PRIMERGY RX2530 M7
1U Rack Server
Configurator for base units

Type	Front Drives	Rear Drives
1	4x 3.5” hot plug SAS/SATA HDD/SSD drives	none
2	8x 2.5” hot plug SAS/SATA HDD/SSD drives	2x 2.5" SAS/SATA
3	10x 2.5” hot plug SAS/SATA HDD/SSD and PCIe SSD drives	2x 2.5" SAS/SATA

Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	describes base unit of RX2530 M7
2		describes rack mount kits and services
3	CPU	Order code and Infos of processors
4	RAM	DDR5 System memory (RAM) and memory modes
5	GFX	Graphics-, Grid-cards, GPU and Xeon Co processors and other graphics options
6	HD_cage	n.a. - not required for PRIMERGY RX2530
7	RAID	SAS / RAID Controller and components
8	ODD	optical disk drives (DVD, DVD-rw, Blu ray)
10	HD_SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN_FC_IB	LAN Components
12		Fibre Channel Controller
13		Infiniband Controller
14	PSU	Power supply units, power cables, country specific opt.
15	USB_devices	Keyboards, Mice, USB devices
16	Energy Star	Energy Star configuration
17	Erp Lot9 restriction	Erp Lot9 configuration
18	Thermal Rule	Thermal restriction
19	others	System Management, ATD, RS232 port, TPM module

Instructions

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

In any case we recommend to use the 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 prerequesites, technical back ground, configuration rules, limitations, …

Conventional order code

S26361-F4610-E2	<-- order code E-part (bold) --
S26361-F4610-L3	<-- order code L-part (bold)
PLAN 2x1Gb Ethern. Controller	<-- "name" of this part
i350-T2 chip (based on Intel Powerville) offers 2x1Gb RJ45 connectors	<--description of this part, in same cases as well description of content
PCIe Gen2 x4 full height card	<--requires a free PCIe slot --> means total amount of PCIe slots reduced
max. 6x per system	<--indicates how many this part can be configured in the related Server

New order code

PYBVAP04	<-- "PYB" order code (bold) for BTO(Built to Order) part
PY-VAP04	<-- "PY-" order code (bold) for Loose delivery part
Front VGA connector (15-pin)	<-- "name" of this part
Front VGA connector (15-pin) including cable and front connector	<--description of this part, in same cases as well description of content
Not for 10x3.5", 32xEDSFF Base unit	<-- Limitation for this part
max. 1x per system	<--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-rx2530M7.pdf

https://www.fujitsu.com/fts/products/computing/servers/primergy/index.h
(internet)

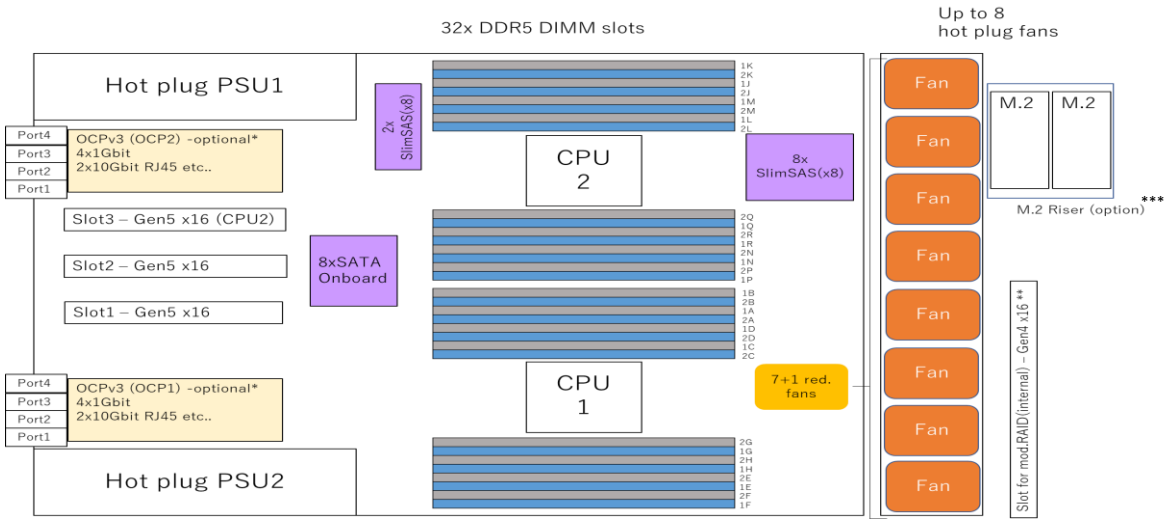
https://extranet.ts.fujitsu.com/com/tools/configure/server/Pages/default.aspx
(extranet)

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-**E**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-**L**240" ordercode with "L" means, the part will be shipped with extra package, may be as well with extra shipment

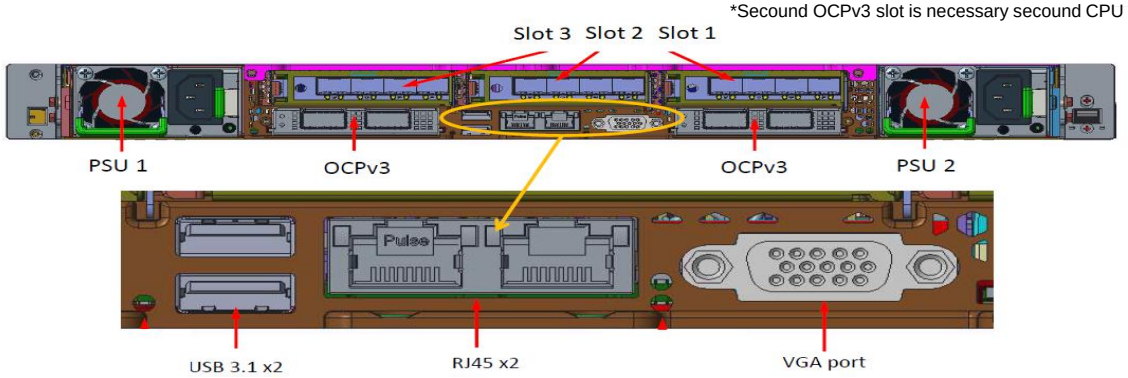
PRIMERGY RX2530 M7: Schematics of the System board



*: For the available options, please see the “Chapter 11”.
**:Not available for 4x3.5" standard base unit and short depth base unit
***: Not available for short depth base unit

PRIMERGY RX2530 M7 rear view with PSU, PCIe slots and OCPv3 slot

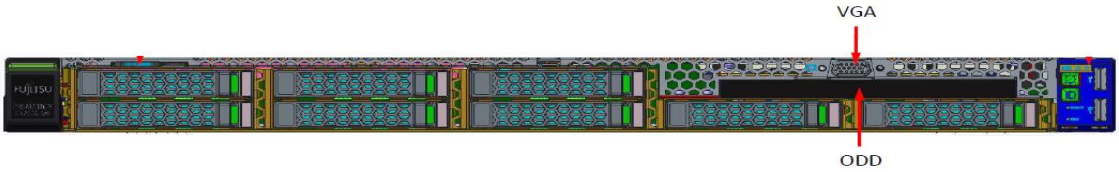
*Slot3 is necessary secound CPU
*Secound OCPv3 slot is necessary secound CPU



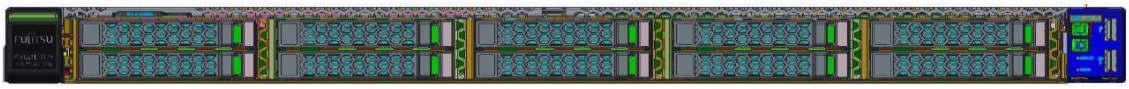
PRIMERGY RX2530 M7 front view with drives and operation panel

4x 3.5"

8x 2.5"



10x 2.5"



recommended components for RX2530 M7	#
Independant Mode installation	1x
PLAN CP I350-T4 4X 1000BASE-T OCPv3	1x
iRMC S6 advanced pack	1x
embedded Lifecycle Management (eLCM)	1x
Modular PSU 900W Titanium hot plug	2x

Chapter 1 - base unit

Start

Power supply units & cooling
The PRIMERGY RX2530 M7 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 RX2530 M7 comes equipped with ultimate performance processor heat pipes and 7+1 high performance dual hot plug fans (7+1 redundant).
Server Management
iRMC S6 (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 D3982-A with PFR function based on Chipset Intel® C741 (Emmitsburg).
> 4 serial UPI(Intel® Ultra Path Interconnect)links
> Up to two Intel® Xeon® Processor Scalable Family CPUs (Sapphire Rapids/Emerald Rapids)
Slots: per default, 4 PCIe slots are on Board - please see schematics in "description"
> 3 PCIe slots low profile, 167mm length @ first CPU:
Internal RAID slot PCIe-Gen4 x16 - only for modular RAID/SAS controller
Slot 1 PCIe-Gen5 x16
Slot 2 PCIe-Gen5 x16
> 1 PCIe slot low profile, 167mm length @ second CPU:
Slot 3 PCIe-Gen5 x16
PCIe controller population has to be according to internal or external connectivity requirements.
The system offers 1x internal x16 PCIe slot for SAS / RAID controllers and 3x freely configurable PCIe slots x16 for other PCIe controllers.
The required riser cards for the above configuration are part of the standard delivery.
System RAM up to DDR5-4800 MHz
32x DDR5 RDIMMs (16 per CPU) or alternatively a mixture of 16 DIMMs and 16x DCPMM modules.
Memory speed depends on CPU and configuration, please see folder "CPU" and "RAM" for further details.

LAN
1x1Gbit/s (RJ45) on Motherboard - optional OCPv3 cards are available

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

Connectivity

Interfaces at rear side	Interfaces at front
- 1 service LAN RJ45 (1 Gbit)	for base units with up to 8 HDD: 2x USB 3.0 and front VGA option
- 1x RJ45 with integrated LEDs for fixed onboard 1Gb LAN	for base units with 10 HDD: 2x USB3.0, no front VGA option
- 1x VGA (15 pins)	Interfaces internal
- 2x USB 3.0 UHCI	- 2x M.2 (required M.2 riser option, not for short depth model)
- 1x serial 16550 interface (optional)	- 2x 4* SATA 6G
- 2 Slot for interface OCPv3 cards	

Rack version for 19'' racks with 1 height unit
No PSU included in base unit

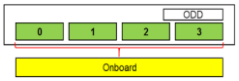
Basic unit is without CPU and Memory
For an orderable basic unit first CPU and
one memory = first memory has to be selected

Basic unit LFF with
4x 3.5" HDD bays **PYR2537R3N**

No Rear Bay option possible.

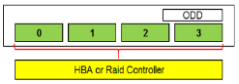
[Limitation]
Refer to Chapter18-Thermal Rule

SAS/SATA | SAS/SATA/PCIe combo | PCIe



Front
Type 1-1: 4xSATA: Onboard SATA

No Rear Bay option



Front
Type 1-3: 4xSAS/SATA: PSAS CP600i or
PRAID CP500i / EP520i / EP540i / EP580i or
PRAID CP600i ** / EP640i / EP680i / EP740i * or
PSAS CP 2100-8i / CP 2200-16i or
PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i
(in PCIe slot 1)

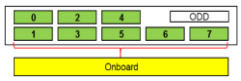
No Rear Bay option

*: will be available in 2025/01
**: will be available in 2024/10

Basic units SFF with
8x 2.5" HDD bays **PYR2537R2N**

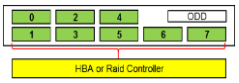
No Rear Bay option possilble.

[Limitation]
Refer to Chapter18-Thermal Rule



Front
Type 2-1: 8xSATA: Onboard SATA

No Rear Bay option



Front
Type 2-4,6: 8xSAS/SATA: PSAS CP600i or
PRAID CP500i / EP520i / EP540i / EP580i or
PRAID CP600i ** / EP640i / EP680i / EP740i * or
PSAS CP 2100-8i / CP 2200-16i or
PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i
(internal RAID slot)

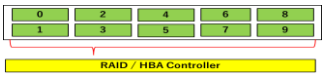
No Rear Bay option

*: will be available in 2025/01
**: will be available in 2024/10

Basic units SFF with
10x 2.5" HDD bays **PYR2537RAN**
for SAS/SATA HDDs with RAID controller

No Rear Bay option possilble.

[Limitation]
Refer to Chapter18-Thermal Rule



Front
Type 3-1: 10xSAS/SATA: PSAS CP600i or
PRAID EP540i / EP580i / EP680i / EP740i * or
PSAS CP 2200-16i or
PRAID EP 3258-16i (internal RAID slot)

No Rear Bay option

*: will be available in 2025/01

Basic units SFF with
10x 2.5" HDD bays **PYR2537RCN**
for SATA/PCIe SSD with onboard controller

No Rear Bay option possilble.

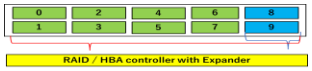
[Limitation]
Refer to Chapter18-Thermal Rule

Front
Type 3-11: 8xSATA: Onboard SATA or
10xNVMe: Onboard PCIe
2nd CPU is required for NVMe

No Rear Bay option

Basic units SFF with
10x 2.5" HDD bays **PYR2537RBN**
Including SAS Expander

[Limitation]
Refer to Chapter18-Thermal Rule



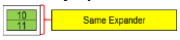
! Cable Kit for HBA/RAID controller **PYBCBE029**

Front

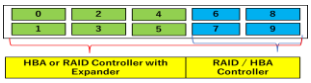
Type 3-8: 10xSAS/SATA: PRAID EP680i / EP740i * or
~~PSAS CP 2200-16i~~ ** or
~~PRAID EP 3258-16i~~ ** (internal RAID slot)
2xNVMe: same controller

*: will be available in 2025/01
**: Cancelled

Rear Bay Option



Type 3-9: 2xSAS/SATA: Same controller as Front



! Cable Kit for HBA/RAID controller **PYBCBE030**

Front

Type 3-10/Type 3-20: 10xSAS/SATA: PSAS CP600i or
PRAID CP500i / EP520i / EP540i / EP580i or
PRAID CP600i *** / EP640i / EP680i / EP740i * or
PSAS CP 2100-8i / PSAS CP 2200-16i or
PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i
(internal RAID slot)
Type 3-10: 4xNVMe: PRAID EP680i **NVMe** / EP740i **NVMe** * or
~~PSAS CP 2200-16i **NVMe**~~ ** or
~~PRAID EP 3258-16i **NVMe**~~ ** (in PCIe slot 1)
*Differece between **Type 3-10 &Type 3-20** is NVMe included or not

No Rear Bay option

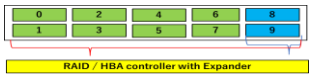
*: will be available in 2025/01
**: Cancelled
***: will be available in 2024/10

Please select one of " ! " options with PYR2537RBN, according to your configuration.

Will be available in 2024/3Q

Basic units SFF with
10x 2.5" HDD bays **PYR2537RGN**
Including SAS Expander

[Limitation]
Refer to Chapter18-Thermal Rule



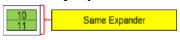
! Cable Kit for HBA/RAID controller **PYBCBE029**

Front

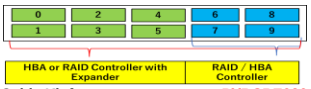
Type 3-8(BlueField2 is possible): 10xSAS/
SATA: PRAID EP680i / EP740i * or
~~PSAS CP 2200-16i~~ ** or
~~PRAID EP 3258-16i~~ ** (internal RAID slot)
2xNVMe: same controller

*: will be available in 2025/01
**: Cancelled

Rear Bay Option



Type 3-9: 2xSAS/SATA: Same controller as Front



! Cable Kit for HBA/RAID controller **PYBCBE030**

Front

Type 3-10/Type 3-20(BlueField2 is possible):
10xSAS/SATA: PSAS CP600i or
PRAID CP500i / EP520i / EP540i / EP580i or
PRAID CP600i *** / EP640i / EP680i / EP740i * or
PSAS CP 2100-8i / PSAS CP 2200-16i or
PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i
(internal RAID slot)
Type 3-10(BlueField2 is possible): 4xNVMe:
PRAID EP680i NVMe / EP740i NVMe * or
~~PSAS CP 2200-16i **NVMe**~~ ** or
~~PRAID EP 3258-16i **NVMe**~~ ** (in PCIe slot 1)
*Differece between **Type 3-10 &Type 3-20** is NVMe included or not

No Rear Bay option

*: will be available in 2025/01
**: Cancelled
***: will be available in 2024/10

Please select one of " ! " options with TBD, according to your configuration.

short depth model

Basic units SFF with

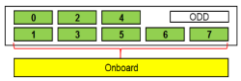
8x 2.5" HDD bays **PYR2537RDN**

***will be available in June 2023**

No Rear Bay option possilble.

[Limitation]

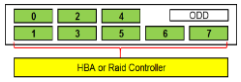
Refer to Chapter18-Thermal Rule



Front

Type 2S-1: 8xSATA: Onboard SATA

No Rear Bay option



Front

Type 2S-2: 8xSAS/SATA: PSAS CP600i or
PRAID CP500i / EP520i / EP540i / EP580i or
PRAID CP600i ** / EP640i / EP680i / EP740i * or
PSAS CP 2100-8i / CP 2200-16i or
PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i
(in PCIe slot 2)

No Rear Bay option

*: will be available in 2025/01
**: will be available in 2024/10

short depth model

Basic units SFF with

10x 2.5" HDD bays **PYR2537REN**

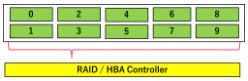
for SAS/SATA HDDs with RAID controller

***will be available in June 2023**

No Rear Bay option possilble.

[Limitation]

Refer to Chapter18-Thermal Rule



Front

Type 3S-1: 10xSAS/SATA: PSAS CP600i or
PRAID EP540i / EP580i / EP680i / EP740i * or
PSAS CP 2200-16i or
PRAID EP 3258-16i (in PCIe slot 2)

No Rear Bay option

*: will be available in 2025/01

short depth model

Basic units SFF with

10x 2.5" HDD bays **PYR2537RFN**

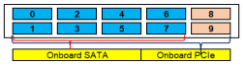
for SATA/PCIe SSD with onboard controller

***will be available in June 2023**

No Rear Bay option possilble.

[Limitation]

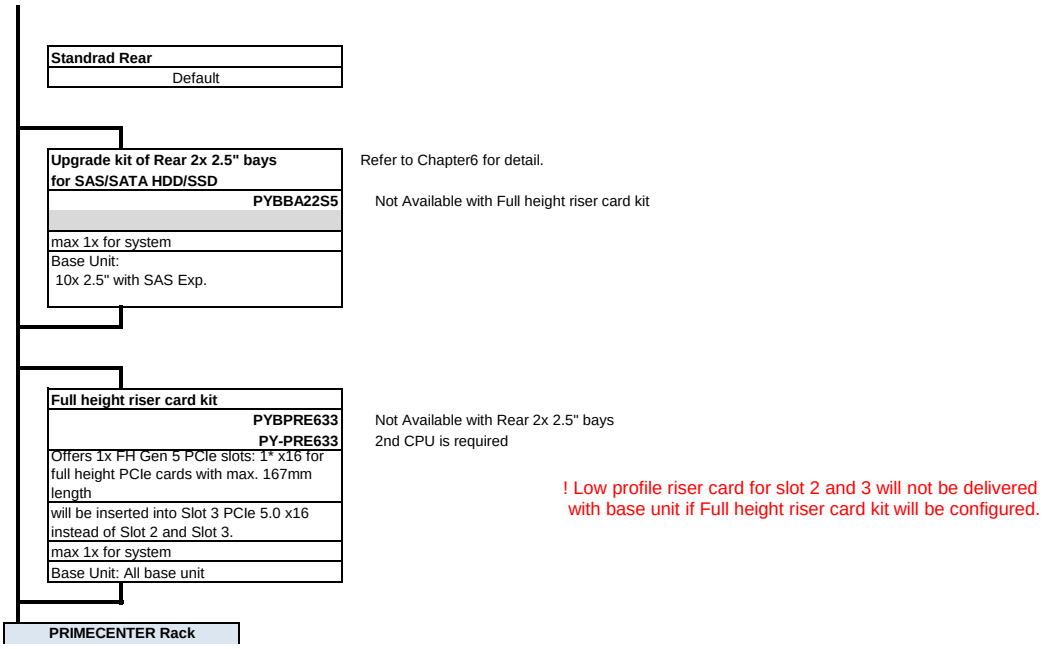
Refer to Chapter18-Thermal Rule



Front

Type 3S-2: 8xSATA: Onboard SATA or
10xNVMe: Onboard PCIe
2nd CPU is required for NVMe

No Rear Bay option


Standrad Rear
Default
Upgrade kit of Rear 2x 2.5" bays for SAS/SATA HDD/SSD
PYBBA22S5
max 1x for system
Base Unit:
10x 2.5" with SAS Exp.
Refer to Chapter6 for detail.
Not Available with Full height riser card kit
Full height riser card kit
PYBPRE633
PY-PRE633
Offers 1x FH Gen 5 PCIe slots: 1* x16 for full height PCIe cards with max. 167mm length
will be inserted into Slot 3 PCIe 5.0 x16 instead of Slot 2 and Slot 3.
max 1x for system
Base Unit: All base unit
Not Available with Rear 2x 2.5" bays
2nd CPU is required
! Low profile riser card for slot 2 and 3 will not be delivered with base unit if Full height riser card kit will be configured.
PRIMECENTER Rack

Chapter 2 - Rack architecture

PRIMECENTER Rack

CMA require RMK

Rack Architecture				Remark	
No RMK	1x	Only with loose server order	**S26361-F2735-E111**	**n/a**	no mounting in rack
Rack Mount Kit	1x	Telescopic drop-in rail 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 1U (for standard models)	1x	Cable mgmt. arm for 1U or higher	**PYBRA06**	**PY-RA06**	No possible together with 1600W PSU HVDC.
Rack Mount Kit for short depth	1x	Telescopic drop-in rail	**PYBRRL7**	**PY-RRL7**	*will be available in June 2023
Rack Mount Kit for short depth	1x	Telescopic drop-in rail, CMA not supported	**PYBRRL8**	**PY-RRL8**	*will be available in June 2023 *CMA is not supported.
Rack Mount Kit, Slide-in rail for short depth	1x	Slide-in rail	**PYBRRS9S**	**PY-RRS9S**	*will be available in June 2023 *CMA is not supported.
Rack Cable Arm 1U (for short depth models)	1x	Cable mgmt. arm for 1U server	**S26361-F2735-E81**	**S26361-F2735-L81**	No possible together with 1600W PSU HVDC.
Rack installation ex works	1x	Rack will be delivered completely premounted and tested ex factory	**S26361-F1647-E302**	**n/a**	to be ordered 1x per installed rack server RMK needed

B

B

4th Generation Intel® Xeon® Scalable Processors

There are 2 processor sockets available. Please configure 1 or 2 Processors.
>> All processors have to be the same type.
>> With **one** processor; 1x OCPv3, 2x PCIe low profile slots, Internal RAID card slot (except for 4x3.5" base unit) and 16x DIMM slots are available.
>> With **two** processors; 2xOCPv3, 3x PCIe low profile slots, Internal RAID card slot (except for 4x3.5" base unit) and 32x DIMM slots are available.
>> To configure 2nd CPU, an additional cooler kit is required.
Xeon Bronze 3508U, Xeon Gold 5512U and Xeon Platinum 8558U and Xeon Platinum 8581V are not allowed to configure 2nd CPU.

			CPU Group for Thermal condition (4x3.5" 8x2.5" 10x2.5")	Available DIMM Type: DDR5-4800 (16GB 32GB 64GB 128GB 256GB)	DDR5-5600 (16GB 32GB 64GB 128GB 256GB)	DDR5-5600 (96GB)
Xeon Bronze 34xx - Mainline, 1 socket configuration only	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4000 MT/s						
Xeon Bronze 3408U 8C 1.8GHz 125W	PYBCP65XR	-	A	○		
Xeon Silver 44xx - Mainline, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4000 MT/s & UPI Bus (2UPI) @ 16 GT/s						
Xeon Silver 4410Y 12C 2.0GHz 150W Speed Select Technology	PYBCP66XG	PY-CP66XG	A	○		
Xeon Silver 4416+ 20C 2.0GHz 165W	PYBCP66XH	PY-CP66XH	B	○		
Xeon Gold 54xx - Mainline/Performance Optimized, 1 socket configuration only	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4400 MT/s						
Xeon Gold 5412U 24C 2.1GHz 185W	PYBCP65XS	-	B	○		
Xeon Gold 54xx - Mainline/Performance Optimized, 2 socket scalablity	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4400 MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Gold 5415+ 8C 2.9GHz 150W	PYBCP65XT	PY-CP65XT	A	○		
Xeon Gold 5418Y 24C 2.0GHz 185W Speed Select Technology	PYBCP65XW	PY-CP65XW	B	○		
Xeon Gold 5420+ 28C 2.0GHz 205W	PYBCP65XX	PY-CP65XX	C	○		
Xeon Gold 64xx - Mainline/Performance Optimized, 1 socket configuration only	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s						
Xeon Gold 6414U 32C 2.0GHz 250W	PYBCP65X1	-	C	○		○
Xeon Gold 64xx - Mainline/Performance Optimized, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Gold 6426Y 16C 2.5GHz 185W Speed Select Technology	PYBCP66X2	PY-CP66X2	B	○		
Xeon Gold 6430 32C 2.1GHz 270W (DDR5 @ 4400(1DPC/2DPC))	PYBCP65X2	PY-CP65X2	C	○		○
Xeon Gold 6434 8C 3.7GHz 195W	PYBCP66X4	PY-CP66X4	C	○		
Xeon Gold 6438Y+ 32C 2.0GHz 205W Speed Select Technology	PYBCP66X8	PY-CP66X8	C	○		
Xeon Gold 6442Y 24C 2.6GHz 225W Speed Select Technology	PYBCP66X9	PY-CP66X9	C	○		
Xeon Gold 6444Y 16C 3.6GHz 270W Speed Select Technology	PYBCP66XA	PY-CP66XA	C	○		
Xeon Gold 6448Y 32C 2.1GHz 225W Speed Select Technology	PYBCP66XC	PY-CP66XC	C	○		
Xeon Platinum 84xx - Mainline/Performance, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (4UPI) @ 16 GT/s						
Xeon Platinum 8462Y+ 32C 2.8GHz 300W Speed Select Technology	PYBCP66XE	PY-CP66XE	D	○		
Xeon Platinum 8452Y 36C 2.0GHz 300W Speed Select Technology	PYBCP65X8	PY-CP65X8	D	○		○
Xeon Platinum 8460Y+ 40C 2.0GHz 300W Speed Select Technology	PYBCP65XE	PY-CP65XE	D	○		○
Xeon Platinum 8468 48C 2.1GHz 350W	PYBCP65XF	PY-CP65XF	D	○		○
Xeon Platinum 8470 52C 2.0GHz 350W	PYBCP65XK	PY-CP65XK	D	○		○
Xeon Platinum 8480+ 56C 2.0GHz 350W	PYBCP65XN	PY-CP65XN	D	○		○
Xeon Platinum 84xxH - IMDB/Analytics Workload Optimized, 8 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (4UPI) @ 16 GT/s						
Xeon Platinum 8490H 60C 1.9GHz 350W	PYBCP65XP	PY-CP65XP	D	○		○
Xeon - Cloud Optimized, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Gold 6438M 32C 2.2GHz 205W Speed Select Technology	PYBCP66X6	PY-CP66X6	C	○		
Xeon Platinum 8468V 48C 2.4GHz 330W Speed Select Technology	PYBCP65XJ	PY-CP65XJ	D	○		○
Xeon Platinum 8458P 44C 2.7GHz 350W Speed Select Technology	PYBCP65XB	PY-CP65XB	D	○		○
Xeon - Network Optimized, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Gold 5418N 24C 1.8GHz 165W (DDR5 @ 4000(1DPC/2DPC)) Speed Select Technology	PYBCP65XV	PY-CP65XV	B	○		
Xeon Gold 6428N 32C 1.8GHz 185W (DDR5 @ 4000(1DPC/2DPC)) Speed Select Technology	PYBCP66X3	PY-CP66X3	B	○		
Xeon Gold 6438N 32C 2.0GHz 205W Speed Select Technology	PYBCP66X7	PY-CP66X7	C	○		
Xeon Platinum 8470N 52C 1.7GHz 300W Speed Select Technology	PYBCP65XL	PY-CP65XL	D	○		○
Xeon - Storage & HCI Workload Optimized, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Gold 5416S 16C 2.0GHz 150W (DDR5 @ 4400(1DPC/2DPC)) Speed Select Technology	PYBCP65XU	PY-CP65XU	A	○		
Xeon Gold 6454S 32C 2.2GHz 270W Speed Select Technology	PYBCP65X3	PY-CP65X3	C	○		○
Xeon - Long-Life Use (IOT) Workload Optimized, 2 socket scalability	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4000 MT/s & UPI Bus (2UPI) @ 16 GT/s						
Xeon Silver 4410T 10C 2.7GHz 150W Speed Select Technology	PYBCP66XF	PY-CP66XF	A	○		
Xeon - HBM HPC Workload Optimize, 2 socket scalability, 3UPI	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 16 GT/s						
Xeon Max 9462 32C 2.7GHz 350W	PYBCP66XJ	PY-CP66XJ	E	○		
Xeon Max 9460 40C 2.2GHz 350W	PYBCP66XK	PY-CP66XK	E	○		
Xeon - HBM HPC Workload Optimize, 2 socket scalability, 4UPI	(BTO)	(Loose delivery)				
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (4UPI) @ 16 GT/s						
Xeon Max 9468 48C 2.1GHz 350W Speed Select Technology	PYBCP66XL	PY-CP66XL	E	○		

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 up to **185W** TDP	**-**	**PY-TKCPC88**
Cooling kit up to **350W** TDP or ATD	**-**	**PY-TKCPC89**

C

Chapter 3 - CPU (B)

B

5th Generation Intel® Xeon® Scalable Processors

There are 2 processor sockets available. Please configure 1 or 2 Processors.
>> All processors have to be the same type.
>> With **one** processor; 1x OCPv3, 2x PCIe low profile slots, Internal RAID card slot (except for 4x3.5" base unit) and 16x DIMM slots are available.
>> With **two** processors; 2xOCPv3, 3x PCIe low profile slots, Internal RAID card slot (except for 4x3.5" base unit) and 32x DIMM slots are available.
>> To configure 2nd CPU, an additional cooler kit is required.
Xeon Bronze 3508U, Xeon Gold 5512U and Xeon Platinum 8558U and Xeon Platinum 8581V are not allowed to configure 2nd CPU.

			CPU Group for Thermal condition	Available DIMM Type			
				DDR5-4800	DDR5-5600		
			4x3.5" 8x2.5" 10x2.5"	16GB 32GB 64GB 128GB 256GB	16GB 32GB 64GB 128GB 256GB	96GB*	
Xeon Bronze 35xx - Mainline, 1 socket configuration only	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4400 MT/s							
Xeon Bronze 3508U 8C 2.1GHz 125W	PYBCP68X1	-	A	○			
Xeon Silver 45xx - Mainline, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4400 MT/s & UPI Bus (2UPI) @ 16 GT/s							
Xeon Silver 4509Y 8C 2.6GHz 125W Speed Select Technology	PYBCP68X2	PY-CP68X2	A	○			
Xeon Silver 4510 12C 2.4GHz 150W	PYBCP68X3	PY-CP68X3	A	○			
Xeon Silver 4514Y 16C 2.0GHz 150W Speed Select Technology	PYBCP68X4	PY-CP68X4	A	○			
Xeon Silver 4516Y+ 24C 2.2GHz 185W Speed Select Technology	PYBCP68X5	PY-CP68X5	B	○			
Xeon Gold 55xx - Mainline/Performance Optimized, 1 socket configuration only	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s							
Xeon Gold 5512U 28C 2.1GHz 185W	PYBCP68X6	-	B	○			
Xeon Gold 55xx - Mainline/Performance Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 20 GT/s							
Xeon Gold 5515+ 8C 3.2GHz 165W	PYBCP68X7	PY-CP68X7	B	○			
Xeon Gold 5520+ 28C 2.2GHz 205W	PYBCP68X8	PY-CP68X8	C	○			
Xeon Gold 65xx - Mainline/Performance Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 5200(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 20 GT/s							
Xeon Gold 6526Y 16C 2.8GHz 195W Speed Select Technology	PYBCP68X9	PY-CP68X9	C		○		
Xeon Gold 6530 32C 2.1GHz 270W (DDR5 @4800(1DPC) / 4400(2DPC))	PYBCP68XA	PY-CP68XA	C	○		○	
Xeon Gold 6534 8C 3.9GHz 195W (DDR5 @4800(1DPC) / 4400(2DPC))	PYBCP68XB	PY-CP68XB	C	○			
Xeon Gold 6538Y+ 32C 2.2GHz 225W Speed Select Technology	PYBCP68XC	PY-CP68XC	C		○		
Xeon Gold 6542Y 24C 2.9GHz 250W Speed Select Technology	PYBCP68XD	PY-CP68XD	C		○		
Xeon Gold 6544Y 16C 3.6GHz 270W Speed Select Technology	PYBCP68XE	PY-CP68XE	C		○		
Xeon Gold 6548Y+ 32C 2.5GHz 250W Speed Select Technology	PYBCP68XF	PY-CP68XF	C		○		
Xeon Platinum 85xx - Mainline/Performance, 1 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s							
Xeon Platinum 8558U 48C 2.0GHz 300W Speed Select Technology	PYBCP68XG	-	D	○		○	Will be available June,2024
Xeon Platinum 85xx - Mainline/Performance, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 5600(1DPC) / 4400(2DPC) MT/s & UPI Bus (4UPI) @ 20 GT/s							
Xeon Platinum 8562Y+ 32C 2.8GHz 300W (UPI Bus (3UPI)) Speed Select Technology	PYBCP68XJ	PY-CP68XJ	D		○		Will be available June,2024
Xeon Platinum 8558 48C 2.1GHz 330W (DDR5 @5200(1DPC) / 4400(2DPC))	PYBCP68XH	PY-CP68XH	D		○	○	Will be available June,2024
Xeon Platinum 8568Y+ 48C 2.3GHz 350W Speed Select Technology	PYBCP68XK	PY-CP68XK	D		○	○	Will be available June,2024
Xeon Platinum 8570 56C 2.1GHz 350W	PYBCP68XL	PY-CP68XL	D		○	○	Will be available June,2024
Xeon Platinum 8580 60C 2.0GHz 350W	PYBCP68XM	PY-CP68XM	D		○	○	Will be available June,2024
Xeon Platinum 8592+ 64C 1.9GHz 350W	PYBCP68XN	PY-CP68XN	D		○	○	
Xeon - Cloud Optimized, 1 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s							
Xeon Platinum 8581V 60C 2.0GHz 270W Speed Select Technology	PYBCP68XX	-	C	○		○	Will be available June,2024
Xeon - Cloud Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4800(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 20 GT/s							
Xeon Platinum 8592V 64C 2.0GHz 330W Speed Select Technology	PYBCP68XR	PY-CP68XR	D	○		○	Will be available June,2024
Xeon Platinum 8558P 48C 2.7GHz 350W (DDR5 @5600(1DPC) / 4400(2DPC)) Speed Select Techno	PYBCP68XS	PY-CP68XS	D		○	○	Will be available June,2024
Xeon - Network Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 5200(1DPC) / 4400(2DPC) MT/s & UPI Bus (3UPI) @ 20 GT/s							
Xeon Gold 6538N 32C 2.1GHz 205W Speed Select Technology	PYBCP68XT	PY-CP68XT	C		○		Will be available June,2024
Xeon Gold 6548N 32C 2.8GHz 250W Speed Select Technology	PYBCP68XU	PY-CP68XU	C		○		Will be available June,2024
Xeon - Storage & HCI Workload Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 5200(1DPC) / 4400(2DPC) MT/s & UPI Bus (4UPI) @ 20 GT/s							
Xeon Gold 6554S 36C 2.2GHz 270W Speed Select Technology	PYBCP68XV	PY-CP68XV	C		○	○	
Xeon - Edge (IOT) Workload Optimized, 2 socket scalability	(BTO)	(Loose delivery)					
64-bit Intel Xeon processor supporting HT*, DDR5 @ 4400 MT/s & UPI Bus (2UPI) @ 16 GT/s							
Xeon Silver 4510T 12C 2.0GHz 115W Speed Select Technology	PYBCP68XW	PY-CP68XW	A	○			

*Will be available 2Q,2024 for 5th gen CPU

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 up to **185W** TDP	**-**	**PY-TKCPC88**
Cooling kit up to **350W** TDP or ATD	**-**	**PY-TKCPC89**

C

Chapter 4 - DDR5 System memory

C

Each CPU offers 16 Slots for DDR5 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 Mirroing Memory RAS Mode.

There are different kinds of DDR5 Memory Modules available: RDIMM x4, RDIMM x8 and RDIMM 3DS x4
Mix of these different kind of memories is not allowed.

Supported memory capacities per CPU:
Up to 4TB using DDR5 RDIMM (16x 256GB DDR5 RDIMM 3DS)

Supported memory capacities per System (with 2CPU configuration):
Up to 8TB using DDR5 RDIMM (32x 256GB DDR5 RDIMM 3DS)

The memory speed depends on configuration restricted by the CPU SKU (max. 4800 MT/s).
DDR5 memory is operated at 1.2V

The restriction for 96GB memory
- The oreder must be x8pcs or x16pcs per CPU only
- Not supported for mixed capacity in a system
- Supported with XCC CPU only

Memory Mode ; either one of follwoig memory modes must be selected.			
Nomal Mode	Requires 1, 2, 4, 6, 8, 12 or 16 memory Module per CPU	1x per CPU	PYBMMD2
Normal Mode required to be the best performance. ADDDC Sparing is available in case system configured by DDR5xRx4 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.			
HBM-ONLY Mode	Requires HBM CPU, no memory needed	1x per CPU	**PYBMMH1**
HBM CPUs can work as memory with memory less configuration. If you order HBM SKUs with no DIMMs, you should order HBM-ONLY Mode.			
HBM Cache Mode	Requires HBM CPU, 4, 8 or 16 memory Module per CPU	1x per CPU	**PYBMMHC1**
HBM works as cache of memory under BIOS preconfiguration. Additional DIMM is needed			
HBM Flat Mode	Requires HBM CPU, 1, 2, 4, 8 or 16 memory Module per CPU	1x per CPU	**PYBMMHF1**
In this Mode, DDR can be added for a high capacity, HBM&DDR exposed as separete regions. Higher performing than Cache mode.			
HBM Flat+Mirroring Mode	Requires HBM CPU, 8 or 16 memory Module per CPU	1x per CPU	**PYBMMHFM1**
In this Mode, DDR can be added for a high capacity, HBM&DDR exposed as separete regions.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			

DDR5 DIMM ony configuration section

Min 1x DIMM per CPU is required. Any Mix of RDIMMx8, RDIMMx4 and RDIMM 3DS is not coniugred.

DDR5-4800

DDR5 Registered DIMM 4800MHz 1R/2R x8				
16GB (1x16GB) 1Rx8 DDR5-4800 R ECC	max 16x per CPU	PYBME16SL	PY-ME16SL	
32GB (1x32GB) 2Rx8 DDR5-4800 R ECC	max 16x per CPU	PYBME32SL	PY-ME32SL	
max 16x per CPU; max 32x for System				

DDR5 Registered DIMM 4800MHz 1R/2R x4				
32GB (1x32GB) 1Rx4 DDR5-4800 R ECC	max 16x per CPU	PYBME32SL2	PY-ME32SL2	
64GB (1x64GB) 2Rx4 DDR5-4800 R ECC	max 16x per CPU	PYBME64SL	PY-ME64SL	
max 16x per CPU; max 32x for System				

DDR5 Registered DIMM 4800MHz 3DS 4R/8R x4				
128GB (1x128GB) 4Rx4 DDR5-4800 R 3DS ECC	max 16x per CPU	PYBME12SL	PY-ME12SL	Will be available on 5th gen CPU June,2024
256GB (1x256GB) 8Rx4 DDR5-4800 R 3DS ECC	max 16x per CPU	PYBME25SL	PY-ME25SL	Will be available on 5th gen CPU June,2024
max 16x per CPU; max 32x for System				

DDR5-5600

DDR5 Registered DIMM 5600MHz 1R/2R x8			
16GB (1x16GB) 1Rx8 DDR5-5600 R ECC	max 16x per CPU	PYBME16SP	PY-ME16SP
32GB (1x32GB) 2Rx8 DDR5-5600 R ECC	max 16x per CPU	PYBME32SP	PY-ME32SP
max 16x per CPU; max 32x for System			

DDR5 Registered DIMM 5600MHz 1R/2R x4			
32GB (1x32GB) 1Rx4 DDR5-5600 R ECC	max 16x per CPU	PYBME32SP2	PY-ME32SP2
64GB (1x64GB) 2Rx4 DDR5-5600 R ECC	max 16x per CPU	PYBME64SP	PY-ME64SP
max 16x per CPU; max 32x for System			

DDR5 Registered DIMM 5600MHz 1R/2R x4				
96GB (1x96GB) 2Rx4 DDR5-5600 R ECC	max 16x per CPU	PYBME96SP	PY-ME96SP	Will be available on 5th gen CPU June,2024
max 16x per CPU; max 32x for System				

DDR5 Registered DIMM 5600MHz 3DS 4R/8R x4				
128GB (1x128GB) 4Rx4 DDR5-5600 R 3DS ECC	max 16x per CPU	PYBME12SP	PY-ME12SP	Will be available June,2024
256GB (1x256GB) 8Rx4 DDR5-5600 R 3DS ECC	max 16x per CPU	PYBME25SP	PY-ME25SP	Will be available June,2024
max 16x per CPU; max 32x for System				

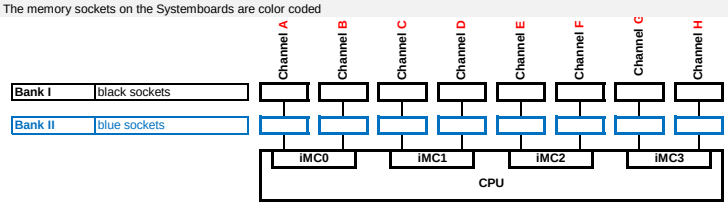
D

Detailed information

RAS feature	Memory Mode	RDIMM	RDIMM LRDIMM	BIOS setting
		x8	x4	
ECC	Normal Mode/Mirroring Mode	yes	yes	always enabled.
SDDC	Normal Mode/Mirroring Mode	no	yes	always enabled in case x4 DIMM conifugred.
ADDDC Sparing	Normal 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	16GB: 16GB x1	-
	8 Module / CPU	with one CPU	-	64GB: 16GBx8x50%
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%

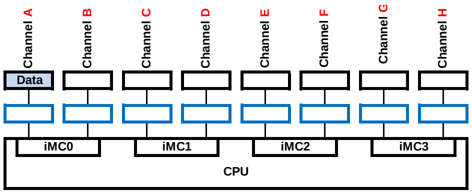
The memory sockets on the Systemboards are color coded



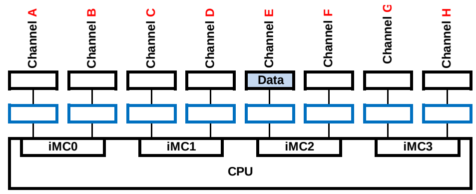
Normal Mode population DDR5 DIMM only

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 poputated in each Chanel.

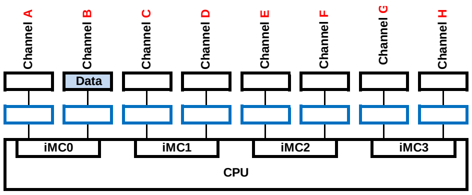
1 DIMMs for 1CPU



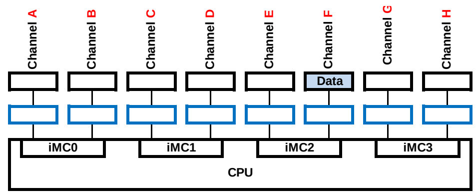
1 DIMMs for 1CPU



1 DIMMs for 1CPU

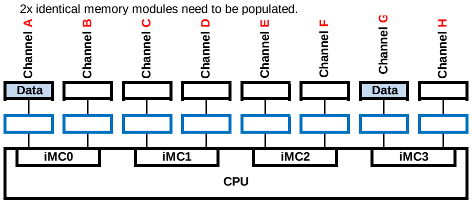


1 DIMMs for 1CPU



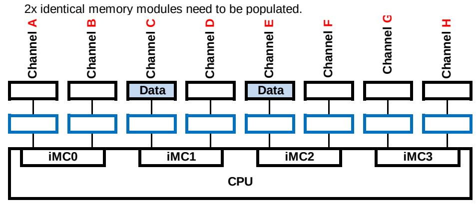
2 DIMMs for 1CPU

2x identical memory modules need to be populated.



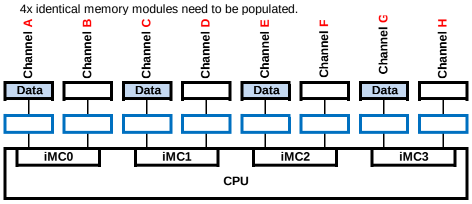
2 DIMMs for 1CPU

2x identical memory modules need to be populated.



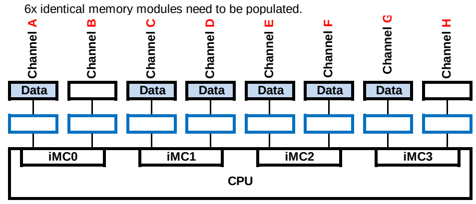
4 DIMMs for 1CPU

4x identical memory modules need to be populated.



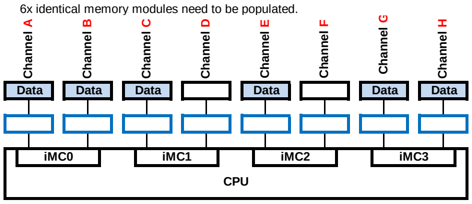
6 DIMMs for 1CPU

6x identical memory modules need to be populated.



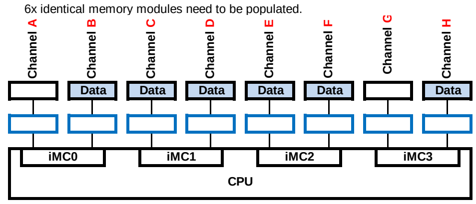
6 DIMMs for 1CPU

6x identical memory modules need to be populated.



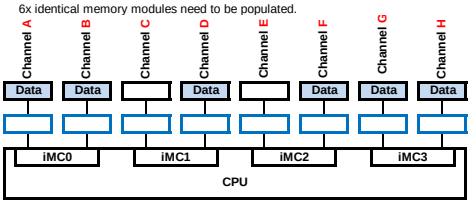
6 DIMMs for 1CPU

6x identical memory modules need to be populated.



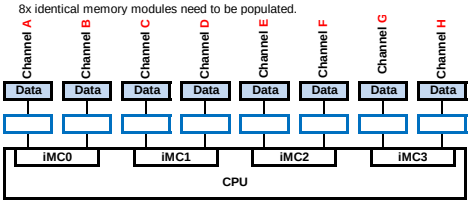
6 DIMMs for 1CPU

6x identical memory modules need to be populated.



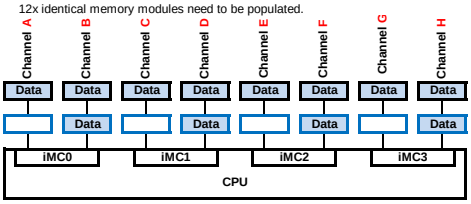
8 DIMMs for 1CPU

8x identical memory modules need to be populated.



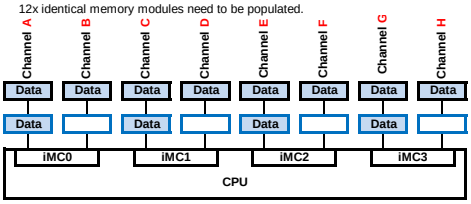
12 DIMMs for 1CPU

12x identical memory modules need to be populated.



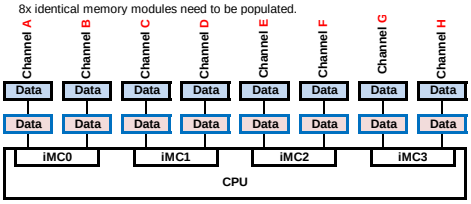
12 DIMMs for 1CPU

12x identical memory modules need to be populated.



16 DIMMs for 1CPU

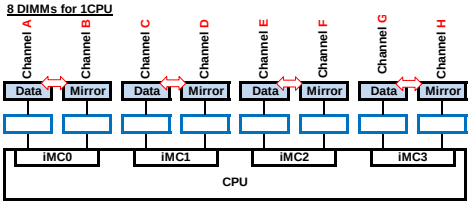
8x identical memory modules need to be populated.



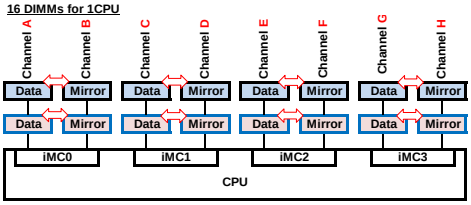
Mirroing Mode population DDR5 DIMM only

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



Chapter 5 - Graphics options

D

*will be available in June 2023

PYBVAP10 **PY-VAP10**
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
Not for 10x2.5" Base unit and short depth base units
max. 1x per system

PYBVAP13 **PY-VAP13**
Front VGA connector (15-pin)
Front VGA connector (15-pin) including cable and front connector
only for short depth base units
max. 1x per system

Optional Front VGA
only possible for
onboard graphics

PYBVG4T2L **PY-VG4T2L**
PGRA CP NVIDIA T400 4GB LP
NVIDIA T400 4GB PCIe 3.0 x16
Connectors: 3x Mini-DP
no cable kits included cablse must be ordered seperately
Triple head + professional 2-D + 3-D supported for Windows OS native driver support for Linux OS
Low profile bracket
max. 1x per system

The high end optional NVIDIA Quadro P400 graphic card offers triple head operation and full 3D video support.
The cables kit is not included. It is necessary to order cable kit.
Remote Video direction via iRMC must be disabled.

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

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

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

NVIDIA A2/L4

For NVIDIA GRID SW License to use the virtual graphic (GRID) functionality, a SW activation key **and** support licence has to be purchased additionally. Please refer to additional licence oferings for Virtual Applications / Virtual PC / Virtual Workstation plus SUMs (Support, Updates & Maintenance subscriptions).
In addition, it is possible to use as GPGPU. In this case, there is no NVIDIA GRID SW License.

Cards personality is set to graphic card ex factory!

PYBVG4A8L PY-VG4A8L
NVIDIA A2
NVIDIA A2 Card 16GB GDDR6 memory.
PCIe x8 (Gen4) - single width, low profile bracket, no exlernal power cable, 60W
Limitation: **Refer to Chapter18 - Thermal Rule for the detail.** **PY-VG4A8L requires Cooling Kit: PY-TKCPC88** *A2 requires a heat sink including Cooling Kit: PY-TKCPC88 inspite of CPU group. If CPU group C/D is already installed without A2 and A2 as loose delivery is ordered, a number of Cooling Kit: PY-TKCPC88 is required same as a number of CPUs
max. 3x per system

PYBVG4L1L PY-VG4L1L
NVIDIA L4
NVIDIA L4 Card 24GB GDDR6 memory.
PCIe x16 (Gen4) - single width, low profile bracket, no exlernal power cable, 70W
Limitation: **Refer to Chapter18 - Thermal Rule for the detail.** **PY-VG4L1L requires Cooling Kit: PY-TKCPC88** *L4 requires a heat sink including Cooling Kit: PY-TKCPC88 inspite of CPU group. If CPU group C/D is already installed without A2 and A2 as loose delivery is ordered, a number of Cooling Kit: PY-TKCPC88 is required same as a number of CPUs
max. 3x per system

Perpetual Software license

S26361-F4024-S101 S26361-F4024-L101
GRID Virtual Applications (vApps) Perpetual License, 1 CCU
16x per A2 card

S26361-F4024-S805 L26361-F4024-L805
NVIDIA GRID vApps Prod SUMS **5 year**, 1CCU
same volume with perpetual license

S26361-F4024-S201 S26361-F4024-L201
NVIDIA GRID Virtual PC (vPC) Perpetual License, 1 CCU
16x per A2 card

S26361-F4024-S815 L26361-F4024-L815
NVIDIA GRID vPC Prod SUMS **5 year**, 1 CCU
same volume with perpetual license

S26361-F4024-S301 S26361-F4024-L301
NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Perpetual License, 1 CCU
16x per A2 card

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

S26361-F4024-S825 L26361-F4024-L825
NVIDIA Quadro vDWS Prod SUMS **5 year**, 1 CCU
same volume with perpetual license

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

S26361-F4024-L956
NVIDIA GRID vApps Prod SUMS 6 months Renew, 1CCU
NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L966
NVIDIA GRID vPC Prod SUMS 6 months Renew, 1 CCU
NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L976
NVIDIA GRID vWS Prod SUMS 6 months Renew, 1 CCU
NVIDIA SUMS License (6 months) for renewal. It needs if you need to continue SUMs.

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

S26361-F4024-L901
NVIDIA GRID vApps Prod SUMS 1yr Renew, 1CCU
NVIDIA SUMS License (1year) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L911
NVIDIA GRID vPC Prod SUMS 1yr Renew, 1 CCU
NVIDIA SUMS License (1year) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L921
NVIDIA GRID vWS Prod SUMS 1yr Renew, 1 CCU
NVIDIA SUMS License (1year) for renewal. It needs if you need to continue SUMs.

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

S26361-F4024-L952
NVIDIA GRID vApps Prod SUMS 2yrs Renew, 1CCU
NVIDIA SUMS License (2years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L962
NVIDIA GRID vPC Prod SUMS 2yrs Renew, 1 CCU
NVIDIA SUMS License (2years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L972
NVIDIA GRID vWS Prod SUMS 2yrs Renew, 1 CCU
NVIDIA SUMS License (2years) for renewal. It needs if you need to continue SUMs.

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

S26361-F4024-L953
NVIDIA GRID vApps Prod SUMS 3yrs Renew, 1CCU
NVIDIA SUMS License (3years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L963
NVIDIA GRID vPC Prod SUMS 3yrs Renew, 1 CCU
NVIDIA SUMS License (3years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L973
NVIDIA GRID vWS Prod SUMS 3yrs Renew, 1 CCU
NVIDIA SUMS License (3years) for renewal. It needs if you need to continue SUMs.

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

S26361-F4024-L954
NVIDIA GRID vApps Prod SUMS 4yrs Renew, 1CCU
NVIDIA SUMS License (4years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L964
NVIDIA GRID vPC Prod SUMS 4yrs Renew, 1 CCU
NVIDIA SUMS License (4years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L974
NVIDIA GRID vWS Prod SUMS 4yrs Renew, 1 CCU
NVIDIA SUMS License (4years) for renewal. It needs if you need to continue SUMs.

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

S26361-F4024-L955
NVIDIA GRID vApps Prod SUMS 5yrs Renew, 1CCU
NVIDIA SUMS License (5years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L965
NVIDIA GRID vPC Prod SUMS 5yrs Renew, 1 CCU
NVIDIA SUMS License (5years) for renewal. It needs if you need to continue SUMs.

S26361-F4024-L975
NVIDIA GRID vWS Prod SUMS 5yrs Renew, 1 CCU
NVIDIA SUMS License (5years) for renewal. It needs if you need to continue SUMs.

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

Subscription Software license

S26361-F4024-S111 / S26361-F4024-L111	S26361-F4024-S113 / S26361-F4024-L113	S26361-F4024-S115 / S26361-F4024-L115	S26361-F4024-S211 / S26361-F4024-L211	S26361-F4024-S213 / S26361-F4024-L213	S26361-F4024-S215 / S26361-F4024-L215	S26361-F4024-S311 / S26361-F4024-L311	S26361-F4024-S313 / S26361-F4024-L313	S26361-F4024-S315 / S26361-F4024-L315
GRID Virtual Applications (vApps) Subscription License, **1 year**, 1 CCU	GRID Virtual Applications (vApps) Subscription License, **3 years**, 1 CCU	GRID Virtual Applications (vApps) Subscription License, **5 years**, 1 CCU	NVIDIA GRID Virtual PC (vPC) Subscription License, **1 year**, 1 CCU	NVIDIA GRID Virtual PC (vPC) Subscription License, **3 years**, 1 CCU	NVIDIA GRID Virtual PC (vPC) Subscription License, **5 years**, 1 CCU	NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, **1 year**, 1 CCU	NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, **3 years**, 1 CCU	NVIDIA Quadro Virtual Datacenter Work Station (vDWS) Subscription License, **5 years**, 1 CCU
16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card	16x per A2 card

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

S26361-F4024-L906	S26361-F4024-L916	S26361-F4024-L926
NVIDIA GRID vApps Subscription License 6 months Renew, 1CCU	NVIDIA GRID vPC Subscription License 6 months Renew, 1 CCU	NVIDIA GRID Quadro vDWS Subscription License 6 months Renew, 1 CCU
NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (6 months) for renewal. It needs if you need to continue Subscription.

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

S26361-F4024-L902	S26361-F4024-L912	S26361-F4024-L922
NVIDIA GRID vApps Subscription License 1yr Renew, 1CCU	NVIDIA GRID vPC Subscription License 1yr Renew, 1 CCU	NVIDIA GRID Quadro vDWS Subscription License 1yr Renew, 1 CCU
NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (1 year) for renewal. It needs if you need to continue Subscription.

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

S26361-F4024-L900	S26361-F4024-L910	S26361-F4024-L920
NVIDIA GRID vApps Subscription License 2yrs Renew, 1CCU	NVIDIA GRID vPC Subscription License 2yrs Renew, 1 CCU	NVIDIA GRID Quadro vDWS Subscription License 2yrs Renew, 1 CCU
NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (2 years) for renewal. It needs if you need to continue Subscription.

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

S26361-F4024-L903	S26361-F4024-L913	S26361-F4024-L923
NVIDIA GRID vApps Subscription License 3yrs Renew, 1CCU	NVIDIA GRID vPC Subscription License 3yrs Renew, 1 CCU	NVIDIA GRID Quadro vDWS Subscription License 3yrs Renew, 1 CCU
NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (3 years) for renewal. It needs if you need to continue Subscription.

NVIDIA Subscription License (5years) for renewal - Loose Delivery -

S26361-F4024-L905	S26361-F4024-L915	S26361-F4024-L925
NVIDIA GRID vApps Subscription License 5yrs Renew, 1CCU	NVIDIA GRID vPC Subscription License 5yrs Renew, 1 CCU	NVIDIA GRID Quadro vDWS Subscription License 5yrs Renew, 1 CCU
NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.	NVIDIA Subscription License (5 years) for renewal. It needs if you need to continue Subscription.

Education Software license

Perpetual license

S26361-F4024-S401 / S26361-F4024-L401
NVIDIA GRID EDU Perpetual License, 1 CCU
16x per A2 card

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

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

Subscription license

S26361-F4024-S411 / S26361-F4024-L411	S26361-F4024-S413 / S26361-F4024-L413
NVIDIA GRID EDU Subscription License, **1 year**, 1 CCU	NVIDIA GRID EDU Subscription License, **3 year**, 1 CCU
16x per A2 card	16x per A2 card

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

S26361-F4024-L930
NVIDIA GRID EDU SUMS 6 months Renew, 1CCU
NVIDIA EDU SUMS License (6 months) for renewal. It needs if you need to continue EDU SUMs.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

F

Rear HDD/SSD cage option

rear 2x2.5" HDD/SSD SFF

PYBBA22S5 Option REAR HDD/SSD
Provides 2 rear hot-plug bays for SAS/SATA HDD/SSD SFF
Note: [Thermal Restriction] Refer to Chapter18 - Thermal Rule
Note: Consumes space for PCIe slot #2, #3 Not Available with Full height riser card kit
max. 1x per system
Includes all necessary cage, backplane and cables

G

Chapter 7 - SAS / RAID Controller

F

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

onboard SATA controller with SW-RAID

onboard controller for SATA HDD or SSD drives					
6Gb/s SATA	Intel VROC (SATA RAID) based on chipset	No Cache	SW-RAID 0, 1, 10	2x	**onboard, included**

BIOS version R1.12.0 or later is required to use Intel VROC (SATA RAID)

internal HBA and RAID controller, no 2nd Level cache

internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP600i LP available from 2024/10	No Cache	RAID 0, 1, 10	1x	**PYBSR4FAL**	**PY-SR4FA**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander supports SED (Self Encrypting Drives) 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					
internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP500i LP	No Cache	RAID 0, 1, 10, 5, 50	1x	**PYBSR3FBL**	**PY-SR3FB**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander supports SED (Self Encrypting Drives) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					

internal RAID / HBA controllers for SAS, SATA HDD or SAS, SATA, PCIe SSD drives					
PSAS CP 2200-16i LP	No Cache	HBA + RAID 0, 1, 10, 5	1x	**PYBSC4MA1L**	**PY-SC4MA1**
16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, without expander, up to 16 SAS/SATA drives or in mixed configuration up to 8 SAS/SATA drives and up to 2 x4 NVMe drives are supported. (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: PYBSC4MA1L and PYBSC4MA2L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PSAS CP 2100-8i LP	No Cache	HBA + RAID 0, 1, 10, 5	1x	**PYBSC3MA2L**	**PY-SC3MA2**
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	1x	**PYBSC3MAWL**	**-**
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 PYR2537R2N / PYR2537RBN / PYR2537RDN					

internal RAID / HBA controllers for PCIe SSD drives -Cancelled-					
PSAS CP 2200-16i NVMe LP	No Cache	HBA + RAID 0, 1, 10, 5	1x	**PYBSC4MA2L**	**PY-SC4MA1**
for Chassis Variant PYR2537RBN up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only or mixed configuration for up to 8 SAS/SATA drives and up to 2 x4 NVMe drives requires a different order number, please see above) requires 1x LP PCIe 4.0 x8 (int.) slot (FYI: PYBSC4MA1L and PYBSC4MA2L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					

internal RAID controller with 2nd Level cache

internal RAID controllers for SAS, SATA HDD or SAS, SATA, PCIe SSD drives					
PRAID EP740i LP available from 2025/01	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C71L**	**PY-SR4C71**
16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, without expander, up to 16 SAS/SATA drives or in mixed configuration up to 8 SAS/SATA drives and up to 2 x4 NVMe drives are supported. (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) supports SED (Self Encrypting Drives) requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS4116 (FYI: PYBSR4C71L and PYBSR4C72L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
internal RAID controllers for SAS, SATA HDD or SAS, SATA, PCIe SSD drives					
PRAID EP640i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C63L**	**PY-SR4C63**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander supports SED (Self Encrypting Drives) requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3908					
PRAID EP680i LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C6L**	**PY-SR4C6**
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, without expander, up to 16 SAS/SATA drives or in mixed configuration up to 8 SAS/SATA drives and up to 2 x4 NVMe drives are supported. (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) supports SED (Self Encrypting Drives) for PRAID EP680i and PCIe SSD drives, no FBU is allowed 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					
PRAID EP520i LP	2GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	**S26361-F4042-E202**	**S26361-F4042-L502**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander supports SED (Self Encrypting Drives) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP540i LP	4GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	**S26361-F4042-E214**	**S26361-F4042-L514**
PRAID EP580i LP	8GB Cache	RAID 0, 1, 1E, 10, 5, 50, 6, 60	1x	**S26361-F4042-E208**	**S26361-F4042-L508**
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander supports SED (Self Encrypting Drives) requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
optional Flash Backup Unit (FBU)					
FBU option for PRAID EP5xx / EP6xx / EP7xx in internal RAID slot: Supercap securing the power supply of the RAID controller in case of power failure including cable with 25cm length. (For 2.5" base units)			1x	**PYBFBR15**	**PY-FBR14**
FBU option for PRAID EP5xx / EP6xx / EP7xx in rear PCIe slot#1 or slot#2: Supercap securing the power supply of the RAID controller in case of power failure including cable with 100cm length. (For 3.5" base units or short depth models)			1x	**PYBFBR14**	**PY-FBR14**

internal RAID controllers for PCIe SSD drives					
PRAID EP740i NVMe LP available from 2025/01	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C72L**	**PY-SR4C71**
for Chassis Variant PYR2537RBN up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only or mixed configuration for up to 8 SAS/SATA drives and up to 2 x4 NVMe drives requires a different order number, please see above) requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS4116 (FYI: PYBSR4C71L and PYBSR4C72L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
optional Flash Backup Unit (FBU) available from 2025/01					
FBU option for PRAID EP7xx in rear PCIe slot#1: Supercap securing the power supply of the RAID controller in case of power failure including cable with 100cm length. (For Type 3-10)			1x	**PYBFBR14**	**PY-FBR14**
internal RAID controllers for PCIe SSD drives					
PRAID EP680i NVMe LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C62L**	**PY-SR4C6**
for Chassis Variant PYR2537RBN up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only or mixed configuration for up to 8 SAS/SATA drives and up to 2 x4 NVMe drives requires a different order number, please see above) no FBU is allowed for this controller 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 SAS, SATA, PCIe SSD drives					
PRAID EP 3252-8i LP	2GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4MA1L**	**PY-SR4MA1**
PRAID EP 3254-8i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4MA2L**	**PY-SR4MA2**
8 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander supports SED (Self Encrypting Drives) requires 1x LP PCIe 4.0 x8 (int.) slot					
PRAID EP 3258-16i LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4MA3L**	**PY-SR4MA3**
16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, without expander, up to 16 SAS/SATA drives or in mixed configuration up to 8 SAS/SATA drives and up to 2 x4 NVMe drives are supported. (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) supports SED (Self Encrypting Drives) 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 EP 325x in internal RAID slot: Supercap securing the power supply of the RAID controller in case of power failure including cable with 31cm length. (For 2.5" base units)			1x	**PYBFBM011**	**PY-FBM01**
FBU option for PRAID EP 325x in rear PCIe slot#1 or slot#2: Supercap securing the power supply of the RAID controller in case of power failure including cable with 80cm length. (For 3.5" base units or short depth models)			1x	**PYBFBM013**	**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 PYR2537RBN up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only or mixed configuration for up to 8 SAS/SATA drives and up to 2 x4 NVMe drives 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 EP 325x in rear PCIe slot#1: Supercap securing the power supply of the RAID controller in case of power failure including cable with 80cm length. (For Type 3-10)			1x	**PYBFBM013**	**PY-FBM01**

FBU cannot be combined with Advanced Thermal design.
up to **2x FBU** can be integrated per standard base units, up to **1x FBU** can be integrated per short depth base units
up to 1x for internal RAID slot and up to 1x for rear PCIe slots

[Standard model] Cable kit for upgrade cards: For upgrade, L-parts Cable kit is available.
Cable Kit for EP6xxi/CP6xxi/EP7xxi/EP325x/CP2200-16i: **PY-CBS105**
Cable Kit for CP2100-8i/ PRAID CP500i / PRAID EP520i / PRAID EP540i / PRAID EP580i: **PY-CBS106**
Internal RAID riser module: **PY-PREM03**

[Short depth model] Cable kit for upgrade cards: For upgrade, L-parts Cable kit is available.
Cable Kit for EP6xxi/CP6xxi/EP7xxi/EP325x/CP2200-16i: **PY-CBS112**
Cable Kit for CP2100-8i/ PRAID CP500i / PRAID EP520i / PRAID EP540i / PRAID EP580i: **PY-CBS113**

Group A and Group B cannot be mixed
Group A and Group C can be mixed
Group B and Group C can be mixed

Group A	Group B	Group C
PRAID CP600i	PSAS CP 2200-16i	PSAS CP600e
PSAS CP600i	~~PSAS CP 2200-16i NVMe~~	PRAID EP680e
PRAID CP500i	PSAS CP 2100-8i	PDUAL CP100
PRAID EP740i	PSAS CP 2100-8i for vSAN	PDUAL CP300
PRAID EP740i NVMe	PRAID EP 3252-8i	
PRAID EP640i	PRAID EP 3254-8i	
PRAID EP680i	PRAID EP 3258-16i	
PRAID EP680i NVMe	~~PRAID EP 3258-16i NVMe~~	
PRAID EP520i		
PRAID EP540i		
PRAID EP580i		

G

external HBA controller, no 2nd Level cache

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

external RAID controller with 2nd Level cache

external RAID controllers for SAS HDD or SSD drives					
PRAID EP680e LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	2x	**PYBSR4C6EL**	**PY-SR4C6E**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 2x SFF8644 (external Mini-SAS HD) supports SED (Self Encrypting Drives) requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916					
optional Flash Backup Unit (FBU)					
FBU option for PRAID EP6xx in rear PCIe slot: Supercap securing the power supply of the RAID controller in case of power failure including cable with 100cm length			1x	**PYBFBR14**	**PY-FBR14**

internal controller for PCIe SSD (NVMe SSD), no HW-RAID

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

BIOS version R1.12.0 or later is required to use Intel VROC (VMD NVMe RAID)
* RAID 1 is only supported In VMware ESXi.

H

Chapter 8 - ODD optical disk drives

The 10x 2,5" base unit does NOT feature ODD

H

Config with 1x 9.5mm bay

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

I

Chapter 10 - storage drives

I

SATA drives can be connected to the onboard Controller (max. 8x), or require a dedicated SAS / RAID Controller.
SAS drives require a dedicated SAS / RAID Controller.
PCIe-SSDs can be connected to the onboard Controller, or require a dedicated RAID Controller or PCIe retimer/switch card.
FIPS and SED drives are Self Encrypting Drives, and they require either a RAID controller with SED support or an HBA and in addition a software instance, supporting SED Key Management. It is strongly recommended to order a RAID controller with SED function for SED/FIPS drives.

SATA, SAS and PCIe drives can be mixed based on RAID spec, but cannot be used in one logical RAID volume.
FIPS and SED drives can be mixed based on RAID spec, but cannot be used in one logical RAID volume.
One logical RAID volume must be created the same order code products.

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.
DWPD: Drive Writes Per Day over 5 years.

When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.
https://kb.vmware.com/kb/2145210

HDD Classes:
Economic (ECO) SATA: Entry Class Drives, for non critical applications.
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 **Kioxia PM7** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
800GB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10		**PYBSS80NGF**	**PY-SS80NGF**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10		**PYBSS16NGF**	**PY-SS16NGF**
800GB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED	**PYBSS80NGG**	**PY-SS80NGG**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED	**PYBSS16NGG**	**PY-SS16NGG**

max. 12x - depending on base unit & configuration

SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray
based on **Seagate Nytro3732/3750** 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. 12x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (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*
1.6TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS16NPM**	**PY-SS16NPM**
3.2TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS32NPM**	**PY-SS32NPM**
6.4TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS64NPM**	**PY-SS64NPM**

max. 12x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray
based on **Seagate Nytro3532/3550** 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. 12x - 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*
1.92TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		**PYBSS19NNM**	**PY-SS19NNM**
3.84TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		**PYBSS38NNL**	**PY-SS38NNL**
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. 12x - depending on base unit & configuration

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

based on **Samsung PM1653** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
960GB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS96NNM**	**PY-SS96NNM**
1.92TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS19NNP**	**PY-SS19NNP**
3.84TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS38NNN**	**PY-SS38NNN**
7.68TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS76NNP**	**PY-SS76NNP**
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS15NNN**	**PY-SS15NNN**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 12x - depending on base unit & configuration

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

based on **Seagate Nytro3332/3350** 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. 12x - depending on base unit & configuration

The SSDs not released with PRAID CP500i

will be available in CQ2'24

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

based on **Samsung PM897a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS48NKS**	**PY-SS48NKS**
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS96NKS**	**PY-SS96NKS**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS19NKS**	**PY-SS19NKS**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS38NKS**	**PY-SS38NKS**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

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

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

based on **Micron 5300/5400 MAX** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
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. 12x - depending on base unit & configuration

The SSDs not released with PRAID CP500i

will be available in CQ2'24

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

based on **Samsung PM893a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS48NME**	**PY-SS48NME**
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS96NME**	**PY-SS96NME**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS19NME**	**PY-SS19NME**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS38NME**	**PY-SS38NME**
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS76NME**	**PY-SS76NME**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

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

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

based on **Micron 5300/5400 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. 12x - 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. 12x - 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**
1.2TB	10 000	SAS 12Gb/s	512n		**S26361-F5729-E112**	**S26361-F5729-L112**
300GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH301EU**	**PY-SH301EU**
600GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH601EU**	**PY-SH601EU**
1.2TB	10 000	SAS 12Gb/s	512n	SED	**PYBSH121EU**	**PY-SH121EU**

max. 12x - 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*
1.8TB	10 000	SAS 12Gb/s	512e		**S26361-F5730-E118**	**S26361-F5730-L118**
2.4TB	10 000	SAS 12Gb/s	512e		**S26361-F5543-E124**	**S26361-F5543-L124**
1.8TB	10 000	SAS 12Gb/s	512e	SED	**PYBSH181DU**	**PY-SH181DU**
2.4TB	10 000	SAS 12Gb/s	512e	SED	**S26361-F5582-E124**	**S26361-F5582-L124**

max. 12x - 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. 12x - 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**

max. 12x - depending on base unit & configuration

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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 **Kioxia PM7** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
800GB	3.5" (LFF)	SAS 24Gb/s	Write Intensive	10		**PYBTS80NGC**	**PY-TS80NGC**
1.6TB	3.5" (LFF)	SAS 24Gb/s	Write Intensive	10		**PYBTS16NGC**	**PY-TS16NGC**

max. 4x - depending on base unit & configuration

SSD SAS 3.5" Write Intensive (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray

based on **Seagate Nytro3732/3750** 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. 4x - 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 **Kioxia PM7** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
1.6TB	3.5" (LFF)	SAS 24Gb/s	Mixed Use	3		**PYBTS16NPJ**	**PY-TS16NPJ**
3.2TB	3.5" (LFF)	SAS 24Gb/s	Mixed Use	3		**PYBTS32NPJ**	**PY-TS32NPJ**
6.4TB	3.5" (LFF)	SAS 24Gb/s	Mixed Use	3		**PYBTS64NPJ**	**PY-TS64NPJ**

max. 4x - 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 Nytro3532/3550** 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. 4x - 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*
1.92TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1		**PYBTS19NNH**	**PY-TS19NNH**
3.84TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1		**PYBTS38NNH**	**PY-TS38NNH**
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. 4x - 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 **Samsung PM1653** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
960GB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBTS96NNH**	**PY-TS96NNH**
1.92TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBTS19NNJ**	**PY-TS19NNJ**
3.84TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBTS38NNJ**	**PY-TS38NNJ**
7.68TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBTS76NNL**	**PY-TS76NNL**
15.36TB	3.5" (LFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBTS15NN3**	**PY-TS15NN3**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 4x - 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 Nytro3332/3350** 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. 4x - depending on base unit & configuration

The SSDs not released with PRAID CP500i — will be available in CQ2'24

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

based on **Samsung PM897a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBTS48NK9**	**PY-TS48NK9**
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBTS96NK9**	**PY-TS96NK9**
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBTS19NK9**	**PY-TS19NK9**
3.84TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBTS38NK9**	**PY-TS38NK9**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 4x - 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. 4x - 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 5300/5400 MAX** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
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. 4x - depending on base unit & configuration

The SSDs not released with PRAID CP500i — will be available in CQ2'24

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

based on **Samsung PM893a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBTS48NMB**	**PY-TS48NMB**
960GB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBTS96NMA**	**PY-TS96NMA**
1.92TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBTS19NMA**	**PY-TS19NMA**
3.84TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBTS38NMA**	**PY-TS38NMA**
7.68TB	3.5" (LFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBTS76NMA**	**PY-TS76NMA**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 4x - 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. 4x - 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 5300/5400 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. 4x - depending on base unit & configuration

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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. 4x - depending on base unit & configuration						

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
300GB	10 000	SAS 12Gb/s	512n		**S26361-F5728-E130**	**S26361-F5728-L130**
600GB	10 000	SAS 12Gb/s	512n		**S26361-F5728-E160**	**S26361-F5728-L160**
1.2TB	10 000	SAS 12Gb/s	512n		**S26361-F5728-E112**	**S26361-F5728-L112**
max. 4x - 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**
max. 4x - 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*
12TB	7 200	SAS 12Gb/s	512e		**PYBCHCT7B7**	**PY-CHCT7B7**
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**
20TB	7 200	SAS 12Gb/s	512e		**PYBCHLT7B**	**PY-CHLT7B**
12TB	7 200	SAS 12Gb/s	512e	SED	**PYBCHCT7BW**	**PY-CHCT7BW**
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. 4x - 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. 4x - 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*
12TB	7 200	SATA 6Gb/s	512e		**PYBBHCT7E4**	**PY-BHCT7E4**
14TB	7 200	SATA 6Gb/s	512e		**PYBBHET7E4**	**PY-BHET7E4**
16TB	7 200	SATA 6Gb/s	512e		**S26361-F3904-E160**	**S26361-F3904-L160**
18TB	7 200	SATA 6Gb/s	512e		**PYBBHJT7E2**	**PY-BHJT7E2**
max. 4x - depending on base unit & configuration						

M.2 SATA SSD

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

M.2 Riser Kit
PYBPREM01
PY-PREM01
provides two M.2 Connectors not available for short depth models
max 1x for system
No mixed with PDUAL CP100 and CP300 For standard base units

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

based on **Micron 5300/5400 PRO** drives

Capacity	*Formfactor*	*Interface*		*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.							
max. 1x per Server; M.2 Riser Kit is required. (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.							

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

based on **Micron 5300/5400 PRO** drives (960GB is 5400 only)

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; M.2 Riser Kit is required. (please see folder "description"). VMware is not supported.							
2x M.2 drives required; in case M.2 drives are used with PDUAL CP100 or CP300.							

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

based on **Micron 7450 PRO** drives

Capacity	*Formfactor*	*Interface*	*DWPD*	*Category*		*order code E-part*	*order code L-part*
480GB	M.2 2280	PCIe4.0 x4	0,9	Boot		**PYBBS48PEA**	**PY-BS48PEA**
960GB	M.2 2280	PCIe4.0 x4	0,9	Boot		**PYBBS96PEA**	**PY-BS96PEA**
M.2 drive is designed for use as a boot drive with the Endurance Spec. above.							
max. 2x per Server; M.2 Riser Kit is required. (please see folder "description"). 2x M.2 drives require Intel VROC Upgrade Key Premium(PYBRLVR02).							
2x M.2 drives required; in case M.2 drives are used with PDUAL CP300.							

Dual M.2

PDUAL CP100, CP300 and M.2 Riser Kit 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 of 2x SSD SATA M.2 drives, which offers RAID1 with the 2x SSD M.2 drives.							
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 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 SATA M.2 drives.							

PDUAL CP300, 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	**PYBDMCP35L**	**PY-DMCP35**
PDUAL CP300 is a carrier of 2x SSD SATA or PCIe 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) or							
SSD PCIe M.2 480GB/960GB. (PY*BS48PEA/PY*BS96PEA)							
max. 1x per Server, requires 2x SSD 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 or CP300 ex factory.				
max. 1x per Server, requires 1x PDUAL CP100 or CP300.				

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2.5" (SFF) PCIe-SSD

For hot plug support : RAID controller supported with PCIe-SSD is needed.
VMD is needed without RAID controller.

PCIe-SSD 2.5" P5800X (SFF) Enterprise with hot plug/hot replace tray

based on **Intel P5800X** drives

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. 10x - depending on base unit & configuration

~~limitation : can not support VMD / VROC so far~~ supported 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. 10x - depending on base unit & configuration

EOL, as long as stock available

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. 10x - depending on base unit & configuration

~~limitation : can not support VMD / VROC so far~~ supported 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. 10x - depending on base unit & configuration

EOL, as long as stock available

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. 10x - depending on base unit & configuration

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Chapter 10 - storage drives

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SATA drives can be connected to the onboard Controller (max. 8x), or require a dedicated SAS / RAID Controller.
SAS drives require a dedicated SAS / RAID Controller.
PCIe-SSDs can be connected to the onboard Controller, or require a dedicated RAID Controller or PCIe retimer/switch card.
FIPS and SED drives are Self Encrypting Drives, and they require either a RAID controller with SED support or an HBA and in addition a software instance, supporting SED Key Management. It is strongly recommended to order a RAID controller with SED function for SED/FIPS drives.

SATA, SAS and PCIe drives can be mixed based on RAID spec, but cannot be used in one logical RAID volume.
FIPS and SED drives can be mixed based on RAID spec, but cannot be used in one logical RAID volume.
One logical RAID volume must be created the same order code products.

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.
DWPD: Drive Writes Per Day over 5 years.

When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.
https://kb.vmware.com/kb/2145210

HDD Classes:
Economic (ECO) SATA: Entry Class Drives, for non critical applications.
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 **Kioxia PM7** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
800GB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10		**PYBSS80NGF**	**PY-SS80NGF**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10		**PYBSS16NGF**	**PY-SS16NGF**
800GB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED	**PYBSS80NGG**	**PY-SS80NGG**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED	**PYBSS16NGG**	**PY-SS16NGG**

max. 10x - depending on base unit & configuration

SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray
based on **Seagate Nytro3732/3750** 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. 10x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (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*
1.6TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS16NPM**	**PY-SS16NPM**
3.2TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS32NPM**	**PY-SS32NPM**
6.4TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3		**PYBSS64NPM**	**PY-SS64NPM**

max. 10x - depending on base unit & configuration

SSD SAS 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray
based on **Seagate Nytro3532/3550** 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. 10x - 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*
1.92TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		**PYBSS19NNM**	**PY-SS19NNM**
3.84TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1		**PYBSS38NNL**	**PY-SS38NNL**
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. 10x - depending on base unit & configuration

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

based on **Samsung PM1653** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
960GB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS96NNM**	**PY-SS96NNM**
1.92TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS19NNP**	**PY-SS19NNP**
3.84TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS38NNN**	**PY-SS38NNN**
7.68TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS76NNP**	**PY-SS76NNP**
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED	**PYBSS15NNN**	**PY-SS15NNN**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 10x - depending on base unit & configuration

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

based on **Seagate Nytro3332/3350** 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. 10x - depending on base unit & configuration

The SSDs not released with PRAID CP500i

will be available in CQ2'24

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

based on **Samsung PM897a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS48NKS**	**PY-SS48NKS**
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS96NKS**	**PY-SS96NKS**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS19NKS**	**PY-SS19NKS**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3	SED	**PYBSS38NKS**	**PY-SS38NKS**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 10x - 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. 10x - depending on base unit & configuration

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

based on **Micron 5300/5400 MAX** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
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. 10x - depending on base unit & configuration

The SSDs not released with PRAID CP500i

will be available in CQ2'24

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

based on **Samsung PM893a** drives

Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS48NME**	**PY-SS48NME**
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS96NME**	**PY-SS96NME**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS19NME**	**PY-SS19NME**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS38NME**	**PY-SS38NME**
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,0	SED	**PYBSS76NME**	**PY-SS76NME**

This SSDs can be used as Non-SED drives, but it requires a RAID controller with SED support for using as SED drives.

max. 10x - 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. 10x - depending on base unit & configuration

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

based on **Micron 5300/5400 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. 10x - 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. 10x - 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**
1.2TB	10 000	SAS 12Gb/s	512n		**S26361-F5729-E112**	**S26361-F5729-L112**
300GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH301EU**	**PY-SH301EU**
600GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH601EU**	**PY-SH601EU**
1.2TB	10 000	SAS 12Gb/s	512n	SED	**PYBSH121EU**	**PY-SH121EU**

max. 10x - 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*
1.8TB	10 000	SAS 12Gb/s	512e		**S26361-F5730-E118**	**S26361-F5730-L118**
1.8TB	10 000	SAS 12Gb/s	512e	SED	**PYBSH181DU**	**PY-SH181DU**

max. 10x - 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**

max. 10x - depending on base unit & configuration

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M.2 SATA SSD

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

*available in Dec 2023

M.2 carrier card kit
PYBDMAP02
PY-DMAP02
provides two M.2 Connectors not available for standard base units installed on PCIe slot
max 1x for system
No mixed with PDUAL CP100 and CP300 For short depth base units

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

based on **Micron 5300/5400 PRO** drives

Capacity	*Formfactor*	*Interface*		*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.
max. 1x per Server; M.2 carrier card kit is required. (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.

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

based on **Micron 5300/5400 PRO** drives (960GB is 5400 only)

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.
max. 2x per Server; M.2 carrier card kit is required. (please see folder "description"). VMware is not supported.
2x M.2 drives required; in case M.2 drives are used with PDUAL CP100 or CP300.

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

based on **Micron 7450 PRO** drives

Capacity	*Formfactor*	*Interface*	*DWPD*	*Category*		*order code E-part*	*order code L-part*
480GB	M.2 2280	PCIe4.0 x4	0,9	Boot		**PYBBS48PEA**	**PY-BS48PEA**
960GB	M.2 2280	PCIe4.0 x4	0,9	Boot		**PYBBS96PEA**	**PY-BS96PEA**

M.2 drive is designed for use as a boot drive with the Endurance Spec. above.
max. 2x per Server; M.2 carrier card kit is required. (please see folder "description"). 2x M.2 drives require Intel VROC Upgrade Key Premium(PYBRLVR02).
2x M.2 drives required; in case M.2 drives are used with PDUAL CP300.

Dual M.2

PDUAL CP100, CP300 and M.2 Riser Kit 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 of 2x SSD SATA M.2 drives, which offers RAID1 with the 2x SSD M.2 drives.
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 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 SATA M.2 drives.

PDUAL CP300, 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	**PYBDMCP35L**	**PY-DMCP35**

PDUAL CP300 is a carrier of 2x SSD SATA or PCIe 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) o
SSD PCIe M.2 480GB/960GB. (PY*BS48PEA/PY*BS96PEA)
max. 1x per Server, requires 2x SSD 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 or CP300 ex factory.
max. 1x per Server, requires 1x PDUAL CP100 or CP300.

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2.5" (SFF) PCIe-SSD

For hot plug support : RAID controller supported with PCIe-SSD is needed.
VMD is needed without RAID controller.

PCIe-SSD 2.5" P5800X (SFF) Enterprise with hot plug/hot replace tray

based on **Intel P5800X** drives

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. 10x - depending on base unit & configuration

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. 10x - depending on base unit & configuration

EOL, as long as stock available

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. 10x - depending on base unit & configuration

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. 10x - depending on base unit & configuration

EOL, as long as stock available

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. 10x - depending on base unit & configuration

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Chapter 11 - LAN Components

OCPv3 LoM Adapter

Intel 1GbE BASE-T for OCPv3				
PLAN CP I350-T4 4X 1000BASE-T OCPv3 IL	2x	Intel, 1GTx4port	PYBLA274U2	PY-LA274U2
max. 2 adapters per system				

Broadcom 1GbE BASE-T for OCPv3				
PLAN CP N41T 4X 1000BASE-T OCPv3 IL	2x	Broadcom, 1GTx4port	PYBLA284U2	PY-LA284U2
max. 2 adapters per system				

Broadcom 10GbE BASE-T for OCPv3				
PLAN EP N210TP 2X 10GBASE-T OCPv3 IL	2x	Broadcom, 10GTx2port	PYBLA3K2U2	PY-LA3K2U2
max. 2 adapters per system				

Will be available from 2Q,CY2024

Intel 10GbE BASE-T for OCPv3				
PLAN EP X710-T2L 2X 10GBASE-T OCPv3 IL	2x	Intel, 10GTx2port	PYBLA342U2	PY-LA342U2
PLAN EP X710-T4L 4X 10GBASE-T OCPv3 IL	2x	Intel, 10GTx4port	PYBLA344U2	PY-LA344U2
max. 2 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 IL	2x	Broadcom, 10Gx2port	PYBLA3J2U2	PY-LA3J2U2
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/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. 2x per system				

Will be available from 2Q,CY2024

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 can install the same Parts Number of optical module.				
PLAN EP X710-DA2 2X 10G SFP+ OCPv3 IL	2x	Intel, 10Gx2port	PYBLA352U2	PY-LA352U2
PLAN EP X710-DA4 4X 10G SFP+ OCPv3 IL	2x	Intel, 10Gx4port	PYBLA354U2	PY-LA354U2
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/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. 2 adapters per system				

Broadcom 25GbE for OCPv3				
Each cage consumes 1x optical SFP28				
10G SFP BTO is not available for 25G cards, please select L parts.				
All ports on this card can install the same Parts Number of optical module.				
PLAN EP N225PI 25Gb 2p SFP28 OCPv3	2x	Broadcom, 25Gx2port	PYBLA3G2U2	PY-LA3G2U2
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 25G LR E25GSFP28LRX LC	2x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 2 adapters per system				

Will be available from 3Q,CY2024

NVIDIA 25GbE for OCPv3				
Each cage consumes 1x optical SFP28				
10G SFP BTO is not available for 25G cards, please select L parts.				
All ports on this card can install the same Parts Number of optical module.				
PLAN EP MCX6-LX 25Gb 2p SFP28 OCPV3 IL	2x	NVIDIA, 25Gx2port	PYBLA402U5	PY-LA402U5
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 25G LR E25GSFP28LRX LC	2x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	NVIDIA, 25G SR SFP28	S26361-F4054-E701	S26361-F4054-L701
SFP28 25G LR MMA2L20-AR LC	2x	NVIDIA, 25G LR SFP28	PYBSFPL10	PY-SFPL10
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 2 adapters per system				

Intel 25GbE for OCPv3				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port.				
All ports on this card can install the same Parts Number of optical module.				
10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN CP E810-XXVDA2 2x25Gb OCPv3 IL	2x	Intel, 25Gx2port	PYBLA402U2	PY-LA402U2
PLAN CP E810-XXVDA4 4x25Gb OCPv3 IL	2x	Intel, 25Gx4port	PYBLA404U2	PY-LA404U2
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
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	4x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 2 adapters per system				

Broadcom 100GbE for OCPv3					
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**					
PLAN EP N2100GI 100Gb 2p QSFP56 OCPv3	2x	Broadcom, 100Gx2port	PYBLA452U2	PY-LA452U2	Will be available from 3Q,CY2024
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54	
QSFP28 100G LR4 FTLC1154RDPL LC	2x	II-VI, 100G LR4 QSFP28	PYBSFPL08	PY-SFPL08	
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G LR4 MMA1L10-CR LC	2x	NVIDIA, 100G LR4 QSFP28	PYBSFPL11	PY-SFPL11	
max. 1x per port					
max. 2x per system					

Intel 100GbE for OCPv3				
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**				
PLAN EP E810-CQDA2 2X 100G QSFP28 OCPv3 IL	2x	Intel, 100Gx2port	PYBLA432U2	PY-LA432U2
Optional, 100Gb QSFP28 Optical Transceiver module				
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54
QSFP28 100G LR4 FTLC1154RDPL LC	2x	II-VI, 100G LR4 QSFP28	PYBSFPL08	PY-SFPL08
max. 1x per port				
max. 2x per system				

NVIDIA 100GbE for OCPv3				
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**				
PLAN EP MCX6-DX 2X 100G QSFP28 OCPv3 IL	1x	NVIDIA, 100Gx2port ***cannot be selected with IB.**	PYBLA412U2	PY-LA412U2
Optional, 100Gb QSFP28 Optical Transceiver module				
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701
QSFP28 100G LR4 MMA1L10-CR LC	2x	NVIDIA, 100G LR4 QSFP28	PYBSFPL11	PY-SFPL11
max. 1x per port				
max. 1x per system				

PCIe Adapter

Broadcom 1GbE BEASE-T for PCIe				
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe LP	3x	Broadcom, 1GTx4port	PYBLA284L	PY-LA284
max. 3 adapters per system				

Intel 1GbE BEASE-T for PCIe				
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	3x	Intel, 1GTx2port	S26361-F4610-E202	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	3x	Intel, 1GTx4port	S26361-F4610-E204	S26361-F4610-L504
max. 3 adapters per system				

Will be available from 2Q,CY2024

Broadcom 10GbE BEASE-T for PCIe				
PLAN EP P210TP 2X 10GBASE-T PCIe LP	3x	Broadcom, 10GTx2port	PYBLA3K2L	PY-LA3K2
max. 3x adapters per system				

Intel 10GbE BEASE-T for PCIe				
PLAN EP X710-T2L 2X 10GBASE-T LP	3x	Intel, 10GTx2port	PYBLA342L	PY-LA342
PLAN EP X710-T4L 4X 10GBASE-T LP	3x	Intel, 10GTx4port	PYBLA344L	PY-LA344
max. 3x 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 can install the same Parts Number of optical module.				
PLAN EP P210P 2x10Gb SFP PCIe LP	3x	Broadcom, 10Gx2port	PYBLA3J2L	PY-LA3J2
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/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. 3x 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 can install the same Parts Number of optical module.				
PLAN EP X710-DA2 2x10Gb SFP+ LP	3x	Intel, 10Gx2port	S26361-F3640-E202	S26361-F3640-L502
PLAN EP X710-DA4 4x10Gb SFP+ LP	3x	Intel, 10Gx4port	S26361-F3640-E204	S26361-F3640-L504
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/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. 3x adapters per system				

Broadcom 25GbE for PCIe				
Each cage consumes 1x optical SFP28.				
All ports on this card can install the same Parts Number of optical module.				
10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN EP P225P 25Gb 2p SFP28 PCIe LP	3x	Broadcom, 25Gx2port	PYBLA3H2L	PY-LA3H2
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 25G LR E25GSFP28LRX LC	2x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 3x adapters per server system				

NVIDIA 25GbE for PCIe				
Each cage consumes 1x optical SFP28				
All ports on this card can install the same Parts Number of optical module.				
10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN EP MCX6-LX 25Gb 2p SFP28 PCIe LP	3x	NVIDIA, 25Gx2port	PYBLA402L4	PY-LA4024
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 25G LR E25GSFP28LRX LC	2x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	NVIDIA, 25G SR SFP28	S26361-F4054-E701	S26361-F4054-L701
SFP28 25G LR MMA2L20-AR LC	2x	NVIDIA, 25G LR SFP28	PYBSFPL10	PY-SFPL10
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 3x adapters per server system				

Intel 25GbE for PCIe				
Each cage consumes 1x optical SFP28.				
All ports on this card can 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 LP	3x	Intel, 25Gx2port	PYBLA402L	PY-LA402
PLAN EP E810-XXVDA4 4X 25G SFP28 LP	3x	Intel, 25Gx4port	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
max. 1x per port				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G/1G Dual Rate SR	4x	Intel, 1G/10G SR SFP+		S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 3x adapters per server system				

Broadcom 100GbE for PCIe					
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**					
PLAN EP P2100G 100Gb 2p QSFP56 PCIe LP	3x	Broadcom, 100Gx2port	PYBLA442L	PY-LA442	Will be available on 5th gen CPU 2Q,2024
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54	
QSFP28 100G LR4 FTLC1154RDPL LC	2x	II-VI, 100G LR4 QSFP28	PYBSFPL08	PY-SFPL08	
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G LR4 MMA1L10-CR LC	2x	NVIDIA, 100G LR4 QSFP28	PYBSFPL11	PY-SFPL11	
max. 1x per port					
max. 3x adapters per server system					

Intel 100GbE for PCIe					
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**					
PLAN EP E810-CQDA2 2X 100G QSFP28 LP	3x	Intel, 100Gx2port	PYBLA432L	PY-LA432	
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54	
QSFP28 100G LR4 FTLC1154RDPL LC	2x	II-VI, 100G LR4 QSFP28	PYBSFPL08	PY-SFPL08	
max. 1x per port					
max. 3x adapters per server system					

NVIDIA 100GbE for PCIe					
Each cage consumes 1x optical QSFP28 The QSFP will not ship on the card because it will interfere with the shipping box. **All ports on this card can install the same Parts Number of optical module.**					
PLAN EP MCX6-DX 2X 100G QSFP28 LP	3x	NVIDIA, 100Gx2port ***cannot be selected with IB.**	PYBLA412L	PY-LA412	
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G LR4 MMA1L10-CR LC	2x	NVIDIA, 100G LR4 QSFP28	PYBSFPL11	PY-SFPL11	
max. 1x per port					
max. 3x adapters per server system					

PCIe Adapter Smart NIC

NVIDIA 25GbE					
Each cage consumes 1x SFP28. **All ports on this card can install the same Parts Number of optical module.** **This card is only for Vsphere Distributed Services Engine.(VDSE). It cannot be used for other purpose.** **Available base model is limited. please refer to "base" sheet for the details.** **Not mounted with other SmartNIC and IB cards.** Full height riser card kit is necessary to support this card					
Ethernet Network Adapters					
PLAN EP BlueField2 2X 25GBASE PCIe	1x	NVIDIA, 25Gx2port	PYBSN402	PY-SN402	Will be available from 2Q,CY2024
Optional, 25Gb SFP28 optical transceiver module, select one per cage					
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56	
SFP28 25G LR E25GSFP28LRX LC	2x	Intel, 25G LR SFP28	PYBSFPL09	PY-SFPL09	
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	NVIDIA, 25G SR SFP28	S26361-F4054-E701	S26361-F4054-L701	
SFP28 25G LR MMA2L20-AR LC	2x	NVIDIA, 25G LR SFP28	PYBSFPL10	PY-SFPL10	
max. 1x per port					
max. 1x adapters per system					

NVIDIA 100GbE					
Each cage consumes 1x QSFP56. **All ports on this card can install the same Parts Number of optical module.** **This card is only for Vsphere Distributed Services Engine.(VDSE). It cannot be used for other purpose.** **Available base model is limited. please refer to "base" sheet for the details.** **Not mounted with other SmartNIC and IB cards.** Full height riser card kit is necessary to support this card					
Ethernet Network Adapters					
PLAN EP BlueField2 2X 100GBASE PCIe	1x	NVIDIA, 100Gx2port	PYBSN412	PY-SN412	Will be available from End of 2Q,CY2024
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 MPO 850nm 100m MMA1B00-C100D	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701	
QSFP28 100G LR4 MMA1L10-CR LC	2x	NVIDIA, 100G LR4 QSFP28	PYBSFPL11	PY-SFPL11	
max. 1x per port					
max. 1x adapters per system					

Network cables for later upgrade

K

Chapter 12 - Fibre Channel Adapters

K

64G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe36000 1X 64GFC PCIe v4 LP	3x	Broadcom, 64FCx1port	PYBFC441L	PY-FC441
PFC EP LPe36002 2X 64GFC PCIe v4 LP	3x	Broadcom, 64FCx2port	PYBFC442L	PY-FC442
PFC EP QLE2870 1X 32GFC PCIe v4 LP	3x	Marvell, 64FCx1port	PYBFC431L	PY-FC431
PFC EP QLE2872 2X 32GFC PCIe v4 LP	3x	Marvell, 64FCx2port	PYBFC432L	PY-FC432
32G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe35000 1X 32GFC PCIe v4 LP	3x	Broadcom, 32FCx1port	PYBFC421L	PY-FC421
PFC EP LPe35002 2X 32GFC PCIe v4 LP	3x	Broadcom, 32FCx2port	PYBFC422L	PY-FC422
PFC EP QLE2770 1X 32GFC PCIe v4 LP	3x	Marvell, 32FCx1port	PYBFC411L	PY-FC411
PFC EP QLE2772 2X 32GFC PCIe v4 LP	3x	Marvell, 32FCx2port	PYBFC412L	PY-FC412
16G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe31000 1x 16Gb LP	3x	Broadcom, 16FCx1port	S26361-F5596-E201	S26361-F5596-L501
PFC EP LPe31002 2x 16Gb LP	3x	Broadcom, 16FCx2port	S26361-F5596-E202	S26361-F5596-L502
PFC EP QLE2690 1x 16Gb LP	3x	Marvell, 16FCx1port	S26361-F5580-E201	S26361-F5580-L501
PFC EP QLE2692 2x 16Gb LP	3x	Marvell, 16FCx2port	S26361-F5580-E202	S26361-F5580-L502
max. 3 adapters per system				

Chapter 13 - Infiniband Adapters

S26361-F5756-L102	**PY-HC402**	**PY-HC541**	**PY-HC521**
S26361-F5756-E102	**PYBHC402**	**PYBHC541**	**PYBHC521**
IB HCA 200Gb 1channel HDR with PCI riser	IB HCA 200Gb 2channel HDR with PCI riser	1 port 400Gb infiniband NDR (ConnectX-7)	1 port 200Gb infiniband NDR200 (ConnectX-7)
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-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot be supported	200GBit 2channel 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-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot be supported	400GBit 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-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot be supported	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-E202]/PLAN EP MCX6-DX 2X 100G[PY-LA412/PYBLA412L]/PLAN EP MCX4-LX 25Gb OCPv3[PY-LA3F2U/PYBLA3F2U]/PLAN EP MCX6-DX 2X 100G OCPv3[PY-LA412U/PYBLA412U] **AOC cannot be supported
1x Q-SFP+ connector	2x Q-SFP+ connector	1x O-SFP+ connector	1x O-SFP+ connector
PCIe Gen4 x16 LP Card, 170mm	PCIe Gen4 x16 LP Card, 170mm	PCIe Gen5 x16 LP Card, 170mm	PCIe Gen5 x16 LP Card, 170mm
max. 2x per system	max. 2x per system	max. 2x per system	max. 2x per system

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	

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, APAC/JAPAN region only, Not support ATD40/45	**PYBPU501**	**PY-PU501**
500W titanium PSU	96% eff.	Connector type: C13, nom. 220-240V, max. 180-264V, Not support ATD40/4	**PYBPU503**	**PY-PU503**
900W platinum PSU	94% eff.	Connector type: C13, APAC/JAPAN region only	**PYBPU902**	**PY-PU902**
900W titanium PSU	96% eff.	nom. 220-240V, max. 180-264V	**PYBPU901**	**PY-PU901**
1600W platinum PSU	94% eff.	APAC/JAPAN region only	**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, APAC/JAPAN region only	**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	**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			**PYBDMP06**	**-**

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	**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/2400W PSU	**S26361-F3151-E300**	**S26361-F3151-L300**
Power cord IEC320 C19 -> US NEMA L6-20p, 4m for 2200W/2400W PSU	**S26361-F3151-E500**	**S26361-F3151-L500**
Power cord 16A IEC320 C19->CEE 7/7, 2.5m for 2200W/2400W 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 EMEIA 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**	

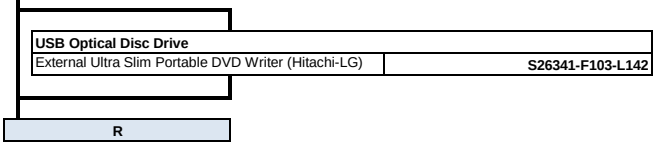
Certifications, optional 1x per system		
Certification for China, (CCC), Reduced component selection possible, only with no power cord option	**S26361-F3301-E120**	

N

Chapter 15 - Accessories

Q

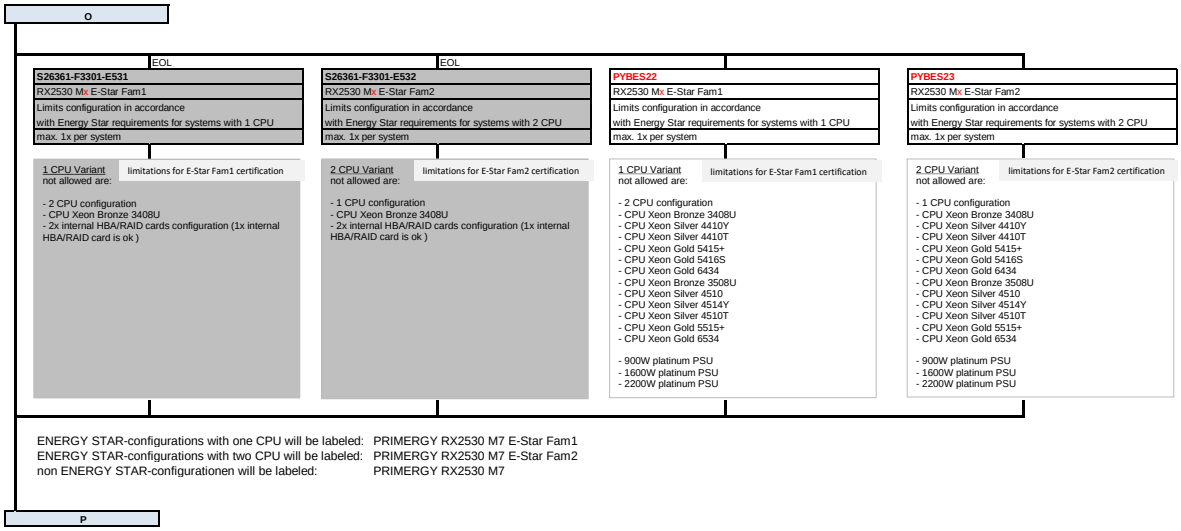
http://www.fujitsu.com/fts/products/computing/peripheral/accessories/index-facts.html



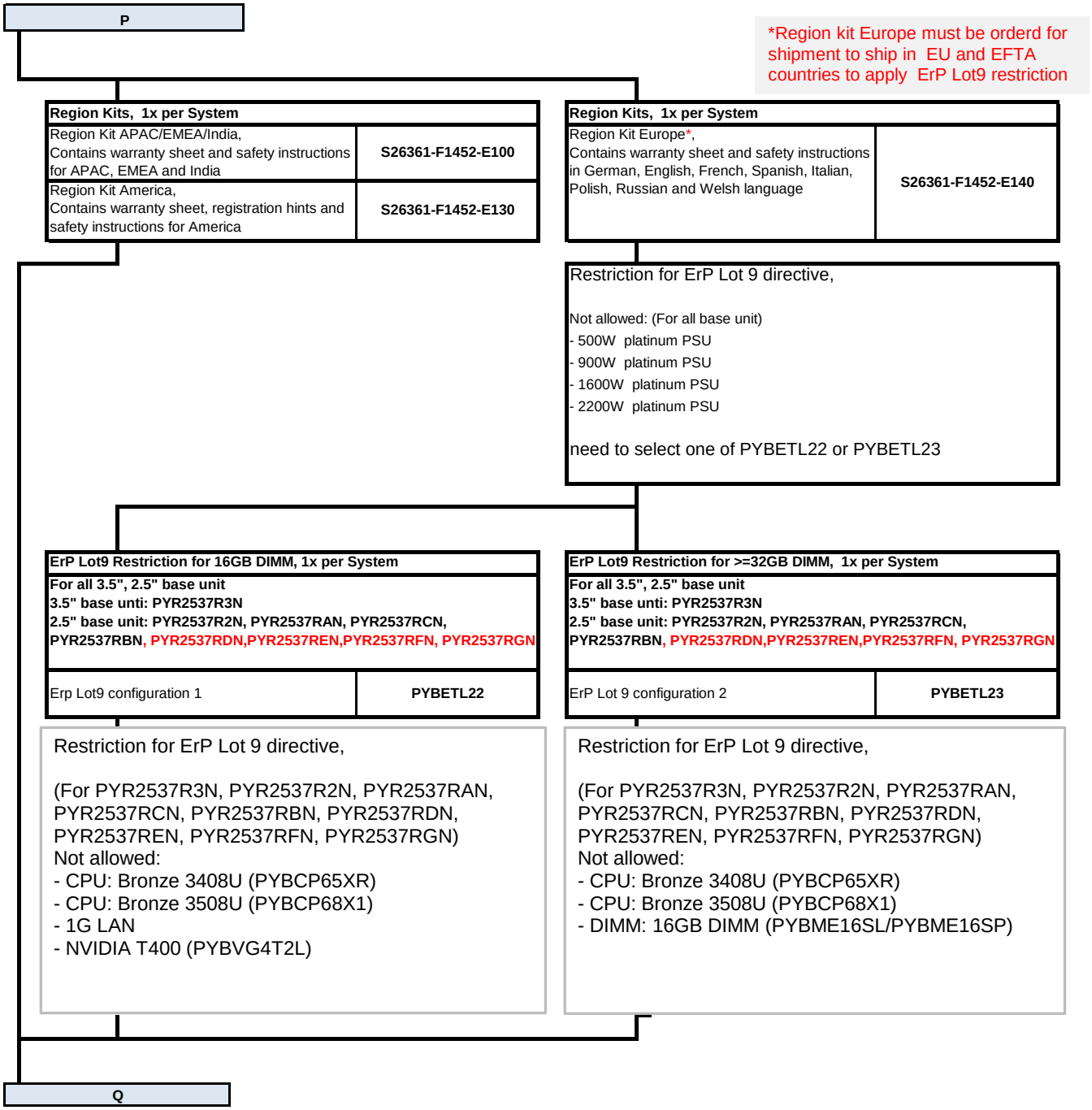
USB Optical Disc Drive	
External Ultra Slim Portable DVD Writer (Hitachi-LG)	S26341-F103-L142

R

Chapter 16 - Energy Star



Chapter 17 - ErP Lot 9 restriction



Chapter 18 - Thermal Rule

Q

For CPU group, refere to Chapter3- CPU

3.5"/2.5" standard base unit (not including Rear drive bay and GPGPU)

CPU		Memory Type	Front / Rear drive bay			GPGPU	Option Card		Ambient
		DDR5	4x3.5"	8x2.5"	10x2.5"	NVIDIA A2/L4	PCIe	OCP	Temp.
2CPU/1CPU configuration (with CPU and dimm dummy)	CPU A CPU B CPU C	16GB - 256GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear: 0	0	Level1-6	Tier1-12	35C ~~**~~
	CPU A CPU B CPU C CPU D ~~CPU E~~	16GB - 256GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear: 0	0	Level1-7 Level1-6	Tier1-12	30C *
	CPU D CPU E	16GB - 256GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear: 0	0	Level1-7	Tier1-12	25C *special release*
	~~CPU E~~						~~Level1-6~~		~~25C ***~~

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

~~** 6438Y+ CPU is not supported on 35C. Need to select Configuration Thermal Design 30°C(PYBETA1)~~

~~*** Need to select Configuration Thermal Design 25°C(PYBET21)~~

3.5"/2.5" standard base unit (including GPGPU)

CPU		Memory Type	Front / Rear drive bay			GPGPU	Option Card		Ambient
		DDR5	4x3.5"	8x2.5"	10x2.5"	NVIDIA A2/L4	PCIe	OCP	Temp.
2CPU/1CPU configuration (with CPU and dimm dummy)	CPU A CPU B CPU C CPU D CPU E	16GB - 256GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear: 0	1-3	Level1-7	Tier1-10	30C * 25C *special release*
	~~CPU E~~	~~Not support~~							

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

3.5"/2.5" standard base unit (including Rear drive bay)

CPU		Memory Type	Front / Rear drive bay			GPGPU	Option Card		Ambient
		DDR5	4x3.5"	8x2.5"	10x2.5"	NVIDIA A2/L4	PCIe	OCP	Temp.
2CPU/1CPU configuration (with CPU and dimm dummy)	CPU A CPU B CPU C CPU D CPU E	16GB - 256GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear : 2	0	Level1-5	Tier1-11	30C * 25C *special release*
	~~CPU E~~	~~Not support~~							

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

3.5"/2.5" base unit (ATD40)

CPU		Memory Type	Front / Rear drive bay			GPGPU	Option Card		Ambient
		DDR5	4x3.5"	8x2.5"	10x2.5"	NVIDIA A2/L4	PCIe	OCP	Temp.
2CPU/1CPU configuration (with CPU and dimm dummy)	CPU A CPU B CPU C	16GB - 128GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear : 0	0	Level1-5	Tier1-9	40C
	CPU D CPU E	Not support							

3.5"/2.5" base unit (ATD45)

CPU		Memory Type	Front / Rear drive bay			GPGPU	Option Card		Ambient
		DDR5	4x3.5"	8x2.5"	10x2.5"	NVIDIA A2/L4	PCIe	OCP	Temp.
2CPU/1CPU configuration (with CPU and dimm dummy)	CPU A	16GB - 128GB	Front: 0-4 Rear: N/A	Front: 0-8 Rear: N/A	Front: 0-10 Rear : 0	0	Level1-4	Tier1-8	45C
	CPU B CPU C CPU D CPU E	Not support							

R

Option card: PCIe Level for Thermal condition

Card		Product Number	PCIe Level
RAID/SAS	PDUAL CP100	PYBDMCP24L	Level4
	PDUAL CP300	PYBDMCP35L	Level5
	PRAID CP500i RAID Contr.	PYBSR3FBL	Level3
	PRAID EP520i RAID Contr. LP	S26361-F4042-E202	Level4
	PRAID EP540i RAID LP	S26361-F4042-E214	Level4
	PRAID EP580i RAID LP	S26361-F4042-E208	Level4
	PRAID CP600i LP	PYBSR4FAL	Level3
	PRAID EP640i LP	PYBSR4C63L	Level3
	PRAID EP680i LP / NVMe LP	PYBSR4C6L / PYBSR4C62L	Level3
	PRAID EP680e LP	PYBSR4C6EL	Level3
	PSAS CP600i LP	PYBSC4FAL	Level3
	PSAS CP600e LP	PYBSC4FAEL	Level3
	PSAS CP2100-8i LP	PYBSC3MA2L / PYBSC3MAWL	Level3
	PSAS CP2200-16i LP / NVMe LP	PYBSC4MA1L / PYBSC4MA2L	Level4
	PRAID EP3252-8i LP	PYBSR4MA1L	Level4
	PRAID EP3254-8i LP	PYBSR4MA2L	Level4
	PRAID EP3258-16i LP / NVMe LP	PYBSR4MA3L / PYBSR4MA4L	Level4
	PRAID EP740i LP / NVMe LP	TBD	Level4
FC	PFC EP LPe31000 1X 16GB EMULEX LP	S26361-F5596-E201	Level3
	PFC EP LPe31002 2X 16GB EMULEX LP	S26361-F5596-E202	Level3
	PFC EP LPe35000 1X 32GFC PCIe v4 LP	PYBFC421L	Level4
	PFC EP LPe35002 2X 32GFC PCIe v4 LP	PYBFC422L	Level4
	PFC EP LPe36000 1X 64GFC PCIe v4 LP	PYBFC441L	Level4
	PFC EP LPe36002 2X 64GFC PCIe v4 LP	PYBFC442L	Level4
	PFC EP QLE2690 1x 16Gb LP	S26361-F5580-E201	Level3
	PFC EP QLE2692 2x 16Gb LP	S26361-F5580-E202	Level3
	PFC EP QLE2770 1X 32GFC PCIe v4 LP	PYBFC411L	Level4
	PFC EP QLE2772 2X 32GFC PCIe v4 LP	PYBFC412L	Level4
	PFC EP QLE2870 1X 32GFC PCIe v4 LP	PYBFC431L	Level4
	PFC EP QLE2872 2X 32GFC PCIe v4 LP	PYBFC432L	Level4
IB	PIB EP 200Gb 1 port HDR ConnectX-6	S26361-F5756-E102	Level6
	PIB EP 200Gb 2 port HDR ConnectX-6	PYBHC402	Level7
	1 port 200Gb infiniband NDR200 (ConnectX-7)	PYBHC521	Level7
	1 port 400Gb infiniband NDR (ConnectX-7)	PYBHC541	Level7
LAN	PLAN CP 4x1Gbit Cu Intel I350-T4 FH LP	S26361-F4610-E204	Level1
	PLAN EP E810-CQDA2 2X 100G QSFP28 LP	PYBLA432L	Level7
	PLAN EP E810-XXVDA2 2X 25G SFP28 LP	PYBLA402L	Level5
	PLAN EP E810-XXVDA4 4X 25G SFP28 LP	PYBLA404L	Level7
	PLAN EP MCX6-DX 100Gb 2p QSFP28 LP	PYBLA412L	Level7
	PLAN EP X710-DA2 2x10Gb SFP+ LP	S26361-F3640-E202	Level1
	PLAN EP X710-DA4 4x10Gb SFP+ LP	S26361-F3640-E204	Level3
	PLAN EP X710-T2L 2X 10GBASE-T LP	PYBLA342L	Level2
	PLAN EP X710-T4L 4X 10GBASE-T LP	PYBLA344L	Level3
	PLAN CP BCM5719-4P 4X 1000BASE-T PCIe LP	PYBLA284L	Level1
	PLAN EP P210P 2x10Gb SFP LP	PYBLA3J2L	Level3
	PLAN EP P210TP 2X 10GBASE-T PCIe LP	PYBLA3K2L	Level5
	PLAN EP MCX6-LX 25Gb 2p SFP28 PCIe LP	PYBLA402L4	Level5
	PLAN EP P225P 25Gb 2p SFP28 PCIe LP	PYBLA3H2L	Level3
	PLAN EP P2100G 100Gb 2p QSFP56 PCIe LP	PYBLA442L	Level5
Smart NIC	PLAN EP BlueField2 2X 25GBASE PCIe	PYBSN402	Level6
	PLAN EP BlueField2 2X 100GBASE PCIe	TBD	TBD
GPU	NVIDIA T400 4G LP	PYBVG4T2L	Level3

Option card: OCP Tier for Thermal condition

Card		Product Number	OCP Tier
OCPv3	PLAN CP I350-T4 4X 1000BASE-T OCPv3 IL	PYBLA274U2	Tier1
	PLAN EP E810-CQDA2 2X 100G QSFP28 OCPv3	PYBLA432U2	Tier11
	PLAN CP E810-XXVDA2 2x25Gb OCPv3 IL	PYBLA402U2	Tier8
	PLAN CP E810-XXVDA4 4x25Gb OCPv3 IL	PYBLA404U2	Tier11
	PLAN EP MCX6-DX 2X 100G QSFP28 OCPv3 IL	PYBLA412U2	Tier12
	PLAN EP X710-DA2 2X 10G SFP+ OCPv3 IL	PYBLA352U2	Tier2
	PLAN EP X710-DA4 4X 10G SFP+ OCPv3 IL	PYBLA354U2	Tier8
	PLAN EP X710-T2L 2X 10GBASE-T OCPv3 IL	PYBLA342U2	Tier2
	PLAN EP X710-T4L 4X 10GBASE-T OCPv3 IL	PYBLA344U2	Tier4
	PLAN CP N41T 4X 1000BASE-T OCPV3 IL	PYBLA284U2	Tier2
	PLAN EP N210P 2X 10G SFP+ OCPV3 IL	PYBLA3J2U2	Tier2
	PLAN EP N210TP 2X 10GBASE-T OCPV3 IL	PYBLA3K2U2	Tier5
	PLAN EP MCX6-LX 25Gb 2p SFP28 OCPV3 IL	PYBLA402U5	Tier6
	PLAN EP N225PI 25Gb 2p SFP28 OCPv3	PYBLA3G2U2	Tier3
	PLAN EP N2100GI 100Gb 2p QSFP56 OCPv3	PYBLA452U2	Tier8

Option card: GPGPU

Card		Product Number
GPGPU	NVIDIA L4 LP (T4 successor) , 70W	PYBVG4L1L
	NVIDIA A2 LP (T4 successor) , 40~60W	PYBVG4A8L

S

Chapter 19 - others

O

PYBRMC44
PY-RMC44
iRMC advanced pack
integrated remote Management controller activation key for graphical console redirection and remote media redirection
max. 1x per system

PYBLCM14
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-LCM14
options contains:
- Paper with TAN for Licensekey

will be available in CQ'24

iRMC MicroSD card option

Capacity	Interface	E-parts	L-parts
64GB	SDXC	PYBMD64R1	PY-MD64R1
128GB	SDXC	PYBMD12R1	PY-MD12R1

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

PYBSSS3
iRMC standard/legacy Option
When this product is orderd, following iRMC default setting is changed.
- Unique default password: No. The fixed password is printed on ID tag.
- SSH: Enabled
- USB Host LAN : Enabled
- Force to change default pwd to use Redfish/RESTful/other interfaces: No

max. 1x per system

Advanced Thermal design 45°C cannot be combined with the Flash backup unit of the RAID controllers

*special release

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 Chapter18-Thermal Rule
this setting can be activated ex factory only
max. 1x per system

PYBET21
Configuration Thermal Design 25°C(CTD25)
Sets the PRIMERGY server to support temperatures of up to 25 ° C in operating mode for the configuration with thermal restriction.
Refer to Chapter18-Thermal Rule
this setting can be activated ex factory only
max. 1x per system

TPM module must not order for China region.

When CPU 5th generation ordered, the orderable are PYBTPM20, PY-TPM20 and PYBNTPM only

will be replaced to TPM20 in April 2024

PYBTPM14
PY-TPM14
TPM 2.0 Module SPI
required for Microsoft Windows Server 2022 (host OS)
max. 1x per system

will be available in April 2024

PYBTPM20
PY-TPM20
TPM 2.0 Module V2
required for Microsoft Windows Server 2022 (host OS)
max. 1x per system

PYBNTPM
No TPM for WINSVR
Either PYBTPM14 or PYBNTPM is required in ordering Windows Server 2022 OEM
max. 1x per system

When Windows Server 2022 is used as a host OS, PYBTPM14, PY-TPM14, PYBTPM20 or PY-TPM20 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.
OS support matrix:

Operating system for host OS	PYBTPM14 PY-TPM14	PYBTPM20 PY-TPM20
Windows Server 2022	required	required
Windows Server 2019	supported	supported
Windows Server 2016	supported	-
Red Hat Enterprise Linux 8	supported	supported
Red Hat Enterprise Linux 7	supported	supported
SUSE Linux Enterprise Server 15	-	-
VMware ESXi 7.0	supported	supported
VMware ESXi 6.7	supported	-

PYBTPM14/PY-TPM14 are currently available when will be replaced to PYBTPM20/PY-TPM20 will be available in April 2024 because new TPM supports mandatory to fit to new Windows requirement
New TPM are backward compatible with former TPMs.

PYBCOM10
PY-COM10
serial port (RS232)
serial port (RS232) mounted on a low profile PCIe slot
max. 1x per system

PYBFOP19
PY-FOP19
1U 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	1,99	HDD_SSD, HDD_SSD(short depth)	updated availability schedule	Y. Sugiyama
25.03.2024	1,98	base	reviced available date for PYR2537RGN	S. Fujita
25.03.2024	1.97	others	revised the descriptuon about iRMC MicroSD card option for eLCM	Y. Sugiyama
22.03.2024	1.96	others	changed comments for TPM	KonnoH
15.03.2024	1.95	base, RAID	updated availability schedule for PRAID CP600i	T. Sudou
13.03.2024	1,94	LAN_FC_IB	update availavle date for P2100G	J.Zhao
12.03.2024	1,93	LAN_FC_IB	Adding Broadcom 10G OCPv3, N210P and N210TP IL	F. Kanega
08.03.2024	1,92	others	added the restriction for TPM	KonnoH
01.03.2024	1,91	HDD_SSD, HDD_SSD(short depth)	added the restriction for SSD SATA PM893a/PM897a updated availability schedule	Y. Sugiyama
29.02.2024	1,90	CPU	Added 5th gen CPU	J.Zhao
29.02.2024	1,90	RAM	Added 5600MHz	J.Zhao
29.02.2024	1,90	Lot9/Energy Star	restriction updated	J.Zhao
27.02.2024	1,89	base	added base unit[PYR2537RGN] in PYBETL22/PYBETL23	S. Fujita
27.02.2024	1,89	Lot9	added base unit[PYR2537RGN] including Bluefield2.	S. Fujita
21.02.2024	1.88	HDD_SSD, HDD_SSD(short depth)	removed the limitation about VMD/VROC for Kioxia CM7 updated availability schedule	Y. Sugiyama
16.02.2024	1.87	others	added the iRMC MicroSD card option for eLCM	Y. Sugiyama
14.02.2024	1,86	CPU, RAM	Add CPU type for MCC, XCC, HBM Add the restriction for 96GB memory	KonnoH
08.02.2024	1.85	base, RAID, HDD_SSD, HDD_SSD (short depth)	released PSAS CP 2200-16i and PDUAL CP300 updated availability schedule	T. Sudou
07.02.2024	1,84	LAN_FC_IB, Thermal	Add note to SmartNIC and update Thermal rule	J.Zhao
05.02.2024	1,83	LAN_FC_IB	MCX6-LX 25G OCPv3, PCIe, P225P, P2100G released.	F. Kanega
22.01.2024	1,82	base	Add comment for S26361-F1647-E302	Y. Kanai
16.01.2024	1.81	HDD_SSD	removed availability schedule for PCIe-SSD "kioxia CM7"	J.Zhao
10.01.2024	1.80	others	Added '45°C' into 'Advanced Thermal design 45°C cannot be combined with the Flash backup unit of the RAID controllers'	J.Zhao
10.01.2024	1.79	RAID	added PYR2537RDN to PSAS CP 2100-8i LP for vSAN	T. Sudou
09.01.2024	1,78	LAN_FC_IB	Add BF2	F. Kanega
26.12.2023	1,77	HDD_SSD HDD_SSD (short depth)	removed the restriction for SSD SAS "Kioxia PM7" added the restriction for SSD PCIe "Kioxia CM7" removed 20TB FIPS updated availability schedule	Y. Sugiyama
21.12.2023	1.76	HDD_SSD, HDD_SSD (short depth), Thermal Rule	updated PDUAL CP300	T. Sudou
20.12.2023	1,75	LAN_FC_IB	Change available date of N225PI and N2100GI to CY20243Q(End of June or later)	F. Kanega
18.12.2023	1,74	base	revised Interfaces internal	J. ZHAO
11.12.2023	1.73	base, RAID, HDD_SSD, HDD_SSD (short depth)	updated availability schedule	T. Sudou
30.11.2023	1,72	Description	eLCM is added to recommended components	J. ZHAO
29.11.2023	1,71	ErP Lot9	Change Lot9 restriction (PYBETL23) Restriction for 3.5" bae unit with 1CPU conf removed.	A. Iwata
16.11.2023	1,7	LAN_FC_IB	Change available date of MCX6-LX and Broadcom 25/100G cards. Delete available date of QLE287x because they are shipping now.	F. Kanega
13.11.2023	1.69	Other (iRMC)	Add "iRMC standard/legacy Option" PYBSSS3 in others sheet.	H. Ogino
10.11.2023	1.68	base	updated availability schedule for RAID	T. Sudou
01.11.2023	1.67	HDD_SSD	added the restriction about HBA/RAID for Kioxia PM7 updated availability schedules	Y. Sugiyama
26.10.2023	1.66	RAM	Rmoved DDR5 5600 memory without 96GB	H. Konno
25.10.2023	1.65	HDD_SSD, HDD_SSD (short depth)	updated the description about max qty for M.2 SATA/PCIe drives. Updated availability sxhedule for HDD_SSD(short depth)	Y. Sugiyama J. ZHAO
24.10.2023	1.64	Description	Removed 'Region kit APAC/EMEA/India'	S. Fujita
24.10.2023	1.63	RAM	Added DDR5 5600 memory	H. Konno
18.10.2023	1.62	RAID	updated Note for Intel VROC (SATA RAID)	T. Sudou
13.10.2023	1.61	HDD_SSD, HDD_SSD (short depth)	updated availability schedule	T. Sudou
13.10.2023	1.61	RAID	released Intel VROC (VMD NVMe RAID)	T. Sudou
13.10.2023	1.60	HDD_SSD, HDD_SSD (short depth)	updated the EOL information for PCIe-SSD	Y. Sugiyama
12.10.2023	1,59	RAM	Modified required memory qty condition for HBM Cache Mode	A. Iwata
12.10.2023	1.58	-	change font from 'Fujitsu Sans" to "Arial"	J. ZHAO
04.10.2023	1.57	LAN_FC_IB	Add I350-T2 PCIe card	F. Kanega
03.10.2023	1.56	RAM	Remove HBM Cache+Mirroring Mode because Intel will not support this mode	J. ZHAO

02.10.2023	1.55	others	Add new TPM	H. Konno
02.10.2023	1.54	RAID	released Intel VROC (SATA RAID)	T. Sudou
26.09.2023	1.53	RAM	Update schedule for HBM Cache+Mirroring Mode	J. ZHAO
22.09.2023	1.52	RAID, HDD_SSD, HDD_SSD (short depth)	added the limitation about VROC for PCIe-SSD	Y. Sugiyama
22.09.2023	1.51	RAID, HDD_SSD, HDD_SSD (short depth)	updated availability schedule	T. Sudou Y. Sugiyama
20.09.2023	1.50	HDD_SSD, HDD_SSD (short depth)	updated the description about hot plug for PCIe-SSD	Y. Sugiyama
20.09.2023	1,49	Energy Star	update ES 4.0	J. ZHAO
20.09.2023	1,48	HDD_SSD, HDD_SSD (short depth)	updated availability schedule added the following drives as new products -Samsung PM1653 as SSD SAS 2.5"/3.5" -Samsung PM897a/PM893a as SSD SATA 2.5"/3.5"	Y. Sugiyama
15.09.2023	1,47	LAN_FC_IB	X710-T4L OCPv3 released. QLE277x released. Change available date of QE287x from 3Q to Oct.	F.Kanega
13.09.2023	1.46	HDD_SSD, HDD_SSD (short depth)	added RAID PRESET option S26361-F5659-E13	T. Sudou
08.09.2023	1,45	HDD_SSD / HDD_SSD(short depth)	added the EOL status for HDD SAS 15K and HDD 2.5" BC-SATA/SAS	Y. Sugiyama
04.09.2023	1,44	HDD_SSD / HDD_SSD(short depth)	updated availability schedules for SSD SAS "PM7"	Y. Sugiyama
01.09.2023	1,43	Energy Star	update ES 4.0 PN	J. ZHAO
24.08.2023	1,42	Thermal Rule	Adding information of MCX6-LX 25G, P(N)225P, P(N)2100G cards.(NVIDIA 25G and Broadcom 25/100G)	F.Kanega
08.08.2023	1.41	base, RAID	updated availability schedule	T. Sudou
07.08.2023	1,40	Energy Star base/thermal rule	Add ES 4.0 6438Y+ CPU can be supported on 35C°	J. ZHAO
03.08.2023	1,39	HDD_SSD (short depth)	revised max number for PCIe-SSD "Kioxia CM7	J. ZHAO
02.08.2023	1.38	HDD_SSD, HDD_SSD (short depth)	added PDUAL CP300 PYBDMCP35L, PY-DMCP35	T. Sudou
01.08.2023	1,37	CPU	Add Xeon Gold 6434	J. ZHAO
31.07.2023	1,36	HDD_SSD / HDD_SSD(short depth)	revised the order codes for Kioxia CM7 15.36TB	Y.Sugiyama
31.07.2023	1,35	HDD_SSD / HDD_SSD(short depth)	added the PCIe-SSD "Kioxia CM7 series" updated availability schedule for SED drives	Y.Sugiyama
25.07.2023	1,34	Base	Add base unit Type 3-20	J. ZHAO
24.07.2023	1,33	RAID	Add "PRAID CP500i / PRAID EP520i / PRAID EP540i / PRAID EP580i" to PY-CBS106 and PY-CBS113	J. ZHAO
19.07.2023	1,32	LAN_FC_IB	Adding Broadcom 25/100G cards. Adding NVIDIA 25G cards. Updating the information of whole LAN/FC page	F. Kanega
04.07.2023	1,31	HDD_SSD(short depth)	added to support the HDD SAS 10K 512n 600GB Non-SED, and added the support plan about 300GB SED. Removed the HDD SAS 10K 512e and HDD SAS 7.2K 512e due to RV issue (there is a possibility to add the SAS 10K 1.8TB according the re-test result)	Y.Sugiyama
11.07.2023	1.30	base, RAID	cancelled PSAS CP 2200-16i NVMe, PRAID EP 3258-16i NVMe	T. Sudou
04.07.2023	1,29	HDD_SSD(short depth)	Max number revised	J. ZHAO
04.07.2023	1,29	RAM	Add memory Mode for HBM CPUs	J. ZHAO
30.06.2023	1,28	others	No TPM for WINSVR added	K. Nishihara
28.06.2023	1.27	HDD_SSD(short depth)	Added the new sheet "HDD_SSD(short depth) for the short depth model	Y.Sugiyama
23.06.2023	1.26	PSU	Added the restrcition of ATD40/45 to 500W PSU	J.Sugiyama
22.06.2023	1.25	Thermal Rule	changed level for PRAID CP500i, EP520i, EP540i, EP580i level accroding to updated information	J. ZHAO
21.06.2023	1.24	RAID, Thermal Rule	added PSAS CP 2100-8i for vSAN PYBSC3MAWL	T. Sudou
13.06.2023	1,23	RAM	add Memory less Mode option	J. ZHAO
13.06.2023	1,23	GFX	add L4LP card and updated availability schedules	M.Takaoka
09.06.2023	1,22	LAN_FC_IB	Change target date of X710-T4L OCPv3 from 2Q to 3Q	F. Kanega
07.06.2023	1.21	GFX	The released plan for L4 was deleted.	M.Takaoka
06.06.2023	1.20	base, RAID	added Intel VROC (SATA RAID) added Intel VROC Upgrade Key	T. Sudou
06.06.2023	1.19	Thermal Rule LAN_FC_IB	Revised "PFC EP LPe36000/36002 2X 32GFC PCIe v4 LP" to "PFC EP LPe36000/36002 2X 64GFC PCIe v4 LP"	J. ZHAO
05.06.2023	1.18	RAID	Revised notes for FBU regarding short depth models	J. ZHAO
02.06.2023	1.17	HDD_SSD	updated availability schedule	Y. Sugiyama
01.06.2023	1.16	base RAID	changed slot 1 -> slot 2 for short delth models due to thermal test result Add the comments "1x FBU can be integrated per short depth base units"	Y. Narita

31.05.2023	1.15	base	removed the notes in Type 3-10 with CP2100-8i "To be updated" is removed.	Y. Narita
22.05.2023	1.14	HDD_SSD	removed the BC-SATA 20TB due to release cancel	Y. Sugiyama
16.05.2023	1.13	RAM	revised mistake on population of "12 DIMMs for 1CPU"	J. ZHAO
11.05.2023	1.12	Thermal Rule	added PRAID CP500i, EP520i, EP540i, EP580i to PCIe card thermal rule table.	J.Sugiyama
10.05.2023	1.11	CPU	updated MCC CPU avaialblity. (remove "will be avaialble in 2Q.2023") updated HBM CPU/8470N availablity. (add "will be avaialble in 3Q.2023" removed HBM 9460/9470 CPU due to avaialble for liquid cooling solution as special release	A. Iwata
09.05.2023	1.10	base, RAID	added PRAID CP500i, EP520i, EP540i, EP580i updated availability schedule	T. Sudou
26.04.2023	1.09	RAID	updated availability schedules	T. Sudou
26.04.2023	1.09	base	updated availability schedule for EP 3258-16i in Type 3-8	T. Sudou
21.04.2023	1.08	HDD_SSD	revised the max qty from 2x to 1x for M.2 SATA/M.2 PCIe. (when VROC is available, the max qty will be updated)	Y. Sugiyama
18.04.2023	1.07	RAID	updated availability schedules	T. Sudou
18.04.2023	1.06	base	added RMK for short depth model	Y. Narita
13.04.2023	1.05	HDD_SSD	added the HDD SAS 15K and 10K excluding 2.4TB	Y. Sugiyama
11.04.2023	1.04	Thermal Rule	relaxed the restriction for CPU E due to update by R&D team	Y. Narita
06.04.2023	1.03	base	added order codes of CMA for short depth models	Y. Narita
04.04.2023	1.02	Cover/RAM RAID	corrected some wrong description added order codes of RAID cables for short depth models	Y. Narita
03.04.2023	1.01	HDD_SSD	added the description "available in CQ3 '23" for all SED drives due to dropping from 1st T50.	Y. Sugiyama
03.04.2023	1,0		1st release	Y. Narita