU dummy(PYBDMC03) for 1CPU configuration

EDSFF base unit (not including NVIDIA T4/A2/High speed network card*)

CPU		Memory Type		Front drive bay	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High speed network card	Option Card		Ambient Temp.	
		DDR4	DCPMM	64xEDSFF		PCIe	OCP		
1CPU configuration	CPU A	128GB LRDIMM, 8GB - 64GB	128GB	Front: 32	0		Level1-4	Tier1-7	35C
	CPU B								
	CPU C								
	CPU E								
2CPU configuration	CPU A	8GB - 256GB	128GB - 512GB	Front: 32	0		Level1-4	Tier1-7	35C
	CPU B								
	CPU C								
	CPU E								
	CPU F								
	CPU A	128GB LRDIMM, 8GB - 64GB	128GB - 512GB	Front:33-64**	0		Level1-3	Tier1-7	35C
CPU B									
CPU C									
CPU E									

** Need to select Configuration Thermal Design EDSFF(PYBETA4) for more than 32 drives.

EDSFF base unit (including NVIDIA T4/A2/High speed network card*)

CPU		Memory Type		Front drive bay	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High speed network card	Option Card		Ambient Temp.
		DDR4	DCPMM	64xEDSFF		PCIe	OCP	
1CPU configuration	CPU A	Not support, only 2CPU configuration available.						
	CPU B							
	CPU C							
	CPU E							
	CPU F							
2CPU configuration	CPU A	8GB - 64GB	128GB	Front: 64	L4/A2: 1-4 T4: 1-6 T400: 1 MCX6-DX: 1-6 2x200Gb IB:1-2	Level1-5	Tier1-8	30C**
	CPU B							
	CPU C							
CPU E								
CPU F								

** Need to select Configuration Thermal Design 30°C(PYBETA1)

EDSFF base unit (ATD40)

CPU		Memory Type		Front drive bay	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High speed network card	Option Card		Ambient Temp.	
		DDR4	DCPMM	64xEDSFF		PCIe	OCP		
1CPU configuration	CPU A	Not support, only 2CPU configuration available.							
	CPU B								
	CPU C								
	CPU E								
	CPU F								
2CPU configuration	CPU A	8GB - 64GB	128GB	Front: 32	0		Level1-3	Tier1-5	40C
	CPU B								
	CPU C								
	CPU E								
	CPU F								

EDSFF base unit (ATD45)

CPU		Memory Type		Front drive bay	Nvidia T4 / A2 / L4 NVIDIA T400 4GB LP High speed network card	Option Card		Ambient Temp.	
		DDR4	DCPMM	64xEDSFF		PCIe	OCP		
1CPU configuration	CPU A	Not support, only 2CPU configuration available.							
	CPU B								
	CPU C								
	CPU E								
	CPU F								
2CPU configuration	CPU A	8GB - 32GB	Not support	Front: 32	0		Level1-2	Tier1-4	40C
	CPU B								
	CPU C								
	CPU E								
	CPU F								

R

Option card: PCIe Level for Thermal condition

Card		Product Number	PCIe Level
RAID/SAS	PSAS CP503i HBA SAS Contr.	PYBSC3FB1L / PYBSR3FBVL / PYBSC3FB1L	Level2
	PSAS CP 2100-8i LP	PYBSC3MA2L / PYBSC3MAVL	Level3
	PSAS CP 2100-8i LP for LTO	PYBSC3MA4L	Level3
	PRAID CP500i RAID Contr.	PYBSR3FB1L	Level2
	PRAID EP520i RAID Contr. LP	S26361-F4042-E202	Level3
	PRAID EP540i RAID LP	S26361-F4042-E214 / -E224	Level3
	PRAID EP580i RAID LP	S26361-F4042-E208 / -E228	Level3
	PSAS CP600i LP	PYBSC4F4L / PYBSC4FAVL	Level3
	PSAS CP600i LP for LTO	PYBSC4FA2L	Level3
	PRAID CP600i LP	PYBSR4F4L	Level3
	PRAID EP640i LP	PYBSR4C63L	Level3
	PRAID EP680i RAID LP	PYBSR4C6L / PYBSR4C62L	Level3
	PRAID EP3252-8i LP	PYBSR4MA1L	Level4
	PRAID EP3254-8i LP	PYBSR4MA2L	Level4
	PRAID EP3258-16i LP / NVMe LP	PYBSR4MA3L / PYBSR4MA4L	Level4
	PRAID CP500e RAID Contr. FH/LP	PYBSC3FBE / PYBSC3FBEL	Level2
	PRAID EP540e RAID Contr. FH/LP	S26361-F4063-E4 / -E204	Level3
	PSAS CP600e FH / LP	PYBSC4FAE / PYBSC4FAEL	Level3
	PRAID EP680e RAID Contr. FH/LP	PYBSR4C6E / PYBSR4C6EL	Level3
	LAN/FC/IB	PFC EP LPE31000 1X 16GB EMULEX	S26361-F5596-E1 / -E201
PFC EP LPE31002 2X 16GB EMULEX		S26361-F5596-E2 / -E202	Level3
PFC EP LPe35000 1X 32GFC PCIe v4 FH/LP		PYBFC421 / PYBFC421L	Level3
PFC EP LPe35002 2X 32GFC PCIe v4 FH/LP		PYBFC422 / PYBFC422L	Level3
PFC EP LPe36000 1X 32GFC PCIe v4 FH/LP		PYBFC441 / PYBFC441L	Level4
PFC EP LPe36002 2X 32GFC PCIe v4 FH/LP		PYBFC442 / PYBFC442L	Level4
PFC EP QLE2770 1X 32GFC PCIe v4 FH/LP		PYBFC411 / PYBFC411L	Level4
PFC EP QLE2772 2X 32GFC PCIe v4 FH/LP		PYBFC412 / PYBFC412L	Level4
PFC EP QLE2690 1x 16Gb FH/LP		S26361-F5580-E1 / -E201	Level3
PFC EP QLE2692 2x 16Gb FH/LP		S26361-F5580-E2 / -E202	Level3
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe FH/LP		PYBLA284 / PYBLA284L	Level1
PLAN EP P210P 2x10Gb SFP PCIe FH/LP		PYBLA3J2 / PYBLA3J2L	Level3
PLAN EP P210TP 2X 10GBASE-T PCIe FH/LP		PYBLA3K2 / PYBLA3K2L	Level5
PLAN CP 4x1Gbit Cu Intel I350-T4 FH		S26361-F4610-E4 / -E204	Level1
PLAN EP X710-T2L 2X 10GBASE-T FH/LP		PYBLA342 / PYBLA342L	Level2
PLAN EP X710-T4L 4X 10GBASE-T FH/LP		PYBLA344 / PYBLA344L	Level2
PLAN EP X710-DA2 2x10Gb SFP+ FH/LP		S26361-F3640-E2 / -E202	Level1
PLAN EP X710-DA4 4x10Gb SFP+ FH/LP		S26361-F3640-E4 / -E204	Level3
PLAN EP E810-XXVDA2 2X 25G SFP28 LP		PYBLA402L	Level2
PLAN EP E810-XXVDA4 4X 25G SFP28 LP		PYBLA404L	Level4
PLAN EP E810-CQDA2 2X 100G QSFP28 LP		PYBLA432L	Level4
PLAN EP MCX4-LX 2X 25G SFP28 FH/LP		S26361-F4054-E2 / -E202	Level4
PLAN EP MCX6-DX 2X 100G QSFP28 LP		PYBLA412L	Level6
IB HCA 200Gb 1channel HDR		S26361-F5756-E102	Level4
IB HCA 200Gb 2channel HDR		PYBHC402	Level5
IB HCA 100Gb 1channel HDR		S26361-F5724-E102	Level4
IB HCA 100Gb 2channel HDR		S26361-F5724-E202	Level4

Option card: OCP Tier for Thermal condition

Card		Product Number	PCIe Level
OCPv3	PLAN CP N41T 4X 1000BASE-T OCPv3	PYBLA284U	Tier2
	PLAN EP N210P 2X 10G SFP+ OCPv3	PYBLA3J2U	Tier2
	PLAN EP N210TP 2X 10GBASE-T OCPv3	PYBLA3K2U	Tier5
	PLAN CP I350-T4 4X 1000BASE-T OCPv3	PYBLA274U	Tier1
	PLAN EP X710-T2L 2X 10GBASE-T OCPv3	PYBLA342U	Tier2
	PLAN EP X710-T4L 4X 10GBASE-T OCPv3	PYBLA344U	Tier3
	PLAN EP X710-DA2 2X 10G SFP+ OCPv3	PYBLA352U	Tier1
	PLAN EP X710-DA2 2X 10G SFP+ OCPv3	PYBLA354U	Tier1
	PLAN EP E810-XXVDA2 2X 25G SFP28 OCPv3	PYBLA402U	Tier3
	PLAN EP E810-XXVDA4 4X 25G SFP28 OCPv3 P	PYBLA404U	Tier7
	PLAN EP E810-CQDA2 2X 100G QSFP28 OCPv3	PYBLA432U	Tier3
	PLAN EP MCX4-LX DA2 2X 25G SFP28 OCPv3	PYBLA3F2U	Tier3

S

Chapter 19 - others

S

S26361-F1790-E243
S26361-F1790-L244 (Sales region except for APAC)
S26361-F1790-L264 (Sales region for APAC only)
iRMC advanced pack
integrated remote Management controller activation key for graphical console redirection and remote media redirection
max. 1x per system

PYBLCM13
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)
PY-LCM13
options contains:
- Paper with TAN for Licensekey

will be available in CQ2'24

iRMC MicroSD card option			
Capacity	Interface	E-parts	L-parts
32GB	SDHC	--	PY-MD32R1
max. 1x per system, instead of 16GB MicroSD card			

Advanced Thermal design 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-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

PYBETA1
Configuration Thermal Design 30°C(CTD30)
Sets the PRIMERGY server to support temperatures of up to 30 ° C in operating mode for the configuration with thermal restriction. Refer to Thermal Rule
this setting can be activated ex factory only
max. 1x per system

Refer to Thermal Rule for the limitation with Advanced Thermal design for each base unit

PYBETA2
Configuration Thermal Design 3.5"HDD
Configuration Thermal Design 3.5"HDD is required for more than 6 front drives with 3.5" base unit. Refer to Thermal Rule
Only for EMEIA/APAC region
max. 1x per system

PYBETA3
Configuration Thermal Design 2.5"HDD
Configuration Thermal Design 3.5"HDD is required for more than 16 front drives with 24x2.5" base unit. Refer to Thermal Rule
Only for EMEIA/APAC region
max. 1x per system

PYBETA4
Configuration Thermal Design EDSFF
Configuration Thermal Design 3.5"HDD is required for more than 32 drives with 64xEDSFF base unit. Refer to Thermal Rule
Only for EMEIA/APAC region
max. 1x per system

 **TPM module must not order for China region.**

PYBTM14
PY-TPM14
TPM 2.0 Module SPI
Either PYBTM14, PY-TPM14, or PYBNTPM is required for Windows Server 2022
max. 1x per system

PYBNTPM
No TPM for WINSVR
Either PYBTM14 or PYBNTPM has to be chosen in ordering Windows Server 2022 OEM
max. 1x per system

When Windows Server 2022 is used as a host OS, PYBTM14, PY-TPM14, is required. This requirement, however, can be waived if the end customer expresses their desire to configure the server system without a TPM. In that case, No TPM for WINSVR can be selected.
When Windows Server 2022 is used as a guest OS, TPMs are not necessary.

S26361-F3552-E100/L100 are EOL at end-Sep 2022.
PYBTM14/PY-TPM14 are currently available

PYBCOM08
PY-COM08
Serial Port Option RS-232-C for a RS-232-C Serial Port Interface
does NOT occupy PCI slot
max. 1x per system

PYBFOP07
PY-FOP07
2U Front Bezel
max. 1x per system

Your Server is ready

Date of change [yyyy/mm/dd]	Configurator revision	Folder / order code / description	What has been changed / comment	Name
27.03.2024	1.158	HDD_SSD	updated availability schedules	Y. Sugiyama
25.03.2024	1.157	others	revised the description about iRMC MicroSD card option for eLCM	Y. Sugiyama
04.03.2024	1.156	others	remove PY-TPM20 and PYBTPM20 add information	KonnoH
16.02.2024	1.155	others	added the iRMC MicroSD card option for eLCM	Y. Sugiyama
09.02.2024	1.154	HDD_SSD	cancelled PDUAL CP300	T.Sudou
19.01.2024	1,153	LAN_FC_IB	remove restriction of N210P.(appropriate iRMC implementation is done at factory.) remove out of date description in Ethernet/FC cards.	F. Kanega
16.01.2024	1,152	HDD_SSD	removed availability schedule for PCIe-SSD "Kioxia CM7"	Y. Sugiyama
26.12.2023	1,151	HDD_SSD	removed the restriction for SSD SAS "Kioxia PM7" added the restriction for SSD PCIe "Kioxia CM7"	Y. Sugiyama
20.12.2023	1.150	CPU	Add description '3x Dual Rotor FAN' for PY-TKPC83, PY-TKPC84 'including 3x Dual Rotor FAN' for PY-DMC03	S.Fujita
13.12.2023	1.149	GFX	Add L4 and L40 to NVIDIA AI Enterprise Subscription License and Support	M.Murayama
30.11.2023	1.148	Description	eLCM is added to recommended components	J. ZHAO
06.11.2023	1.147	RAID	updated Note for onboard SATA SW-RAID	T.Sudou
01.11.2023	1.146	HDD_SSD	added the restriction about HBA/RAID for Kioxia PM7	Y. Sugiyama
18.10.2023	1.145	RAID, HDD_SSD	added SLES15 SP5 to OS support matrix for SW-RAID updated availability schedules	T.Sudou
30.08.2023	1.144	GFX	T4 max card 4 -> 6 pcs	M.Takaoka
03.10.2023	1.143	others	Add new TPM, Remove EOL TPM	H. Konno
22.09.2023	1.142	HDD_SSD	updated availability schedules	Y. Sugiyama
08.09.2023	1.141	HDD_SSD	removed the 1.92TB/3.84TB from Kioxia PM7 (it is my mistakes) added the EOL status for HDD SAS 15K, HDD 2.5" BC-SATA/SAS and P4800X/P4511 E1.S	Y. Sugiyama
04.09.2023	1.140	HDD_SSD	updated availability schedules for SSD SAS "PM7" and M.2 SATA 960GB	Y. Sugiyama
30.08.2023	1,139	LAN_FC_IB	Remove Broadcom OCPv3 10G SFP, N210P due to the issue of iRMC GUI error message	F.Kanega
30.08.2023	1.138	GFX	NVIDIA Subscription License is EOL	M.Takaoka
07.08.2023	1.137	HDD_SSD	updated availability schedules	T.Sudou
07.08.2023	1.137	RAID	added RHEL 8.8 and 9.2 to OS support matrix for SW-RAID	T.Sudou
04.08.2023	1,136	GFX	Revised some mistakes, PYBTMX08 could be configured without GPU	J.Zhao
01.08.2023	1,135	GFX	Add new perGPU NVIDIA AI Enterprise Subscription License and Support to GFX sheet	J.Liu
31.07.2023	1,134	HDD_SSD	revised the order codes for Kioxia CM7 15.36TB	Y. Sugiyama
31.07.2023	1,133	HDD_SSD	added the PCIe-SSD "Kioxia CM7 series"	Y. Sugiyama
01.07.2023	1,132	Thermal Rule	Change "2.5" base unit (not including GFX/GPU mount kit , NVIDIA T4/A2/High speed network card*, Rear drive bay)" section delete *(PYBETA3) in column as "DDR4 8GB - 256GB, Level1-4,Tier1-8"	H.Taniguchi
30.06.2023	1,131	others	No TPM for WINSVR added	K. Nishihara
22.06.2023	1.130	base	cancelled PRAID CP600i, PRAID EP 3252-8i, PRAID EP 3254-8i, PRAID EP 3258-16i, PRAID EP 3258-16i NVMe	T.Sudou
15.06.2023	1.129	RAID, backup	cancelled PRAID CP600i, PRAID EP 3252-8i, PRAID EP 3254-8i, PRAID EP 3258-16i, PRAID EP 3258-16i NVMe, PSAS CP 2100-8i for LTO	T.Sudou
08.06.2023	1.128	LAN_FC_IB	Change available date of X710-T4L OCPv3 from 2Q to 3Q	F. Kanega
05.06.2023	1.127	GFX	L40 was released	M.Takaoka
05.06.2023	1.126	RAID, backup, HDD_SSD	updated availability schedules	T.Sudou
02.06.2023	1.125	GFX	Updated L4 and the description with some GPUs.	T.Sasaki
30.05.2023	1,124	HD_cage	added the restriction about rear bay for Kioxia PM7	Y. Sugiyama
30.05.2023	1,124	HDD_SSD	added the Kioxia PM7 as SSD SAS 24G due to T40 declaration	Y. Sugiyama
17.05.2023	1.123	GFX	updated the description PY*TKMX07	J.Sugiyama
15.05.2023	1.122	RAID, backup	updated availability schedules	T.Sudou
09.05.2023	1.121	Thermal Rule	added CP600i,EP600i,EP640i,CP2100-8i for LTO,EP3252-8i,EP3254-8i,EP3258-16i,CP600e to thermal level table.	J.Sugiyama
25.04.2023	1.120	CPU	added iRMC FW version condition to CPU dummy	J.Sugiyama
18.04.2023	1.119	HDD_SSD	added PDUAL CP300 PYBDMCP35L, PY-DMCP35	T.Sudou
18.04.2023	1.119	RAID, backup	updated availability schedules revived Intel VROC Upgrade Key PYBRLVR02, PY-RLVR02	T.Sudou
17.04.2023	1,118	Thermal Rule	updated thermal rule added PYBLA412L thermal level	J.Sugiyama
17.04.2023	1,118	GFX	Updated PY-CBG024	J.Sugiyama
17.04.2023	1,118	CPU	removed liquid cooling CPU PY*CP62XE added CPU dummy PY*DMC03, and cooler kit PY-TKPC97, PY-TKPC98	J.Sugiyama
17.04.2023	1,118	base	added rear bay configuration to PYR2546RBN added EOL schedule of PYR2546R6N	J.Sugiyama
12.04.2023	1.117	GFX	Updated "NVIDIA L40 Mounting kit" and L4 and L40 items.	T.Sasaki
28.03.2023	1.116	GFX	updated L4 and L40 GPU and Thermal Rule.	T.Sasaki
22.03.2023	1.115	GFX	updated A2, L4 and L40 GPU.	T.Sasaki
13.03.2023	1.114	RAID, backup	updated availability schedules updated Note about PSAS CP 2100-8i mixed configurations	T.Sudou
21.02.2023	1.113	LAN_FC_IB	update availability schedules add comment for Finisar 100G LR optics	F.Kanega
15.02.2023	1.112	GFX	added description to PY-TKMX09	J.Sugiyama

15.02.2023	1.112	CPU	added description to PY-TKCP84	J.Sugiyama
15.02.2023	1.111	RAID	updated availability schedules	T.Sudou
03.02.2023	1.110	backup	updated availability schedules	T.Sudou
13.01.2023	1,109	RAID	cancelled Intel VROC Upgrade Key PYBRLVR02, PY-RLVR02 added RHEL 8.7 to OS support matrix for SW-RAID	T.Sudou
28.12.2022	1,108	others	added "iRMC advanced pack" L264 and update region	H.Taniguchi
27.12.2022	1,107	Thermal Rule	added NVIDIA T400 4GB	T.Sasaki
20.12.2022	1,106	LAN_FC_IB / Thermal Rule	updating LAN_FC_IB to the latest status(E810-XXVDA4, SFP28 LR), changing order of LAN cards, adding thermal rule of Broadcom LAN cards.	F.Kanega
13.12.2022	1,105	base	added PSAS CP600i to PYR2546RFN	T.Sudou
13.12.2022	1,105	RAID	added RHEL 9 GA to OS support matrix for SW-RAID	T.Sudou
09.12.2022	1.104	HD_SSD	removed the restriction "18TB HDDs are NOT released with PRAID EP680i" for 3.5" HDD-SAS/SAS SED	Y. Sugiyama
01.12.2022	1,103	GFX	Add RTX A6000 GPU to NVIDIA AI Enterprise Subscription License and Support to GFX sheet	J.Liu
29.11.2022	1,102	RAID, backup	updated availability schedules	T.Sudou
25.11.2022	1.101	HD_SSD	updated the description about hotplug support of PCIe SSD	Y. Sugiyama
21.10.2022	1.100	HDD_SSD	updated the EOL status according to SalesStatus added the M.2 SATA 960GB "PYBMMF96YN/PY-MF96YN"	Y. Sugiyama
05.10.2022	1,99	base, HD_cage	added PRAID EP 3252-8i, EP 3254-8i, PRAID EP 3258-16i (NVMe)	T.Sudou
05.10.2022	1,99	RAID	added PRAID EP 3252-8i PYBSR4MA1L, PY-SR4MA1 PRAID EP 3254-8i PYBSR4MA2L, PY-SR4MA2 PRAID EP 3258-16i (NVMe) PYBSR4MA3L, PYBSR4MA4L, PY-SR4MA3 FBU for EP 325x PYFBM012, PYFBM013, PY-FBM01	T.Sudou
04.10.2022	1,98	RAID	added Note for PSAS CP 2100-8i LP for LTO	T.Sudou
04.10.2022	1,98	backup	added PSAS CP 2100-8i LP for LTO PYBSC3MA4L	T.Sudou
28.09.2022	1,97	base	described the names of support controllers precisely	T.Sudou
26.09.2022	1,96	GFX	Add NVIDIA AI Enterprise Subscription License and Support to GFX sheet	J.Liu
26.09.2022	1,95	Thermal Rule	added NVIDIA A2	T.Sasaki
22.09.2022	1,94	Thermal Rule	added PCIe Level for PSAS CP 2100-8i LP	T.Sudou
16.09.2022	1,93	Thermal Rule	Added thermal Leve/Tier for PYBLA404L and PYBLA404U.	Y.Iukta
08.09.2022	1,92	HDD_SSD	updated Notes on max. No for M.2 SATA SSD added "EOL" to Dual microSD S26361-F4045-E64, S26361-F4045-L64	T.Sudou
08.09.2022	1,92	RAID	added SLES15 SP4 to Note for Onboard SW-RAID	T.Sudou
07.09.2022	1,91	GFX	Updated A30X/ A100X in GFX/GPU	T.Sasaki
05.09.2022	1.90	HDD_SSD / S26361-F5659-E13	added RAID PRESET option	T.Sudou
01.09.2022	1,89	GFX	Updated GFX/GPU	
25.08.2022	1,88	GFX	Updated GFX/GPU	T.Sasaki
22.08.2022	1.87	others	updated Notes for TPM2.0	T.Sudou
15.08.2022	1.86	FC	added release date to QLE287x.	Y.Iukta
10.08.2022	1.85	HDD_SSD	updated Notes for PDUAL CP100	T.Sudou
01.08.2022	1.84	PSU	added new Titanium PSUs PYBPU503, PY-PU503, PY-PU503B8, PY-PU901B8, PYBPU165, PY-PU165, PYBPU243, PY-PU243	Y.Narita
13.07.2022	1.83	RAID / PYBSC3MAVL	added PSAS CP 2100-8i for vSAN	T.Sudou
12.07.2022	1.82	LAN/FC	*Added Broadcom LAN. PYBLA284U,PY-LA284U PYBLA3K2U,PY-LA3K2U PYBLA3J2U,PY-LA3J2U PYBLA284,PYBLA284L,PY-LA284 PYBLA3K2,PYBLA3K2L,PY-LA3K2 PYBLA3J2,PYBLA3J2L,PY-LA3J2 *Added LR optical modules. PYBSFPL09,PY-SFPL09 PYBSFPL08,PY-SFPL08 PYBSFPL10,PY-SFPL10 PYBSFPL11,PY-SFPL11 *Added Marvell 64GFC. PYBFC431,PYBFC431L,PY-FC431 PYBEC432,PYBEC432L,PY-FC432	Y.Iukta
11.07.2022	1.81	RAID / PYBSC4FAL, PYBSC4FAVL	changed max. number of PSAS CP600i (for vSAN) to 1x	T.Sudou
11.07.2022	1.81	RAID / PYBSC3FBVL	added base units to Note	T.Sudou
28.06.2022	1.80	RAID / PYBRLVR02, PY-RLVR02	added Intel VROC Key	T.Sudou
17.06.2022	1,79	FC	Added order code; - S26361-F5580-E1/E201/L501 - S26361-F5580-E2/E202/L502	Y.Ikuta
16.06.2022	1,78	GFX	Updated GFX/GPU	T.Sasaki
15.06.2022	1,77	change_history	Introduce this history table with a new style	

14.06.2022		GFX	Updated GFX/GPU	T.Sasaki
30.05.2022		HDD_SSD	updated Note for PDUAL CP100	T.Sudou
30.05.2022		RAID	updated OS support matrix for SW-RAID, removed BSMI limitation from PSAS CP 2100-8i	T.Sudou
19.05.2022		backup	added PSAS CP600i for LTO	T.Sudou
19.05.2022		base, RAID	added PRAID CP600i, PSAS CP600i/e, PRAID EP640i	T.Sudou
19.05.2022		RAID	updated description for cable kit	J.Sugiyama
19.05.2022		Energy Star	updated condition	J.Sugiyama
17.05.2022		Energy Star	added condition	J.Sugiyama
17.05.2022		RAID	removed "as soon as possible" for cable kit	J.Sugiyama
17.05.2022		base	removed LC Kit	J.Sugiyama
17.05.2022		RAID	added OS support matrix for SW-RAID	T.Sudou
12.05.2022		Thermal Rule	added PCIe Level of QLE2770 and QLE2772	Y.Ikuta
27.04.2022		RAID	updated about BSMI for PSAS CP 2100-8i	T.Sudou
27.04.2022		base	added PSAS CP 2100-8i	T.Sudou
15.04.2022		FC	Released Broadcom LPe3600x	Y.Ikuta
14.04.2022		Thermal Rule	Added IB Cards [Option card: PCIe Level for Thermal condition] in "Thermal Rule".	M. Takaoka / T.Sasaki
04.04.2022		Thermal Rule	Added QLE2690, QLE2692	J.Sugiyama
02.03.2022		GFX	Updated GFX/GPU	T.Sasaki
01.03.2022		RAID	updated Note for PSAS CP 2100-8i	T.Sudou
22.02.2021		GFX	Updated GFX/GPU	T.Sasaki
15.02.2022		Thermal Rule	Added IB Cards [Option card: PCIe Level for Thermal condition] in "Thermal Rule".	M. Takaoka / T.Sasaki
14.12.2021		HDD_SSD	Added the SSD SATA for SM897/PM893, and removed the restriction for P5800X	Y. Sugiyama
10.02.2022		RAID	added Note for PSAS CP 2100-8i, removed PY-SC3MA2	T.Sudou
20221/02/07		GFX	Updated GFX/GPU	T.Sasaki
04.01.2022		base, RAID	added Notes for VMD	T.Sudou
04.01.2022		backup	removed LTO6 due to EOL, added LTO9	T.Sudou
24.12.2021		others	updated Notes for TPM2.0	T.Sudou
10.12.2021		HDD_SSD	Added the restriction for EDSFF PCIe-SSD	Y. Sugiyama
08.12.2021		HDD_SSD	Updated note for PDUAL CP100	T.Sudou
08.12.2021		LAN	Released Intel 25G SRX SFP	Y.Ikuta
29.11.2021		RAID	Updated some restrictions	T.Sudou
26.11.2021		FC	Updated QLE269x status	Y.Ikuta
22.11.2021		others	Added Notes for TPM2.0	T.Sudou
18.11.2021		HDD_SSD	Added the restriction with RAID Controller for P5800X according to T50 Report.	Y. Sugiyama
02.11.2021		FC	Updated 64G FC cards	Y.Ikuta
12.11.2021		RAID	added PSAS CP 2100-8i	T.Sudou
02.11.2021		FC	Added 64G FC cards	Y.Ikuta
25.10.2021		HDD_SSD	removed the description "as soon as available" for several order codes according the update of T50 report	Y. Sugiyama
22.10.2021		base	Add the note for PYBRRS8S/PY-RRS8S	Y.Narita
21.10.2021		GFX	Updated GFX/GPU	T.Sasaki
11.10.2021		others	Added Notes for TPM2.0	T.Sudou
05.10.2021		HDD_SSD	added the description about hot-plug for PCIe-SSD	Y. Sugiyama
29.09.2021		LAN	changed SFP support policy	Y.Ikuta
27.09.2021		IB	Add IB HCA 100Gb 1/2 ch HDR	T. Sasaki
22.09.2021		CPU	updated CPU class for 6346/6345	J. Sugiyama
22.09.2021		base	corrected the descripton for front USB I/F	J. Sugiyama
22.09.2021		HDD_SSD	Added the P5800X as PCIe-SSD	Y. Sugiyama
21.09.2021		FC	Removed "as soon as available" from ALE277x	Y.Ikuta
20.09.2021		RAID, backup / PYBSC3FB1L, PY-SC3FB	Moved PSAS CP503i for LTO from RAID to backup	T.Sudou
15.09.2021		others / PYBTPM14, PY-TPM14	Added TPM2.0 for WS2022	T.Sudou
10.09.2021		HDD_SSD	Added the restriction with PRAID EP680i for HDD SAS 18TB	Y. Sugiyama
10.09.2021		HDD_SSD	reviced the description "as soon as available" and revised to remove the several order codes about restriction of SGT drives.	Y. Sugiyama
09.09.2021		RAID	Updated some restrictions	T.Sudou
07.09.2021		RAID	Added the cable kit for upgrade RAID cards	Y. Narita
06.09.2021		HDD_SSD	removed the several E-part order codes which is restricted the SGT drives, because of available the alternative codes including SGT drives according to T50 update.	Y. Sugiyama
06.09.2021		HDD_SSD	removed the description "as soon as available" for sever order codes according the update of T50 report	Y. Sugiyama
03.09.2021		HDD_SSD	Added the Order codes for HDD 10K SAS 600GB/1.2TB/1.8TB/2.4TB and HDD BC-SAS 12TB, and removed the description "t.b.d.". (removed the restriction of SGT drives about RV issue)	Y. Sugiyama
03.09.2021		HDD_SSD	Added the HDD BC-SATA/SAS 18TB	T.Sudou
01.09.2021		HDD_SSD	Added note to PDUAL CP100	T.Sudou
31.08.2021		CPU	updated for Xeon Platinum 8362/8352M	A.Iwata
30.08.2021		RAID	Updated note for PSAS CP503i	T.Sudou
30.08.2021		HDD_SSD	Added note "EMEIA only" to PDUAL CP100	T.Sudou
28.08.2021		LAN	Removed E25GSFP28SR, Added E25GSFP28SRX.	Y.Ikuta
23.08.2021		LAN	Removed "as soon as available" from X710-DA2/DA4/T2L OCPV3	Y.Ikuta
06.08.2021		base	corrected spec of rear side interface.	J.Sugiyama
04.08.2021		RAID	Added note to Onboard SW-RAID	T.Sudou
30.07.2021		ErP Lot9 Limitation	updated for HCC CPU rerelease	A.Iwata
28.07.2021		LAN	Removed "as soon as available" from X710-DA2/DA4 PCIe Added 10G SFP E-part restriction for 25G card due to BTO system specification.	Y.Ikuta

27.07.2021		CPU	Added new order code for Xeon Platinum 8362/8352M	A.Iwata
09.07.2021		LAN	Removed "as soon as available" from X710-T4L PCIe	Y.Ikuta
09.07.2021		LAN	Removed "as soon as available" from X710-T2L PCIe	Y.Ikuta
09.07.2021		Thermal Rule	Updated table	J.Sugiyama
28.06.2021		HDD_SSD	Added PDUAL CP100	T.Sudou
25.06.2021		GFX	Removed GFX/GPU power cable kit	j.Sugiyama
25.06.2021		PSU	Removed "Region Kit China for CCC option not required systems"	J.Sugiyama
16.06.2021		LAN	X710 series PCIe changed to "as soon as available"	Y.Ikuta
10.06.2021		RAID	Removed PSAS CP 2100-8i	T.Sudou
07.06.2021		LAN	MCX6-DX PCIe changed to "as soon as available"	Y.Ikuta
07.06.2021		Cover	Added new order code information	J.Sugiyama
07.06.2021		Thermal Rule	Updated table	J.Sugiyama
07.06.2021		RAM	Updated the note about mixed DIMM configuration	J.Sugiyama
07.06.2021		PSU	Removed made in German sticker	j.Sugiyama
03.06.2021		RAID	Updated descriptions for CP503i/EP540i/EP580i/EP680i	T.Sudou
01.06.2021		GFX	Updated Limitation	j.Sugiyama
01.06.2021			1st release	