

PRIMERGY TX2550 M7  
Tower or 4U Rack server



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1	Base	Describes base units of TX2550 M7
2		Describes rack mount kits and services
3	CPU	Order codes, information Xeon processors
4	RAM	DDR5 System memory (RAM) and memory modes
5	GFX	Graphics-, Grid-cards, GPU and Xeon Co processors
6	HD_cage	HDD cage kits
7	RAID	SAS / RAID Controller and components
8	ODD	Optical disk drives (DVD, DVD-rw, Blu ray)
9	Backup	LTO drives & RDX drive
10	HD_SSD	Storage drives - PCIe SSD - SAS/SATA SSD & HDD
11	LAN	LAN Components
12	FC_IB	Fibre Channel Controller
13		Infiniband Controller
14	PCI_riser_card	PCI Riser
15	PSU	Power supply units, power cables, country specifics
16	USB_devices	Keyboards, Mice, USB devices
17	Energy Star	Energy Star limitation
18	ErP Lot9	Erp Lot9 limitation
19	others	System Management, ATD, RS232 port, TPM module
20	Thermal	Thermal Rule

# Instructions

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

In any case we recommend to use the WebArchitect to make sure, that you configure a valid system.

This System configurator is divided into several chapters. They are identical to the current price list and WebArchitect.

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

## Chapter xx - description of chapter

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

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

<-- order code E-part (bold) --  
<-- order code L-part (bold)  
<-- "name" of this part  
  
<--description of this part, in same cases as well description of content  
  
<--requires a free PCIe slot --> means total amount of PCIe slots reduced  
<--indicates how often this part can be configured in the related Server

New order code

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

<-- "PYB" order code (bold) for BTO(Built to Order) part  
<-- "PY-" order code (bold) for Loose delivery part  
<-- "name" of this part  
<--description of this part, in same cases as well description of content  
  
<-- Limitation for this part  
  
<--indicates how many this part can be configured in the related Server

### For further information see:

Link to datasheet:

<https://sp.ts.fujitsu.com/dmmp/Publications/public/ds-py-TX2550-M7.pdf>

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

(internet)

[https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy\\_config/Pages/default.aspx](https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx)

(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

<b>Abbreviations</b>
----------------------

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

**PRIMERGY TX2550 M7 offers 3 drive mounting areas:****upper drive area - optional**

- for up to 3x 1.6" bays for optical disk drives or back-up drives
- or up to 4x 3.5" LFF HDD and 1x 9.5mm optical disk drive
- or up to 8x 2.5" SFF HDD/SSD/PCIe-SSD and 1x 1.6" bay for optical disk drive or back-up drive

**combined bottom/mid drive area - optional**

- for up to 24x 2.5" SFF HDD/SSD

**mid drive area - optional**

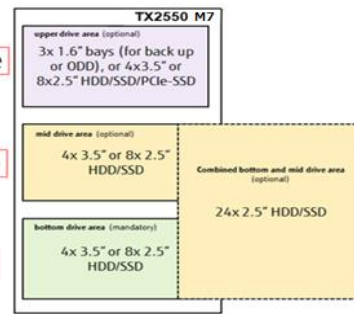
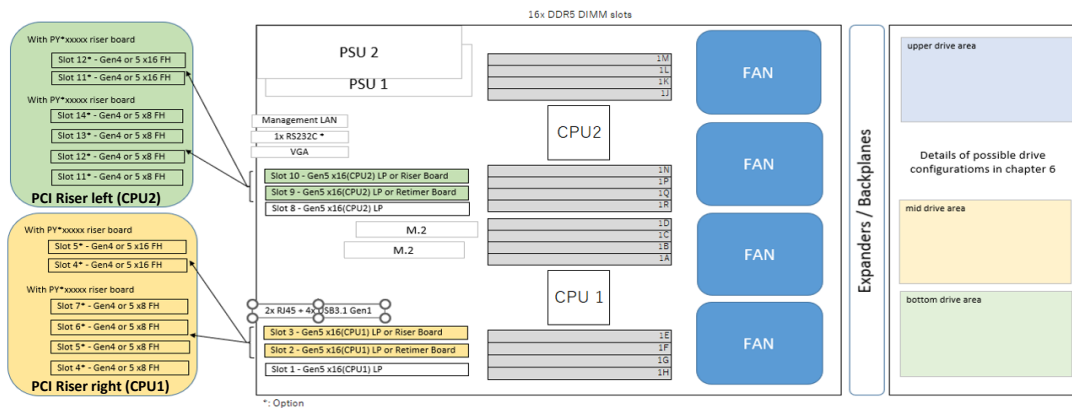
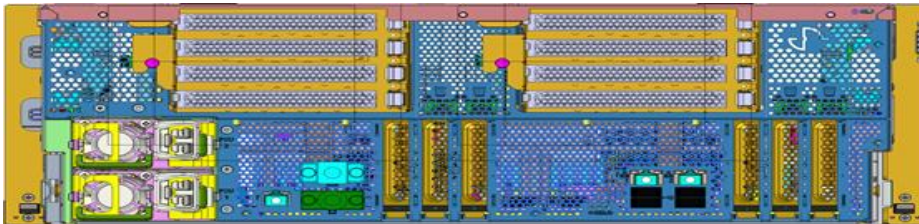
- for up to 4x 3.5" LFF HDD
- or up to 8x 2.5" SFF HDD/SSD

**bottom drive area - mandatory**


- for up to 4x 3.5" LFF HDD
- or up to 8x 2.5" SFF HDD/SSD

2<sup>nd</sup> upgrade1<sup>st</sup> upgrade

Start here

**! All possible configurations in chapter 6: "HD\_cage"****Schematic overview of the interior of PRIMERGY TX2550 M7****PRIMERGY TX2550 M7 rear view**

PRIMERGY TX2550 M7 front view with drives

 The front views shown below represent all possible drive options; they do not represent the base units.  
For information on base units and HD drive cage for each drive option, please see chapter "base" and "HD\_cage"

3.5-inch hot plug SAS/SATA

4x HDDs/SSDs



8x HDDs/SSDs



12x HDDs/SSDs



2.5-inch hot plug SAS/SATA/NVMe

8x HDDs/SSDs



16x HDDs/SSDs



16x HDDs/SSDs + 8xHDDs/SSDs/NVMeS



24x HDDs/SSDs



24x HDDs/SSDs + 8xHDDs/SSDs/NVMeS



recommended components for TX2550 M7	#
Independant Mode installation	1x
iRMC S6 advanced pack	1x
<b>embedded Lifecycle Management (eLCM)</b>	<b>1x</b>
Modular PSU 900W Titanium hot plug	2x

Chapter 1 - base unit

Start

**Power supply units & cooling:**  
PRIMERGY TX2550 M7 offers bays for 2x (1x optional hot plug redundant) power supply units of 500W, 900W, 1600W, 2400W with up to 96% efficiency. 2200W with up to 94% efficiency. Rack options ex factory or via retrofit upgrade with rack conversion kit.

**Server Management:**  
iRMC S6 (integrated Remote Management Controller) on-board with dedicated Service LAN-port and integrated graphics controller. With onboard indicators and controls to easily highlight failed components via LEDs displayed during service even without mains connection by simply pressing the "Indicate CSS" button. Optional ServerView Suite software incl. ServerView Installation Manager, Server View Remote Management and tools.

**Platform:**  
Fujitsu Systemboard D3985-A made in Taiwan based on Chipset Intel® C741, up to two Xeon (Sapphire Rapids) series CPUs, four Intel® UltraPath Interconnect (Intel® UPI) point-to-point links and onboard RAID 0/1 6Gbit/s available for up to 8x SATA drives.  
16GB SD card as default

**Slots:** 6x PCIe slots are on board, with optional riser card up to 10x PCIe slots are available:  
> **6x PCIe slots onboard, low profile, 167mm length, supported with first/second CPU:**  
Slot 1: PCIe-Gen5 x16  
Slot 2: PCIe-Gen5 x16 (occupied in configurations with optional riser card)  
Slot 3: PCIe-Gen5 x16 (occupied in configurations with optional riser card)  
Slot 8: PCIe-Gen5 x16  
Slot 9: PCIe-Gen5 x16 (occupied in configurations with optional riser card)  
Slot 10: PCIe-Gen5 x16 (occupied in configurations with optional riser card)  
> **Optional full height riser card on PCIe slot 2/3/9/10 offers 4x additional PCIe slots, full height, 252mm and 1x PCI4/5 , with first/second CPU:**  
Slot 4/11: PCIe-Gen4/5 x16  
Slot 5/12: PCIe-Gen4/5 x16  
> **Optional full height riser card on PCIe slot 2/3/9/10 offers 8x additional PCIe slots, full height, 252mm and 1x PCI4/5, with first/second CPU:**  
Slot 4/11: PCIe-Gen4/5 x8  
Slot 5/12: PCIe-Gen4/5 x8  
Slot 6/13: PCIe-Gen4/5 x8  
Slot 7/14: PCIe-Gen4/5 x8

**System RAM:**  
16x slots for DDR5-4800MHz RAM modules available (8x RAM modules per CPU). Memory speed depends on CPU and configuration.

**LAN:** 2x 1Gb LAN onboard;

**Interfaces at rear side**

- 1x optional RS-232-C (serial port, 9 pin)
- 2x LAN RJ45 (additional 2x RJ45 optionally available)
- 1x service LAN RJ45 (1 Gbit)
- 1x VGA (15 pins)
- 4x USB 3.1 Gen1

**Interfaces at front side**

- 2x USB 3.1 Gen1 (no USB wakeup)

**Interfaces internal**

- 1x USB 3.1 Gen1 for backup devices
- 2x M.2
- 1x connector for TPM, 1x microSD card slot

Choose one base unit

**Tower base units;**

- Low noise hotplug fans
- up to 6 PCIe slots

**PY TX2550 M7 Tower, 4x3.5" basic**

PYT2557T3N

Tower server, expandable to 8x3.5";  
Not support GPGPU

**PY TX2550 M7 Tower, 8x2.5" basic**

PYT2557T2N

Tower server, not expandable;  
Not support GPGPU

**PY TX2550 M7 Tower 4x3.5" basic and PY TX2550 M7 Tower 8x2.5" basic do not support Advanced Thermal design(ATD) options!**

**Tower base units;**

- High performance hotplug fans
- up to 10 PCIe slots

**PY TX2550 M7 Tower, 8x3.5"**

PYT2557TAN

Tower server, expandable to 12x3.5";

**PY TX2550 M7 Tower, 8x2.5"**

PYT2557TBN

Tower server, expandable to 24x2.5";

**PY TX2550 M7 Tower, 24x2.5"**

PYT2557TCN

Tower server, expandable to 32x2.5";

**Rack base units;**

- High performance hotplug fans
- up to 10 PCIe slots

**PY TX2550 M7 Rack, 8x3.5"**

PYT2557R3N

Rack server, expandable to 12x3.5";

**PY TX2550 M7 Rack, 8x2.5"**

PYT2557R2N

Rack server, expandable to 24x2.5";

**PY TX2550 M7 Rack, 24x2.5"**

PYT2557RAN

Rack server, expandable to 32x2.5";

A

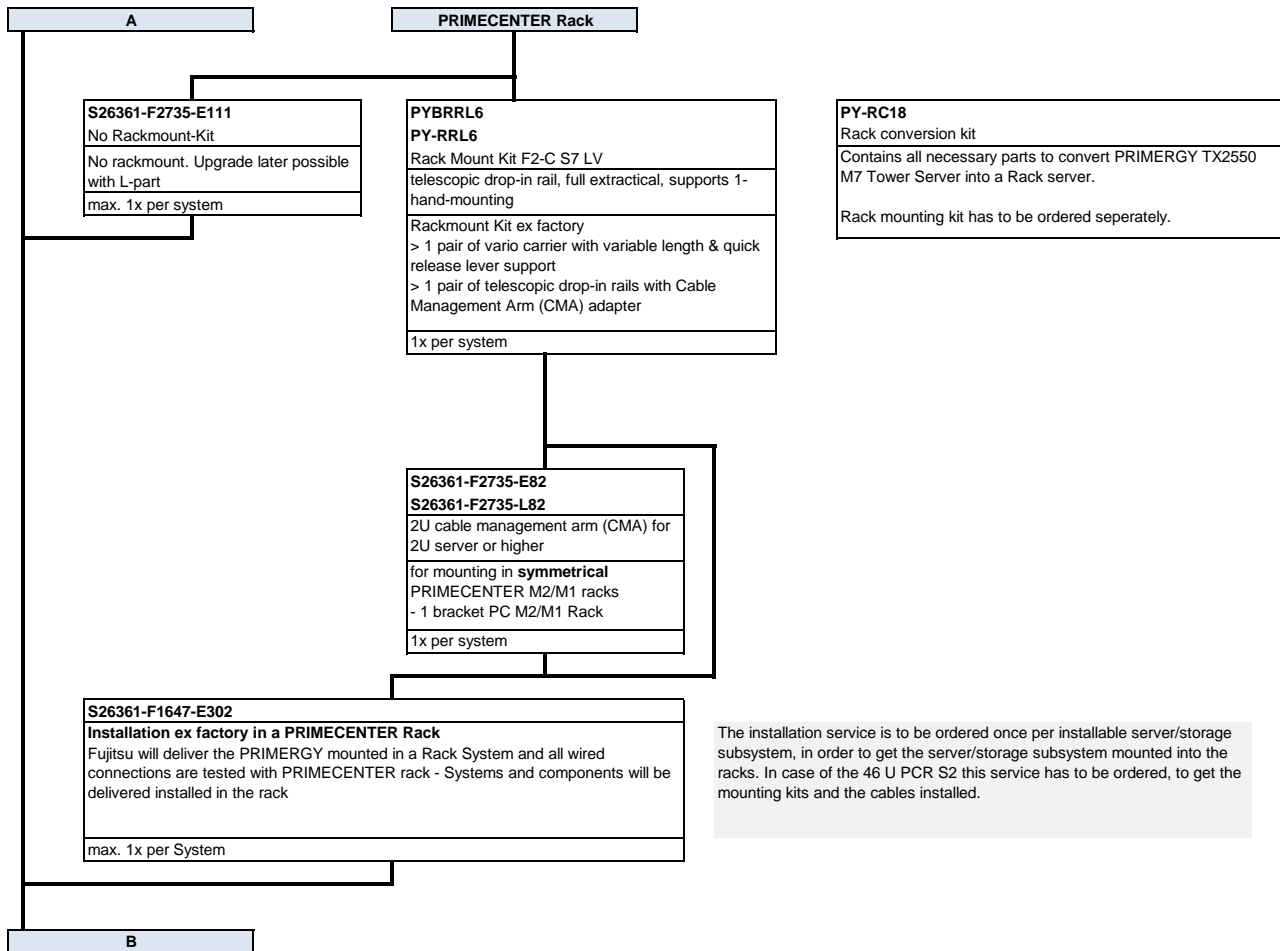
PRIMECENTER Rack

cnfgTX2550M7-20240222\_V1.68.xlsx

base

Page 6 of 46

## Chapter 2 - Rack architecture



## Chapter 3 - CPU

B

**General Description**

There are 2 processor sockets available. Please configure 1 or 2 Processors.

>> All processors have to be the same type.

>> With **one** processor iRMC, 3x PCIe low profile slots(Up to 1x PCIe low profile + 4x PCIe full height) and 8x DIMM slots are available

>> With **two** processors all 16x DIMM slots, 6x PCIe low profile slots are available. Up to 2x PCIe low profile + 8x PCIe full height.

>> To configure 2nd CPU an additional cooler kit is required.

\* HT = Hyper Threading

**Notice**

\*\* Base Unit is not including CPUs. Minimum 1x CPU is required to be configured in one base unit.

\*\* Maximum 2x CPUs are allowed to be configured in one base unit. Only 1 type of CPU can be configured in one base unit.

\*\*CPU: PYBCP65XR, PYBCP65XS and PYBCP65X1 are not allowed to be configured 2x CPUs

CPU Group for  
Thermal condition

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	MCC	
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	MCC	
Xeon Silver 4416+ 20C 2.0GHz 165W	PYBCP66XH	PY-CP66XH	B	MCC	
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	MCC	
Xeon Gold 54xx - Mainline/Performance Optimized, 2 socket scalability		(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	MCC	
Xeon Gold 5418Y 24C 2.0GHz 185W Speed Select Technology	PYBCP65XW	PY-CP65XW	B	MCC	
Xeon Gold 5420+ 28C 2.0GHz 205W	PYBCP65XX	PY-CP65XX	B	MCC	
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	XCC	
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	MCC	
Xeon Gold 6430 32C 2.1GHz 270W (DDR5 @ 4400(1DPC/2DPC))	PYBCP65X2	PY-CP65X2	D	XCC	
Xeon Gold 6434 8C 3.7GHz 195W	PYBCP66X4	PY-CP66X4	B	MCC	
Xeon Gold 6438Y+ 32C 2.0GHz 205W Speed Select Technology	PYBCP66X8	PY-CP66X8	B	MCC	
Xeon Gold 6442Y 24C 2.6GHz 225W Speed Select Technology	PYBCP66X9	PY-CP66X9	C	MCC	
Xeon Gold 6448Y 32C 2.1GHz 225W Speed Select Technology	PYBCP66XC	PY-CP66XC	C	MCC	
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 8444H 16C 2.9GHz 270W	PYBCP65X4	PY-CP65X4	D	XCC	
Xeon Platinum 8450H 28C 2.0GHz 250W Speed Select Technology	PYBCP65X6	PY-CP65X6	C	XCC	
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 Tech	PYBCP65XU	PY-CP65XU	A	MCC	
Xeon Gold 6454S 32C 2.2GHz 270W Speed Select Technology	PYBCP65X3	PY-CP65X3	D	XCC	
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	MCC	

**Notice**

2CPU configuration require to order 2nd CPU cooler kit

**CPU Cooler kit**

(BTO)

(Loose delivery)

2nd CPU Cooler kit for Basic model***	PYBTKCPC85	-
2nd CPU Cooler kit****	PYBTKCPC86	-
CPU cooler kit for loose delivery CPU for Basic model***	-	PY-TKCPC85
CPU cooler kit for loose delivery CPU****	-	PY-TKCPC86

\*\*\* For PYT2557T3N/PYT2557T2N

\*\*\*\* For PYT2557TAN/PYT2557TBN/PYT2557TCN/PYT2557R3N/PYT2557R2N/PYT2557RAN

C



## Chapter 4 - DDR5 System memory

## C

Each CPU offers 8 Slots for DDR5 Memory Modules organised in 1 Banks and 8 Channels with 4 Memory Controllers (2 Channels each).  
If you need more than 8 Slots you have to configure 2nd CPU.  
Depending on the amount of memory configured you can decide between the Normal Memory RAS mode or the Mirroring Memory RAS Mode.

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

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

Supported memory capacities per System (with 2CPU configuration):  
Up to 4TB using DDR5 RDIMM (16x 256GB DDR5 RDIMM 3DS)

The memory speed depends on configuration restricted by the CPU SKU (max. 4800 MT/s).  
DDR5 memory is operated at 1.1V

**Memory Mode ; One of followig memory modes must be selected.**

Independent Mode	Requires 1, 2, 4, 6 or 8 Memory Modules per CPU	1x per CPU	PYBMMD2
Independent Mode required to be the best performance. ADDDC Sparing is available in case system configured by DDR5 xRx4 DIMM only.			
Mirroring Mode	Requires 8 Memory Modules per CPU	1x per CPU	PYBMMC4
BIOS preconfiguration for Mirroring mode. 8x identical memory modules are always equipped on same bank across all channels 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 only configuration section**

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

**DDR5 Registered DIMM 4800MHz 1R/2R x8**

16GB (1x16GB) 1Rx8 DDR5-4800 R ECC	max 8x per CPU	PYBME16SL	PY-ME16SL
32GB (1x32GB) 2Rx8 DDR5-4800 R ECC	max 8x per CPU	PYBME32SL	PY-ME32SL

max 8x per CPU; max 16x for System

**DDR5 Registered DIMM 4800MHz 1R/2R x4**

32GB (1x32GB) 1Rx4 DDR5-4800 R ECC	max 8x per CPU	PYBME32SL2	PY-ME32SL2
64GB (1x64GB) 2Rx4 DDR5-4800 R ECC	max 8x per CPU	PYBME64SL	PY-ME64SL

max 8x per CPU; max 16x for System

**DDR5 Registered DIMM 4800MHz 3DS 4R/8R x4**

128GB (1x128GB) 4Rx4 DDR5-4800 R 3DS ECC	max 8x per CPU	PYBME12SL	PY-ME12SL
256GB (1x256GB) 8Rx4 DDR5-4800 R 3DS ECC	max 8x per CPU	PYBME25SL	PY-ME25SL

max 8x per CPU; max 16x for System

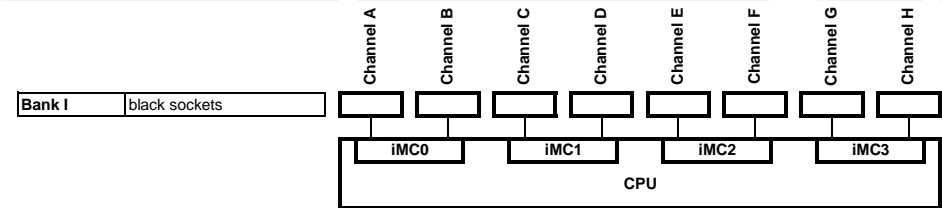
D

Detailed information

RAS feature	Memory Mode	RDIMM	RDIMM	BIOS setting
		x8	LRDIMM	
ECC	Normal Mode/Mirroring Mode	yes	yes	always enabled.
SDDC	Normal Mode/Mirroring Mode	no	yes	always enabled in case x4 DIMM configued.
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	2TB: 256GB x8	1TB: 256GBx8x50%
Max. Memory per System	32 Modules / System	with two CPU	4TB: 256GB x16	2TB: 256GBx16x50%

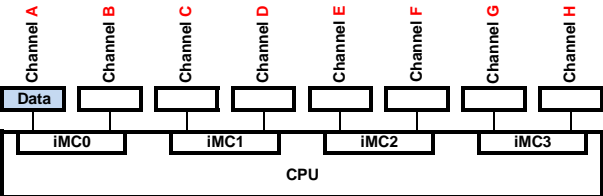
The memory sockets on the Systemboards are color coded



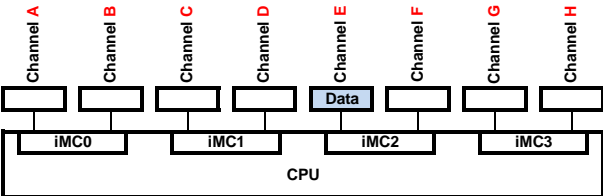
Normal Mode population DDR5 DIMM only

Normal Mode requires 1x, 2x, 4x, 6x or 8x 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 populatued in each Channel.

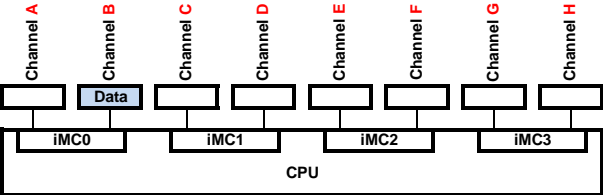
1 DIMMs for 1CPU



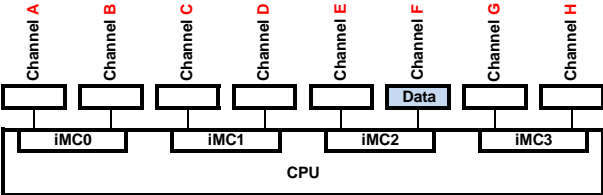
1 DIMMs for 1CPU



1 DIMMs for 1CPU

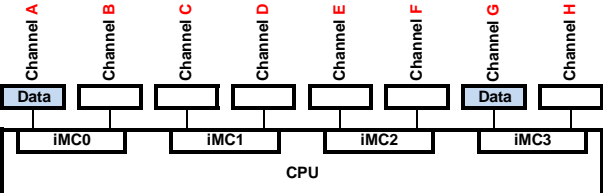


1 DIMMs for 1CPU



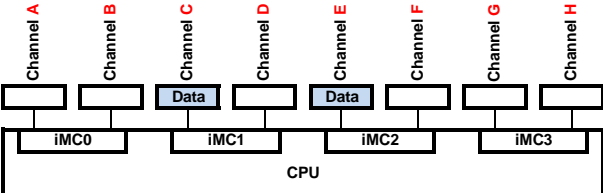
2 DIMMs for 1CPU

2x identical memory modules need to be populated.



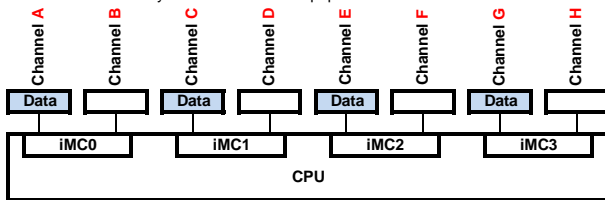
2 DIMMs for 1CPU

2x identical memory modules need to be populated.

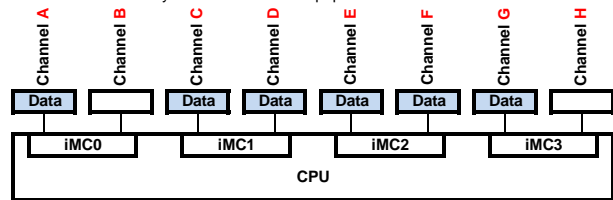


**4 DIMMs for 1CPU**

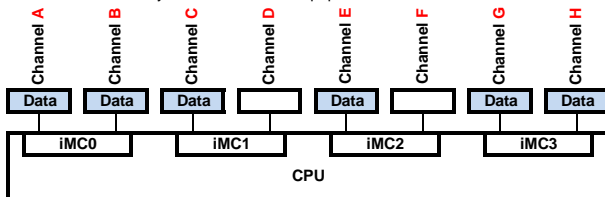
4x identical memory modules need to be populated.

**6 DIMMs for 1CPU**

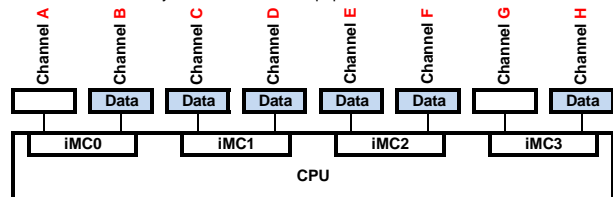
6x identical memory modules need to be populated.

**6 DIMMs for 1CPU**

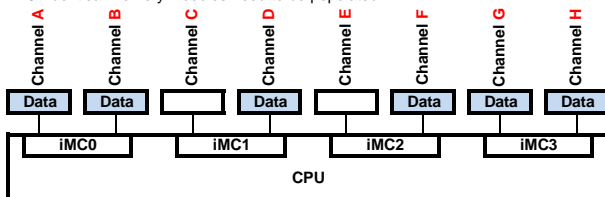
6x identical memory modules need to be populated.

**6 DIMMs for 1CPU**

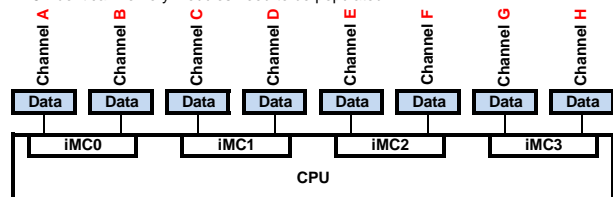
6x identical memory modules need to be populated.

**6 DIMMs for 1CPU**

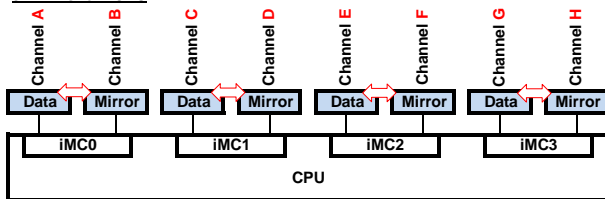
6x identical memory modules need to be populated.

**8 DIMMs for 1CPU**

8x identical memory modules need to be populated.

**Mirroring 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.

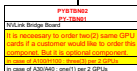
**8 DIMMs for 1CPU**

The different GPU does NOT support



*2: GPGPU cable kit		
Double width GPGPU cable kit	PYBCBG012 / PY-CBG012	1pcs/ per GPGPU card
Double width GPGPU cable kit 2	PYBCBG013 / PY-CBG013	1pcs/ per GPGPU card (for A4500)
Double width GPGPU cable kit 3	PYVCRG017 / PY-CRG017	1pcs/ per GPGPU card (for H100/L40/RTX 6000/L40S/RTX4000)

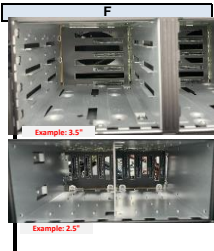
---







Chapter 6 - HD drive cage



HD drive cage is a metal box providing bays for 3.5" HDDs or 2.5" HDDs/SSDs/PCIe-SSDs. Choose out of the following HD cage upgrade kits, depending on pre-selected TX2550 M7 base unit and the targeted configuration. Each upgrade kit contains all relevant parts such as metal cage, backplane, cables and mounting material.

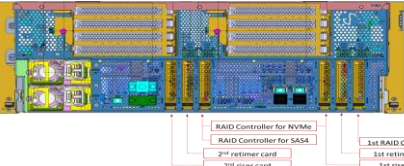
Upgrade kits for the upper drive area require the completion of the mid drive area.

Up to 3x 1.6x5.25" bays are available in the upper drive area for an ODD and/or backup drive configurations; in the 12x3.5" configuration, a 9.5mm bay is available for a slim ODD. Refer to sections "ODD" and "backup" for details.

Upgrade kits are available either ex-factory (E-codes) or as loose delivery party (L-codes). RAID configurations are recommendations; refer to section "RAID" for available options.

Preferred slots for controller assignement

Rear side view (incl. riser card option; refer to sheet "Description" for details)



General drive numbering scheme

24 x 2.5	12 x 3.5	32 x 2.5
<div>16 &gt; 23</div> <div>8 &gt; 15</div> <div>0 &gt; 7</div>	<div>8 &gt; 11</div> <div>4 &gt; 7</div> <div>0 &gt; 3</div>	<div>24 &gt; 31</div> <div>11 &gt; 23</div> <div>0 &gt; 12</div>

TX2550 M7 front views of expandable base units and corresponding HD drive cage options:



If you change channel for HBA- or RAID-Controller as loose delivery, SAS cable need to be changed.

Option B	PY-CBS085	SAS cable for CP2100-8i
Option C	PY-CBS086	SAS cable for CP6xx/EP6xx/EP32xx

Base Unit

<b>PY TX2550 M7 Tower, 4x3.5" basic</b>	
PYT2557T3N	

<b>RAID configuration</b>	1x HBA- or RAID-Controller. Refer to section "RAID" for options. Onboard SATA (max. 8x disks)
---------------------------	-----------------------------------------------------------------------------------------------

<b>ODD / Backup</b>	3x 1.6x5.25" bays are available for an optical and/or backup drives in the upper drive area.
---------------------	----------------------------------------------------------------------------------------------

<b>Upgrade kit for 4x3.5" HDD</b>	
PYBBA34SA	PY-BA34SA
Upgrade kit for 4x3.5" HDD, mounted in the mid drive area	



Base Unit

<b>PY TX2550 M7 Tower, 8x3.5"</b>		<b>PY TX2550 M7 Rack, 8x3.5"</b>	
PYT2557TAN		PYT2557R3N	

<b>RAID configuration</b>	1x HBA- or RAID-Controller. Refer to section "RAID" for options. onboard SATA(Max. qty. for Disk is eight.)
---------------------------	-------------------------------------------------------------------------------------------------------------

If no upper drive area is installed, the below can be selected.

<b>ODD / Backup</b>	3x 1.6x5.25" bays are available for an optical and/or backup drives in the upper drive area.
---------------------	----------------------------------------------------------------------------------------------

HD cage upgrades for upper drive area

<b>Upgrade kit for 4x3.5" HDD</b>	
PYBBA34SB	PY-BA34SB
Upgrade kit for 4x3.5" HDD, mounted in the upper drive area,	
<b>incl. 40x SAS Expander</b>	
1x 9.5mm bay is available for a slim optical drive in the upper drive area.	
Note! This option requires 1x PRAID/HBA per Base unit	

<b>RAID configuration</b>	1x HBA- or RAID-Controller. Refer to section "RAID" for options.
---------------------------	------------------------------------------------------------------

<b>ODD / Backup</b>	1x 9.5mm bay is available for a slim optical drive in the upper drive area.
---------------------	-----------------------------------------------------------------------------



Base Unit

<b>PY TX2550 M7 Tower, 8x2.5" basic</b>	
PYT2557T2N	

<b>RAID configuration</b>	1x HBA- or RAID-Controller. Refer to section "RAID" for options. onboard SATA(Max. qty. for Disk is eight.)
---------------------------	-------------------------------------------------------------------------------------------------------------

<b>ODD / Backup</b>	3x 1.6x5.25" bays are available for an optical and/or backup drives in the upper drive area.
---------------------	----------------------------------------------------------------------------------------------

Base unit

PY TX2550 M7 Tower, 8x2.5"	PY TX2550 M7 Rack, 8x2.5"
PYT2557TBN	PYT2557R2N



RAID configuration	1x HBA- or RAID-Controller. Refer to section "RAID" for options. onboard SATA(Max. qty. for Disk is eight.) if no upper drive area is installed, the below can be selected.
ODD / Backup	3x 1.6x5.25" bays are available for an optical and/or backup drives in the upper drive area.

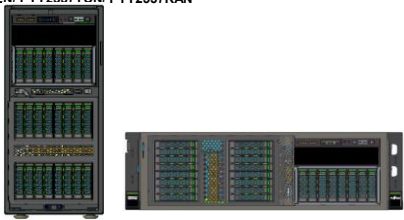
HD cage upgrades

Upgrade kit for 8x2.5" HDD
PYBBA28SQ PY-BA28SQ
Upgrade kit for 8x2.5" HDD, mounted in the mid drive area, for connect 16port RAID option
Note! This option requires 1x 16-channel PRAID/HBA

Upgrade kit for 8x2.5" HDD
PYBBA28SR PY-BA28SR
Upgrade kit for 8x2.5" HDD, mounted in the mid drive area, incl. 40x SAS Expander
Note! This option requires 1x PRAID/HBA



Upgrade kit for the upper drive area Please refer to "Upgrade kit for the upper drive area with PYT2557TBN/ PYT2557R2N/ PYT2557TCN/ PYT2557RAN
---------------------------------------------------------------------------------------------------------------------------------------------------



Base unit

PY TX2550 M7 Tower, 24x2.5"	PY TX2550 M7 Rack, 24x2.5"
PYT2557TCN	PYT2557RAN



*Including 40x SAS Expander!*

RAID configuration	1x HBA- or RAID-Controllers. Refer to section "RAID" for options.
ODD / Backup	3x 1.6x5.25" bays are available for an optical and/or backup drives in the upper drive area.

HD cage upgrades

Upgrade kit for the upper drive area Please refer to "Upgrade kit for the upper drive area with PYT2557TBN/ PYT2557R2N/ PYT2557TCN/ PYT2557RAN
---------------------------------------------------------------------------------------------------------------------------------------------------





## The mix configuration information

	NVMe w/ Onboard *1	NVMe w/ PRAID *2	GPGPU *4	SAS4 *3
NVMe w/ Onboard *1	-	Not support	Support	Not support
NVMe w/ PRAID *2	Not support	-	Not support	Not support
GPGPU *4	Support	Not support	-	Support
SAS4 *3	Not support	Not support	Support	-

\*1: used option "Upgrade kit for 1-4 x2.5" PCIe SSD SFF w/ onBoard"

\*2: used option "Upgrade kit for 1-4 x2.5" PCIe SSD SFF w/ PRAID"

\*3: used option "Upgrade kit for 8x2.5" HDD (SAS4)"

\*4: Not include T400(Low profile)

## Upgrade kit for the upper drive area with PYT2557TBN/ PYT2557R2N/ PYT2557TCN/ PYT2557RAN

Only one of them can be selected.			
Upgrade kit for 8x2.5" HDD	PYBBA28SS	8x2.5"	
	PY-BA28SS		
Upgrade kit for 8x2.5" HDD(SAS4)	PYBBA28ST	8x2.5" combo HDD <b>Note!</b> This option requires 2x CPUs. This option requires min. 1x 24Gb/s PRAID/HBA In total, 2x PRAID/ HBA are allowed (1x for bottom / mid area, 1x for upper area). Choose from the options below:  [Option 1] – Choose two of the following: - 1x for bottom / mid area : PRAID EP 325x-xi [PYBSR4MA1L/PY-SR4MA1/PYBSR4MA2L/PY-SR4MA2/PYBSR4MA3L/PY-SR4MA3], or PSAS CP 2200-16i [PYBSC4MA1L/PY-SC4MA1] or PSAS CP 2100-8i [PYBSC3MA2L/PY-SC3MA2]. - 1x for upper area : PRAID EP 325x-xi [PYBSR4MA1L/PY-SR4MA1/PYBSR4MA2L/PY-SR4MA2/PYBSR4MA3L/PY-SR4MA3], or PSAS CP 2200-16i [PYBSC4MA1L/PY-SC4MA1]	
		PY-BA28ST	[Option 2] – Choose two of the following: - 1x for bottom / mid area : PSAS CP600i[PYBSC4FAL/PY-SC4FA], or PRAID CP600i[PYBSR4FAL/PY-SR4FA], or PRAID EP740i[PYBSR4C71L/PY-SR4C71], or PRAID EP6x0i[PYBSR4C63L/PY-SR4C63/PYBSR4C6L/PY-SR4C6] - 1x for upper area :
	Upgrade kit for 1-4 x2.5" PCIe SSD SFF w/ onBoard		PYBBA24PJ
		PY-BA24PJ	
Upgrade kit for 1-4 x2.5" PCIe SSD SFF w/ PRAID	PYBBA24PK	8x2.5" combo HDD <b>Note!</b> This option requires 1x PRAID for NVMe.	
	PY-BA24PK		

upgrade kit for 5-8 x2.5" PCIe SSD SFF w/ onBoard	PYBCBE024	<b>Note!</b> This option requires 2x CPUs. This option requires PYBBA24PJ.
	PY-CBE024	
Upgrade kit for 5-8 x2.5" PCIe SSD SFF w/ PRAID	PYBCBE025	<b>Note!</b> This option requires 2x CPUs. This option requires another PRAID for NVMe. This option requires PYBBA24PK.
	PY-CBE025	

RAID configuration	HBA- or RAID- or Retimer-Controllers. Refer to section "RAID" for options.
--------------------	----------------------------------------------------------------------------

ODD / Backup	1x 1.6x5.25" bay is available for an optical or backup drive in the upper drive area. <b>Note! One of LTO and ODD can be selected.</b>
--------------	-------------------------------------------------------------------------------------------------------------------------------------------

G

## Chapter 7 - SAS / RAID Controller

G

FH PCIe card requires FH PCIe riser card. Please refer to "Chapter 14 - PCI riser card".

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 R1.6.0 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	No Cache	RAID 0, 1, 10	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	PYBSC4FAL	PY-SC4FA
----------------	----------	--------------	-----------	----------

16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 drives without expander  
**limitation: supports up to 30 drives only with 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

PSAS CP 2200-16i LP	No Cache	HBA + RAID 0, 1, 10, 5	PYBSC4MA1L	PY-SC4MA1
---------------------	----------	------------------------	------------	-----------

16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander  
(the configuration for up to 4 x4 NVMe drives requires a different order number, please see below)  
requires 1x LP PCIe 4.0 x8 (int.) slot  
**\* max. 2x**, when Upgrade kit for 8x2.5" HDD(SAS4): PYBBA28ST is ordered  
(FYI: PYBSC4MA1L and PYBSC4MA2(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

PSAS CP 2100-8i LP	No Cache	HBA + RAID 0, 1, 10, 5	PYBSC3MA2L	PY-SC3MA2
--------------------	----------	------------------------	------------	-----------

8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander  
requires 1x LP PCIe 3.0 x8 (int.) slot

internal RAID / HBA controllers for PCIe SSD drives

PSAS CP 2200-16i NVMe FH	No Cache	HBA + RAID 0, 1, 10, 5	PYBSC4MA2	PY-SC4MA1
PSAS CP 2200-16i NVMe LP	No Cache	HBA + RAID 0, 1, 10, 5	PYBSC4MA2L	

up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above)  
requires 1x FH or LP PCIe 4.0 x8 (int.) slot  
(FYI: PYBSC4MA1L and PYBSC4MA2(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

internal RAID controller with 2nd Level cache

internal RAID controllers for SAS, SATA HDD or SSD drives

PRAID EP740i LP <b>available from 2025/01</b>	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C71L	PY-SR4C71
-----------------------------------------------	-----------	-----------------------------	------------	-----------

16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander  
(the configuration for up to 4 x4 NVMe drives requires a different order number, please see below)  
supports SED (Self Encrypting Drives)  
requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS4116  
**\* max. 2x**, when Upgrade kit for 8x2.5" HDD(SAS4): PYBBA28ST is ordered  
(FYI: PYBSR4C71L and PYBSR4C72(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

internal RAID controllers for SAS, SATA HDD or SSD drives

PRAID EP640i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	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	PYBSR4C6L	PY-SR4C6
-----------------	-----------	-----------------------------	-----------	----------

16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander  
(the configuration for up to 4 x4 NVMe drives requires a different order number, please see below)  
supports SED (Self Encrypting Drives)  
requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916  
(FYI: PYBSR4C6L and PYBSR4C62(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

optional Flash Backup Unit (FBU)

<b>FBU option for PRAID EP6xx / EP7xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length	S26361-F4042-E155	S26361-F4042-L110
----------------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------	-------------------

internal RAID controllers for PCIe SSD drives

PRAID EP740i NVMe FH <b>available from 2025/01</b>	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C72	PY-SR4C71
PRAID EP740i NVMe LP <b>available from 2025/01</b>	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C72L	

up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above)  
requires 1x FH or LP PCIe 4.0 x8 (int.) slot, based on LSI SAS4116  
(FYI: PYBSR4C71L and PYBSR4C72(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

optional Flash Backup Unit (FBU) **available from 2025/01**

<b>FBU option for PRAID EP7xx:</b> Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length	S26361-F4042-E155	S26361-F4042-L110
--------------------------------------------------------------------------------------------------------------------------------------------------------	-------------------	-------------------

internal RAID controllers for PCIe SSD drives

PRAID EP680i NVMe FH	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C62	PY-SR4C6
PRAID EP680i NVMe LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C62L	

up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above)  
no FBU is allowed for this controller  
requires 1x FH or LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916  
(FYI: PYBSR4C6L and PYBSR4C62(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

Internal RAID controllers for SAS, SATA HDD or SSD drives				
PRAID EP 3252-8i LP	2GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4MA1L	PY-SR4MA1
PRAID EP 3254-8i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	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 <b>* max. 2x</b> , when Upgrade kit for 8x2.5" HDD(SAS4): PYBBA28ST is ordered				
PRAID EP 3258-16i LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4MA3L	PY-SR4MA3
16 ports 6, 12 & 24Gb/s SAS/SATA HDD/SSD, supports up to 16 SAS/SATA drives without expander (the configuration for up to 4 x4 NVMe drives requires a different order number, please see below) supports SED (Self Encrypting Drives) requires 1x LP PCIe 4.0 x8 (int.) slot <b>* max. 2x</b> , when Upgrade kit for 8x2.5" HDD(SAS4): PYBBA28ST is ordered (FYI: PYBSR4MA3L and PYBSR4MA4(L) are identical products. The 2nd Order number was only introduced for explicit 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 without extension cable			PYBFBM014	PY-FBM01
FBU option for PRAID EP 325x in rear PCIe Slot#8: Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length			PYBFBM012	PY-FBM01

Internal RAID controllers for PCIe SSD drives				
PRAID EP 3258-16i NVMe FH	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4MA4	PY-SR4MA3
PRAID EP 3258-16i NVMe LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4MA4L	
up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above) requires 1x FH or LP PCIe 4.0 x8 (int.) slot (FYI: PYBSR4MA3L and PYBSR4MA4(L) are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)				
optional Flash Backup Unit (FBU)				
FBU option for PRAID EP 325x in rear PCIe Slot#3/#4/#8: Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length			PYBFBM012	PY-FBM01

FBU cannot be combined with Advanced Thermal design.  
up to 3x FBU can be integrated per System

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
PSAS CP600i	PSAS CP 2100-8i	PSAS CP600e
PSAS CP600i for LTO	PSAS CP 2200-16i	PRAID EP680e
PRAID CP600i	PSAS CP 2200-16i NVMe	PDUAL CP100
PRAID EP740i	PSAS CP 2200-16i for LTO	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	

## H

external HBA controller, no 2nd Level cache

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

external RAID controller with 2nd Level cache

external RAID controllers for SAS HDD or SSD drives				
PRAID EP680e FH	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C6E	PY-SR4C6E
PRAID EP680e LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	PYBSR4C6EL	
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 2x SFF8644 (external Mini-SAS HD) supports SED (Self Encrypting Drives) requires 1x FH or LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916				
optional Flash Backup Unit (FBU)				
FBU option for PRAID EP6xx: Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length			S26361-F4042-E155	S26361-F4042-L110

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 Premium	Intel CPU	No Cache	SW-RAID 0, 1, 10, 5 *	1x	PYBRLVR02 PY-RLVR02

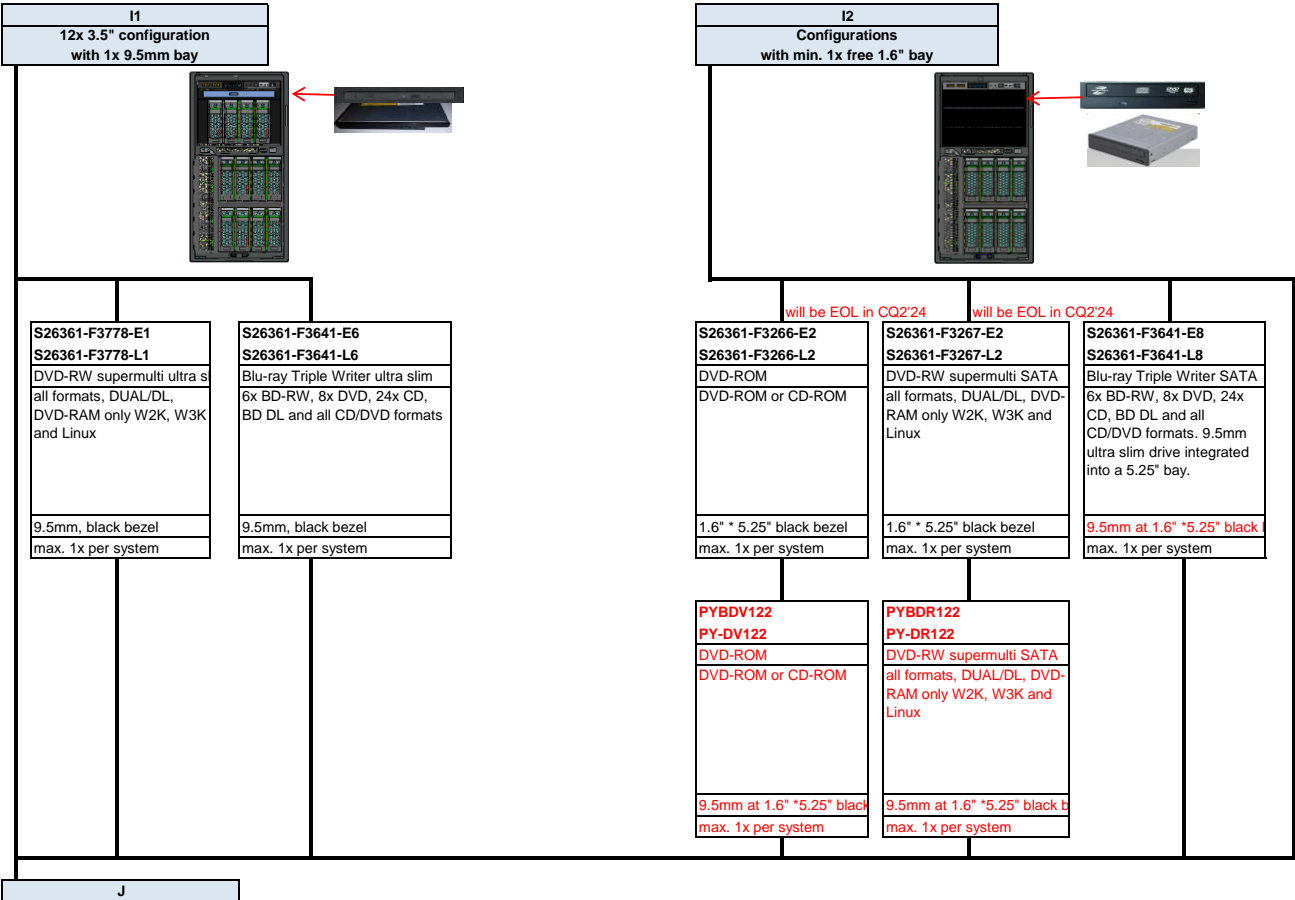
BIOS version R1.6.0 or later is required to use Intel VROC (VMD NVMe RAID)  
\* RAID 1 is only supported in VMware ESXi.

## I

Chapter 8 - ODD optical disk drives

PRIMERGY TX2550 M7 offers up to 3x 1.6" bays (located in the upper side of Tower- / right side of Rack-server) for various ODD's and/or backup drives.  
Depending on the HDD drive cage configuration there may be some or all of 1.6" bays already occupied; please find the number of available bays in the chapter 6, "HD-cage", incl. further configuration details.

The restriction for PYBDV122, PYBDR122  
- When PYBBA345B ordered, PYBDV122 and PYBDR122 cannot be ordered  
- When PYBBA285Q or PYBBA28SR ordered and LTO or RDX ordered, PYBDV122 and PYBDR122 cannot be ordered



## Chapter 9 - backup drives

With most configurations the TX2550 M7 offers 3 x 1.6" bay in the accessible drives area located at the top of the Tower Server (or at the right side of the Rack) for various ODD and or backup drives. Depending on the HDD drive configuration there may be some or all of these 1.6" bays already occupied - please find the number of available bays and the size listed as point 3) at each of the drive bundles. All bundles with limitations are highlighted with 2 exclamation marks in the front (e.g. "!! 1x 9.5mm ...")

J

Config. with min. 1x free 1.6" bay

## SAS HBA card for Internal LTO drives

**Note: In case SATA/SAS/NVMe with Raid card and PCI Riser rights(PYBPRE638/PY-PRE638/PYBPRE641/PY-PRE641/PYBPRE848/PY-PRE848/PYBPRE643/PY-PRE643/PYBPRE645/PY-PRE645/PYBPRE851/PY-PRE851) exists, this can't be used.**

## SAS HBA Controller

PSAS CP600i LP for LTO	requires 1x LP PCIe 4.0 x8 / for LTO drives	1x	PYBSC4FA2L	PY-SC4FA
PSAS CP 2200-16i LP for LTO	requires 1x LP PCIe 4.0 x8 / for LTO drives	1x	PYBSC4MA3L	PY-SC4MA1

## LTO drives (Need to select one of LTO drives together with SAS HBA)

LTO drives are not including tape drives. Cleaning Cartridge and Cables are included

LTO 7 tape drive (w/o tape)	6.0TB, 300MB/s, SAS 2.0, 5.25 inch/HalfHeight	1x	S26361-F5606-E1	S26361-F5606-L1
LTO 8 tape drive (w/o tape)	12.0TB, 300MB/s, SAS 2.0, 5.25 inch/HalfHeight	1x	S26361-F5789-E1	S26361-F5789-L1
LTO 9 tape drive (w/o tape)	18.0TB, 300MB/s, SAS 3.0, 5.25 inch/HalfHeight	1x	PYBLT911	PY-LT911

## RDX drives

RDX drive is not including Cartridge.

RDX Drive cage (w/o cartridges)	USB 3.0, 5.25 inch / Half Height	1x	S26361-F3750-E4	S26361-F3750-L4
---------------------------------	----------------------------------	----	-----------------	-----------------

## RDX

## RDX Cartridge

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

K



## Chapter 10 - storage drives

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.  
SATA drives can be connected to the onboard Controller (max. 8x).  
SAS drives require a dedicated SAS / RAID Controller  
PCIe-SSDs can be connected to the onboard Controller, or require a dedicated RAID Controller or PCIe retimer/switch card.  
Hard Disk Sector Format Information:  
512n HDD: 512 byte sectors on the drive media.  
512e (e=emulation) HDD: 4K physical sectors on the drive media with 512 byte logical configuration.  
512e HDD Disk Drives: VMware 6.0 or earlier is not supported.  
When using SSDs with VMware ESXi, select the SSDs that meet the endurance requirement described in KB2145210 below.  
<https://kb.vmware.com/kb/2145210>  
DWPD: Drive Writes Per Day over 5 years.  
**SED/FIPS are Self Encrypting Drives**, and they require either a RAID controller with \*SafeStore (SED) support or an HBA and in addition a software instance, supporting SED Key Management.  
It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality.  
**Non-SED drives and SED/FIPS drives can be mixed, but cannot be used in one logical RAID volume.**  
**HDD Classes:**  
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.

K

## 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 available in CY24Q1	PYBSS80NGG	PY-SS80NGG
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED available in CY24Q1	PYBSS16NGG	PY-SS16NGG

max. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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 available in CY24Q1	PYBSS76NNN	PY-SS76NNN
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1	SED available in CY24Q1	PYBSS15NNM	PY-SS15NNM
max. 8x, 16x, 24x or 32x - depending on base unit & configuration							

will be available in CQ1'24

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. 8x, 16x, 24x or 32x - 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. 8x, 16x, 24x or 32x - depending on base unit & configuration							

will be available in CQ1'24

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. 8x, 16x, 24x or 32x - 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. 8x, 16x, 24x or 32x - 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. 8x, 16x, 24x or 32x - depending on base unit & configuration							

will be available in CQ1'24

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. 8x, 16x, 24x or 32x - 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. 8x, 16x, 24x or 32x - depending on base unit & configuration							

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5300/5400PRO 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. 8x, 16x, 24x or 32x - depending on base unit & configuration							

L1



## L1

## 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; 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. 8x, 16x, 24x or 32x - depending on base unit &amp; configuration

EOL, as long as stock available

**HDD SATA 2.5" 7.2K 512n** (SFF) Enterprise Business Critical with hot plug/hot replace tray

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		S26361-F3956-E100	S26361-F3956-L100
2TB	7 200	SATA 6Gb/s	512n		S26361-F3956-E200	S26361-F3956-L200

max. 8x, 16x, 24x or 32x - depending on base unit &amp; configuration

## L2

L2

3.5" (LFF) SATA SSD

will be available in CQ1'24

**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, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; configuration

will be available in CQ1'24

**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, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; configuration

## 3.5" (LFF) Hard drives

EOL, as long as stock available

**HDD SAS 3.5" 15K (LFF) 2.5" HDD Enterprise Mission Critical with 3.5" hot plug/hot replace tray**

Capacity	RPM	Interface	Sector	order code E-part	order code L-part
300GB	15 000	SAS 12Gb/s	512n	S26361-F5726-E530	S26361-F5726-L530
600GB	15 000	SAS 12Gb/s	512n	S26361-F5726-E560	S26361-F5726-L560
900GB	15 000	SAS 12Gb/s	512n	S26361-F5532-E590	S26361-F5532-L590

max. 4x, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; configuration

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

Capacity	RPM	Interface	Sector	order code E-part	order code L-part
1.8TB	10 000	SAS 12Gb/s	512e	S26361-F5731-E118	S26361-F5731-L118
2.4TB	10 000	SAS 12Gb/s	512e	S26361-F5569-E124	S26361-F5569-L124

max. 4x, 8x, or 12x - depending on base unit &amp; configuration

**HDD SAS 3.5" 7.2K 512n (LFF) Enterprise Business critical with hot plug/hot replace tray**

Capacity	RPM	Interface	Sector	order code E-part	order code L-part
2TB	7 200	SAS 12Gb/s	512n	PYBCH2T7G4	PY-CH2T7G4
4TB	7 200	SAS 12Gb/s	512n	PYBCH4T7G4	PY-CH4T7G4

max. 4x, 8x, or 12x - depending on base unit &amp; configuration

**HDD SAS 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray**

Capacity	RPM	Interface	Sector	order code E-part	order code L-part
6TB	7 200	SAS 12Gb/s	512e	PYBCH6T7B9	PY-CH6T7B9
8TB	7 200	SAS 12Gb/s	512e	S26361-F5635-E800	S26361-F5635-L800
12TB	7 200	SAS 12Gb/s	512e	PYBCHCT7B7	PY-CHCT7B7
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
6TB	7 200	SAS 12Gb/s	512e	PYBCH6T7BU	PY-CH6T7BU
8TB	7 200	SAS 12Gb/s	512e	S26361-F5584-E800	S26361-F5584-L800
12TB	7 200	SAS 12Gb/s	512e	PYBCHCT7BW	PY-CHCT7BW
14TB	7 200	SAS 12Gb/s	512e	PYBCHET7BV	PY-CHET7BV
16TB	7 200	SAS 12Gb/s	512e	S26361-F5624-E160	S26361-F5624-L160
18TB	7 200	SAS 12Gb/s	512e	PYBCHJT7BT	PY-CHJT7BT

max. 4x, 8x, or 12x - depending on base unit &amp; 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, 8x, or 12x - depending on base unit &amp; configuration

**HDD SATA 3.5" 7.2K 512e (LFF) Enterprise Business Critical with hot plug/hot replace tray**

Capacity	RPM	Interface	Sector	order code E-part	order code L-part
6TB	7 200	SATA 6Gb/s	512e	PYBBH6T7E9	PY-BH6T7E9
8TB	7 200	SATA 6Gb/s	512e	S26361-F5638-E800	S26361-F5638-L800
12TB	7 200	SATA 6Gb/s	512e	PYBBHCT7E4	PY-BHCT7E4
14TB	7 200	SATA 6Gb/s	512e	PYBBHET7E4	PY-BHET7E4
16TB	7 200	SATA 6Gb/s	512e	S26361-F3904-E160	S26361-F3904-L160
18TB	7 200	SATA 6Gb/s	512e	PYBBHJT7E2	PY-BHJT7E2

max. 4x, 8x, or 12x - depending on base unit &amp; configuration

L3

## L3

## 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

**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		Boot		<b>S26361-F5816-E240</b>	<b>S26361-F5816-L240</b>

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

max. 1x per Server; in case M.2 drive is installed in connector located on Motherboard (please see folder "description"). VMware ESXi is only supported.

2x M.2 drives required; in case M.2 drives are used with PDUAL CP100 or CP300.

**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		<b>S26361-F5787-E240</b>	<b>S26361-F5787-L240</b>
480GB	M.2	SATA 6Gb/s	1,5	Boot		<b>S26361-F5787-E480</b>	<b>S26361-F5787-L480</b>
960GB	M.2 2280	SATA 6Gb/s	1,5	Boot		<b>PYBMF96YN</b>	<b>PY-MF96YN</b>

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

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

max. 2x per Server; in case M.2 drive is installed in connector located on Motherboard (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		<b>PYBBS48PEA</b>	<b>PY-BS48PEA</b>
960GB	M.2 2280	PCIe4.0 x4	0,9	Boot		<b>PYBBS96PEA</b>	<b>PY-BS96PEA</b>

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

max. 2x per Server; connector located on Motherboard (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 drive on Motherboard cannot be mixed

**PDUAL CP100, dual M.2 for booting, non hot-plug**

Capacity	Formfactor	Interface		Category		order code E-part	order code L-part
n/a	AIC	PCIe		Boot	FH	<b>PYBDMCP24</b>	<b>PY-DMCP24</b>
n/a	AIC	PCIe		Boot	LP	<b>PYBDMCP24L</b>	

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	FH	<b>PYBDMCP35</b>	<b>PY-DMCP35</b>
n/a	AIC	PCIe		Boot	LP	<b>PYBDMCP35L</b>	

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
<b>pre-config. RAID1 Array for M.2 in PDUAL</b>			<b>S26361-F5659-E13</b>	-

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.

**2.5" (SFF) PCIe-SSD**hot plug support : **supported with VMD****PCIe-SSD 2.5" P5800X** (SFF) Enterprise with hot plug/hot replace traybased 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		<b>PYBBS40PF</b>	<b>PY-BS40PF</b>
800GB	2.5" (SFF)	PCIe4.0 x4	Write Intensive	100		<b>PYBBS80PF</b>	<b>PY-BS80PF</b>
1.6TB	2.5" (SFF)	PCIe4.0 x4	Write Intensive	100		<b>PYBBS16PF</b>	<b>PY-BS16PF</b>

max. **8x (4x per CPU)** - depending on base unit & configuration**limitation : can not support VROC so far** supported VMD / VROC**PCIe-SSD 2.5" Mixed Use** (SFF) Enterprise with hot plug/hot replace traybased 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		<b>PYBBS16PDB</b>	<b>PY-BS16PDB</b>
3.2TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		<b>PYBBS32PDB</b>	<b>PY-BS32PDB</b>
6.4TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		<b>PYBBS64PDB</b>	<b>PY-BS64PDB</b>
12.8TB	2.5" (SFF)	PCIe5.0 x4	Mixed Use	3		<b>PYBBS12PDB</b>	<b>PY-BS12PDB</b>

max. **8x (4x per CPU)** - depending on base unit & configuration**EOL, as long as stock available****PCIe-SSD 2.5" Mixed Use** (SFF) Enterprise with hot plug/hot replace traybased 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		<b>PYBBS16PD6</b>	<b>PY-BS16PD6</b>
3.2TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		<b>PYBBS32PD6</b>	<b>PY-BS32PD6</b>
6.4TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		<b>PYBBS64PD6</b>	<b>PY-BS64PD6</b>
12.8TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		<b>PYBBS12PD6</b>	<b>PY-BS12PD6</b>

max. **8x (4x per CPU)** - depending on base unit & configuration**limitation : can not support VROC so far** supported VMD / VROC**PCIe-SSD 2.5" Read Intensive** (SFF) Enterprise with hot plug/hot replace traybased 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		<b>PYBBS19PEA</b>	<b>PY-BS19PEA</b>
3.84TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		<b>PYBBS38PEA</b>	<b>PY-BS38PEA</b>
7.68TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		<b>PYBBS76PEA</b>	<b>PY-BS76PEA</b>
15.36TB	2.5" (SFF)	PCIe5.0 x4	Read Intensive	1		<b>PYBBS15PEB</b>	<b>PY-BS15PEB</b>

max. **8x (4x per CPU)** - depending on base unit & configuration**EOL, as long as stock available****PCIe-SSD 2.5" Read Intensive** (SFF) Enterprise with hot plug/hot replace traybased 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		<b>PYBBS96PE6</b>	<b>PY-BS96PE6</b>
1.92TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		<b>PYBBS19PE6</b>	<b>PY-BS19PE6</b>
3.84TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		<b>PYBBS38PE6</b>	<b>PY-BS38PE6</b>
7.68TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		<b>PYBBS76PE6</b>	<b>PY-BS76PE6</b>
15.36TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		<b>PYBBS15PE6</b>	<b>PY-BS15PE6</b>

max. **8x (4x per CPU)** - depending on base unit & configuration**M**

M

## Chapter 11 - LAN Components

FH PCI card requires FH PCI riser. Please refer to "Chapter 14 - PCI Riser".

## Broadcom 1GbE BEASE-T for PCIe

PLAN CP BCM5719-4P 4X 1000BASE-T PCIe LP	6x	Broadcom, 1GTx4port	PYBLA284L	PY-LA284
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe FH	8x		PYBLA284	
max. 10 adapters per system				

## Intel 1GbE BASE-T for PCIe

PLAN CP 2x1Gbit Cu Intel I350-T2 LP *1	6x	Intel, 1GTx2port	S26361-F4610-E202	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	6x	Intel, 1GTx4port	S26361-F4610-E204	S26361-F4610-L504
max. 6 adapters per system				

\*1 Will be available from 2Q, CY2024

## Broadcom 10GbE BEASE-T for PCIe

PLAN EP P210TP 2X 10GBASE-T PCIe LP	4x	Broadcom, 10GTx2port	PYBLA3K2L	PY-LA3K2
PLAN EP P210TP 2X 10GBASE-T PCIe FH	6x		PYBLA3K2	
max. 6x adapters per system (must not exceed this number with P210TP and P210P in total and LP cannot be put on slot#3, slot#10)				

## Intel 10GbE BASE-T for PCIe

PLAN EP X710-T2L 2X 10GBASE-T LP	6x	Intel, 10GTx2port	PYBLA342L	PY-LA342
PLAN EP X710-T2L 2X 10GBASE-T FH	8x		PYBLA342	
PLAN EP X710-T4L 4X 10GBASE-T LP	6x	Intel, 10GTx4port	PYBLA344L	PY-LA344
PLAN EP X710-T4L 4X 10GBASE-T FH	8x		PYBLA344	
max. 10x 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	4x	Broadcom, 10Gx2port	PYBLA3J2L	PY-LA3J2
PLAN EP P210P 2x10Gb SFP PCIe FH	6x		PYBLA3J2	

## 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. 6x adapters per system (must not exceed this number with P210TP and P210P in total and LP cannot be put on slot#3, slot#10)

## 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	6x	Intel, 10Gx2port	S26361-F3640-E202	S26361-F3640-L502
PLAN EP X710-DA2 2x10Gb SFP+ FH	8x		S26361-F3640-E2	
PLAN EP X710-DA4 4x10Gb SFP+ LP	6x	Intel, 10Gx4port	S26361-F3640-E204	S26361-F3640-L504
PLAN EP X710-DA4 4x10Gb SFP+ FH	8x		S26361-F3640-E4	

## 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. 10x 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 *1	6x	Broadcom, 25Gx2port	PYBLA3H2L	PY-LA3H2
PLAN EP P225P 25Gb 2p SFP28 PCIe FH *1	8x		PYBLA3H2	

## Optional, 25Gb SFP28 optical transceiver module, select one per cage

SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFSP56	PY-SFSP56
------------------------------	----	---------------------	-----------	-----------

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. 10x adapters per system

\*1 Will be available from 2H, CY2024

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.				
Ethernet Network Adapters				
PLAN EP MCX6-LX 25Gb 2p SFP28 PCIe LP	6x	NVIDIA, 25Gx2port	PYBLA402L4	PY-LA4024
PLAN EP MCX6-LX 25Gb 2p SFP28 PCIe FH	8x		PYBLA4024	
Optional, 25Gb SFP28 optical transceiver module, select one per cage				
SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	NVIDIA, 25G SR SFP28	S26361-F4054-E701	S26361-F4054-L701
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	2x	Intel, 1G/10G LR SFP+		S26361-F3986-L6
max. 1x per port				
max. 10x adapters per system				

Intel 25GbE for PCIe				
Each cage consumes 1x optical SFP28. <b>All ports on this card can install the same Parts Number of optical module.</b> <b>10G SFP BTO is not available for 25G cards, please select L parts.</b>				
PLAN EP E810-XXVDA2 2X 25G SFP28 LP	6x	Intel, 25Gx2port	PYBLA402L	PY-LA402
PLAN EP E810-XXVDA2 2X 25G SFP28 FH	8x		PYBLA402	
PLAN EP E810-XXVDA4 4X 25G SFP28 LP	6x	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
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. 10x adapters per system(E810-XXVDA2) / max. 6x adapters per system(E810-XXVDA4)				

Broadcom 100GbE for PCIe					
Each cage consumes 1x optical QSFP28					
All ports on this card can install the same Parts Number of optical module.					
PLAN EP P2100G 100Gb 2p QSFP56 PCIe LP *1	6x	Broadcom, 100Gx2port	PYBLA442L	PY-LA442	
PLAN EP P2100G 100Gb 2p QSFP56 PCIe FH *1	4x	Broadcom, 100Gx2port	PYBLA442	PY-LA442	
Optional, 100Gb QSFP28 Optical Transceiver module					
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54	
QSFP28 100G SR4 MPO 850nm 100m	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701	
MMA1B00-C100D					
max. 1x per port					
max. 6x adapters per system					

\*1 Will be available from 2H, CY2024

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. <b>All ports on this card can install the same Parts Number of optical module.</b>				
PLAN EP E810-CQDA2 2X 100G QSFP28 LP	6x	Intel, 100Gx2port	PYBLA432L	PY-LA432
Optional, 100Gb QSFP28 Optical Transceiver module				
QSFP28 100G SR4 E100GQSFP28SRX MPO	2x	Intel, 100G SR4 QSFP28	PYBSFPS54	PY-SFPS54
max. 1x per port				
max. 6x adapters per 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	6x	NVIDIA, 100Gx2port	PYBLA412L	PY-LA412
Optional, 100Gb QSFP28 Optical Transceiver module				
QSFP28 100G SR4 MPO 850nm 100m	2x	NVIDIA, 100G SR4 QSFP28	S26361-F4052-E701	S26361-F4052-L701
MMA1B00-C100D				
max. 1x per port				
max. 6x adapters per system				

N

N

Network cables for later upgrade

O

## Chapter 12 - Fibre Channel Controller

O

FH PCIe card requires FH PCIe riser card. Please refer to "Chapter 14 - PCI riser card".

max number of some controllers can vary with base units with 6x card slots

64G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe36000 1X 32GFC PCIe v4 LP	6x	Broadcom, 64GFCx1port	PYBFC441L	PY-FC441
PFC EP LPe36000 1X 32GFC PCIe FH	8x		PYBFC441	
PFC EP LPe36002 2X 32GFC PCIe v4 LP	6x	Broadcom, 64GFCx2port	PYBFC442L	PY-FC442
PFC EP LPe36002 2X 32GFC PCIe v4 FH	8x		PYBFC442	
PFC EP QLE2870 1X 32GFC PCIe v4 LP	6x	Marvell, 64GFCx1port	PYBFC431L	PY-FC431
PFC EP QLE2870 1X 32GFC PCIe v4 FH	8x		PYBFC431	
PFC EP QLE2872 2X 32GFC PCIe v4 LP	6x	Marvell, 64GFCx2port	PYBFC432L	PY-FC432
PFC EP QLE2872 2X 32GFC PCIe v4 FH	8x		PYBFC432	
32G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe35000 1X 32GFC PCIe v4 LP	6x	Broadcom, 32GFCx1port	PYBFC421L	PY-FC421
PFC EP LPe35000 1X 32GFC PCIe v4 FH	8x		PYBFC421	
PFC EP LPe35002 2X 32GFC PCIe v4 LP	6x	Broadcom, 32GFCx2port	PYBFC422L	PY-FC422
PFC EP LPe35002 2X 32GFC PCIe v4 FH	8x		PYBFC422	
PFC EP QLE2770 1X 32GFC PCIe v4 LP	6x	Marvell, 32GFCx1port	PYBFC411L	PY-FC411
PFC EP QLE2770 1X 32GFC PCIe v4 FH	8x		PYBFC411	
PFC EP QLE2772 2X 32GFC PCIe v4 LP	6x	Marvell, 32GFCx2port	PYBFC412L	PY-FC412
PFC EP QLE2772 2X 32GFC PCIe v4 FH	8x		PYBFC412	
16G Fibre Channel adapters with LC interface for 50µm optical cables (OM4 or OM3)				
PFC EP LPe31000 1x 16Gb LP	6x	Broadcom, 16GFCx1port	S26361-F5596-E201	S26361-F5596-L501
PFC EP LPe31000 1x 16Gb FH	8x		S26361-F5596-E1	
PFC EP LPe31002 2x 16Gb LP	6x	Broadcom, 16GFCx2port	S26361-F5596-E202	S26361-F5596-L502
PFC EP LPe31002 2x 16Gb FH	8x		S26361-F5596-E2	
PFC EP QLE2690 1x 16Gb LP	6x	Marvell, 16GFCx1port	S26361-F5580-E201	S26361-F5580-L501
PFC EP QLE2690 1x 16Gb FH	8x		S26361-F5580-E1	
PFC EP QLE2692 2x 16Gb LP	6x	Marvell, 16GFCx2port	S26361-F5580-E202	S26361-F5580-L502
PFC EP QLE2692 2x 16Gb FH	8x		S26361-F5580-E2	
max. 10 adapters per system				

## Chapter 13 - Infiniband Controllers

Infiniband and Omni path controller will not be released.

P



## Chapter 14 - PCI riser card

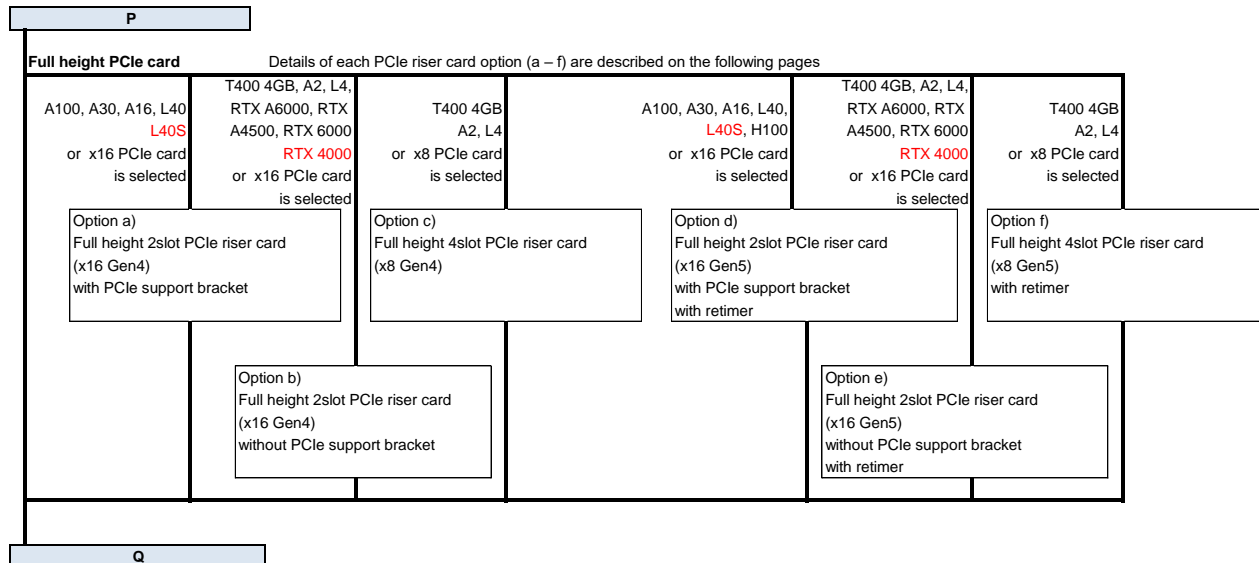
## PCI riser card configuration

Standard Model only(PYT2557TAN/PYT2557TBN/PYT2557TCN  
/PYT2557R3N/PYT2557R2N/PYT2557RAN)

6x PCIe slots are on board, with optional PCIe riser card up to 10x PCIe slots are available.

You can choose between 6 different PCI riser card (Options a – f), depending on the selected PCIe card or GPGPU.  
Please refer to the tables below for more details and for the installation rules.

Required 'Configuration Thermal Design 30°C(CTD30)[PYBETA1]'



## Possible configurations with each PCIe riser card option

Riser card option	No riser card	Option a) or d)	Option b) or e)	Option c) or f)
		Full height 2slot PCIe riser card with PCIe support bracket*	Full height 2slot PCIe riser card without PCIe support bracket*	Full height 4slot PCIe riser card
Available no. of PCIe slots	Up to 6x LP	Up to 2x LP + up to 4x FH	Up to 2x LP + up to 4x FH	Up to 2x LP + up to 8x FH
Available slots	Slots 1, 2, 3, 8, 9, 10	Slots 1, 4, 5, 8, 11, 12	Slots 1, 4, 5, 8, 11, 12	Slots 1, 4, 5, 6, 7, 8, 11, 12, 13, 14
PCIe lanes	x16	x16	x16	x8
Allowed combinations of PCIe cards and GPUs	PCIe cards LP + T400 4GB LP	PCIe cards LP/ FH + double width GPUs FH	PCIe cards LP/ FH + double width GPUs FH / T400 4GB FH / A2 / L4	PCIe cards LP/ FH + T400 4GB FH / A2 / L4

\*Support brackets are required for the cooling of passively cooled FH GPUs.

## Option a) Full height 2slot PCIe riser card (x16 Gen4) with PCIe support bracket

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x16).  
PCIe cards and double width GPGPUs can be supported on 4x PCIe slots (FH/ x16).  
One full height GPGPU can be installed on 1x PCIe slot (FH/ x16).  
Support brackets are required for the cooling of passively cooled FH GPUs."

A100, A30, A16, L40 and / or FH PCIe card is selected

Full height 2slot PCIe riser card right (CPU 1) with PCIe support bracket
PYBPPE638 / PY-PRE638
x16 Gen4 PCIe riser card
Note:
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.
Please refer to chapter 'Thermal' for more details about limitations'.

Full height 2slot PCIe riser card left (CPU 2) with PCIe support bracket
PYBPPE639 / PY-PRE639
x16 Gen4 PCIe riser card
Note:
2nd CPU is needed.
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Option b) Full height 2slot PCIe riser cards (x16 Gen4) without PCIe support bracket

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x16).  
PCIe cards and double width GPGPUs can be supported on 4x PCIe slots (FH/ x16).  
One full height GPGPU can be installed on 1x PCIe slot (FH/ x16).

T400 4GB, A2, L4, RTX A6000, RTX A4500, RTX 6000 and / or FH PCIe card is selected

Full height 2slot PCIe riser card right (CPU 1) without PCIe support bracket
PYBPPE641 / PY-PRE641
x16 Gen4 PCIe riser card
Note:
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.
Please refer to chapter 'Thermal' for more details about limitations'.

Full height 2slot PCIe riser card left (CPU 2) without PCIe support bracket
PYBPPE642 / PY-PRE642
x16 Gen4 PCI Riser
Note:
2nd CPU is needed.
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Option c) Full height 4slot PCIe riser card (x8 Gen4)

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 8x PCIe slots (FH/ x8).  
GPGPU(Double height) cannot be supported.

T400 4GB and / or FH PCIe card is selected

Full height 4slot PCIe riser card right (CPU1)
PYBPPE848 / PY-PRE848
x8 Gen4 PCIe riser card
Note:
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x8).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.
Please refer to chapter 'Thermal' for more details about limitations'.

Full height 4slot PCIe riser card left (CPU2)
PYBPPE849 / PY-PRE849
x8 Gen4 PCI Riser
Note:
2nd CPU is needed
With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x8).
Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Option d) Full height 2slot PCIe riser card (x16 Gen5) with PCIe support bracket with Retimer

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x16).  
PCIe cards and double width GPGPUs can be supported on 4x PCIe slots (FH/ x16).  
One full height GPGPU can be installed on 1x PCIe slot (FH/ x16).  
Support brackets are required for the cooling of passively cooled FH GPUs."

A100, A30, A16, L40, H100 and / or FH PCIe card is selected

## Full height 2slot PCIe riser card right (CPU 1) with PCIe support bracket with Retimer

PYBP643 / PY-PRE643

x16 Gen5 PCI riser card

## Note:

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

Please refer to chapter 'Thermal' for more details about limitations'.

## Full height 2slot PCIe riser card left (CPU 2) with PCIe support bracket with Retimer

PYBP644 / PY-PRE644

x16 Gen5 PCI riser card

## Note:

2nd CPU is needed.

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Option e) Full height 2slot PCIe riser card (x16 Gen5) without PCIe support bracket with Retimer

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x16).  
PCIe cards and double width GPGPUs can be supported on 4x PCIe slots (FH/ x16).  
One full height GPGPU can be installed on 1x PCIe slot (FH/ x16).

T400 4GB, A2, L4, RTX A6000, RTX A4500, RTX 6000 and / or FH PCIe card is selected

## Full height 2slot PCIe riser card right (CPU 1) without PCIe support bracket with Retimer

PYBP645 / PY-PRE645

x16 Gen5 PCI riser card

## Note:

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

Please refer to chapter 'Thermal' for more details about limitations'.

## Full height 2slot PCIe riser card left (CPU 2) without PCIe support bracket with Retimer

PYBP646 / PY-PRE646

x16 Gen5 PCI riser card

## Note:

2nd CPU is needed.

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 2x PCIe slots (FH/ x16).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Option f) Full height 4slot PCIe riser card (x8 Gen5) with Retimer

If the below 2 options are selected, 6x PCIe slots (LP/ x16) change to 2x PCIe slots (LP/ x16) + 8x PCIe slots (FH/ x8).  
GPGPU(Double height) cannot be supported.

T400 4GB and / or FH PCIe card is selected

## Full height 4slot PCIe riser card right (CPU1) with Retimer

PYBP851 / PY-PRE851

x8 Gen5 PCI riser card

## Note:

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x8).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

Please refer to chapter 'Thermal' for more details about limitations'.

## Full height 4slot PCIe riser card left (CPU2) with Retimer

PYBP852 / PY-PRE852

x8 Gen5 PCI riser card

## Note:

2nd CPU is needed

With this card, 3x PCIe slots (LP/ x16) change to 1x PCIe slots (LP/ x16) + 4x PCIe slots (FH/ x8).

Please refer to 'Chapter 5 – Graphics cards' for more details about the supported GPGPUs'.

## Chapter 15 - Power supply unit, power cable, certifications, region kits

R

## Power supply unit

## modular redundant Power Supply

2nd PSU for redundancy basically.

occupies hot plug PSU slot, min. 1 / max. 2x per system. The different PSU mixed configuration does NOT support.

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	PYBPU501	PY-PU501
500W titanium PSU	96% eff.	Connector type: C13, nom. 220-240V, max. 180-264V	PYBPU503	PY-PU503
900W platinum PSU	94% eff.	Connector type: C13, 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.	Connector type: C13, 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 200-240V only, APAC/JAPAN region only	PYBPU221	PY-PU221
2400W Titanium PSU	96% eff.	Connector type: C19, nom. 220-240V, max. 180-264V	PYBPU243	PY-PU243

## Dummy module instead PSU

Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped, max. 1x per system

PYBDMP06

-

If Power consumption error occurs on 2400W PSU, 'No Redundant' can be selected

## PYBVS002

No Power redundant option

Note: 2x 1600W or 2x 2200W or 2x 2400W are mandatory.

If Power budget isn't enough even if 2400W PSU is used, it can be used.

max. 1x per system



If this option is selected, the system may shutdown at the worst case in one PSU failure. Not allow activity exchange for PSU even if two PSU are selected.

## Power cord option for Tower Server, 1x per PSU

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 (D, A, B, F, NL, FIN, N, S, E, P, RUS, TR), 1.8m, grey	T26139-Y1740-E10	T26139-Y1740-L10
Cable powercord (China), 1.8m, grey	T26139-Y1743-E10	-
Cable powercord (China), 1.8m, black	-	T26139-Y1751-L10
Cable powercord (UK, IR), 1.8m, grey	T26139-Y1744-E10	T26139-Y1744-L10
Cable powercord (I), 1.8m, grey	T26139-Y1745-E10	T26139-Y1745-L10
Cable powercord (DK), 1.8m, grey	T26139-Y1746-E10	T26139-Y1746-L10
Cable powercord (ISR), 2.5m, black	T26139-Y1747-E18	T26139-Y1747-L18

## 2200w or more

Power cord 16A IEC320 C19->CEE 7/7, 2.5m for 2200W/2400W PSU		S26361-F3151-L100
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

## common

no power cord	T26139-Y3850-E10	
---------------	------------------	--

## Power cord option for Rack Server, 1x per PSU

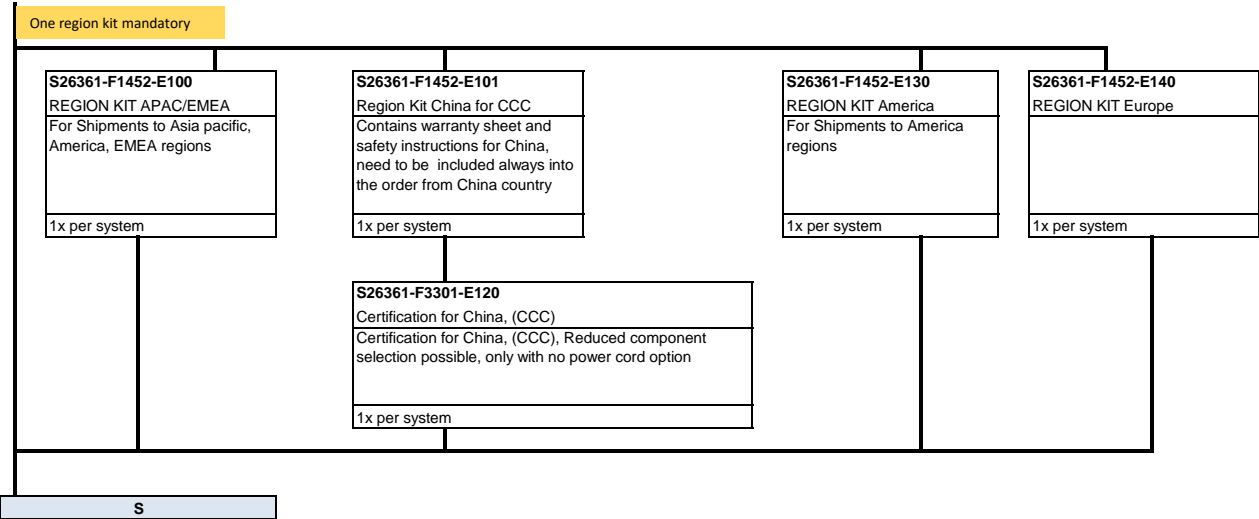
Cable powercord rack, 1.8m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E180	T26139-Y1968-L180
Cable powercord rack, 2.5m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E250	T26139-Y1968-L250
Cable powercord rack, 4m, black, IEC 320 C14 -> C13 (10A plug)	T26139-Y1968-E100	T26139-Y1968-L10
Cable 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 (D, A, B, F, NL, FIN, N, S, E, P, RUS, TR), 1.8m, grey	T26139-Y1740-E10	T26139-Y1740-L10
Cable powercord (China), 1.8m, grey	T26139-Y1743-E10	-
Cable powercord (China), 1.8m, black	-	T26139-Y1751-L10
Cable powercord (UK, IR), 1.8m, grey	T26139-Y1744-E10	T26139-Y1744-L10
Cable powercord (I), 1.8m, grey	T26139-Y1745-E10	T26139-Y1745-L10
Cable powercord (DK), 1.8m, grey	T26139-Y1746-E10	T26139-Y1746-L10
Cable powercord (ISR), 2.5m, black	T26139-Y1747-E18	T26139-Y1747-L18

## 2200w or more

Power cord 16A IEC320 C19->CEE 7/7, 2.5m for 2200W/2400W PSU		S26361-F3151-L100
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

## common

no power cord	T26139-Y3850-E10	
---------------	------------------	--



## Chapter 16 - Accessories

S

**USB Mouse:**

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

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

Country version	FUJITSU Keyboard KB521 USB (grey)
US/ int 105 keys (UK keyboard + US int. Layout)	S26381-K521-L102
Czech/Slovak	S26381-K521-L104
US 104 keys (US keyboard + US layout)	S26381-K521-L110
Germany	S26381-K521-L120
Germany / Int	S26381-K521-L122
France	S26381-K521-L140
Sweden / Finland	S26381-K521-L154
United Kingdom	S26381-K521-L165
Switzerland	S26381-K521-L170
Spain	S26381-K521-L180
Italy	S26381-K521-L185

**USB Optical Disc Drive**

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

T

Chapter 17 - Energy Star

T			
will be expired after 2024-1-11		will be expired after 2024-1-11	
<div>S26361-F3301-E551</div> <div>TX2550 Mx E-Star Fam1</div> <div>Limits configuration in accordance with Energy Star requirements for systems with 1 CPU</div> <div>max. 1x per system</div>		<div>S26361-F3301-E552</div> <div>TX2550 Mx E-Star Fam2</div> <div>Limits configuration in accordance with Energy Star requirements for systems with 2 CPU</div> <div>max. 1x per system</div>	
1 CPU Variant not allowed are:      limitations for E-Star Fam1 certification		2 CPU Variant not allowed are:      limitations for E-Star Fam2 certification	
<div>- 2 CPU configuration</div> <div>- CPU Xeon Bronze 3408U</div>		<div>- 1 CPU configuration</div> <div>- CPU Xeon Bronze 3408U</div>	
will be effective after 2024-1-12		will be effective after 2024-1-12	
<div>PYBES26</div> <div>TX2550 Mx E-Star Fam1</div> <div>Limits configuration in accordance with Energy Star requirements for systems with 1 CPU</div> <div>max. 1x per system</div>		<div>PYBES27</div> <div>TX2550 Mx E-Star Fam2</div> <div>Limits configuration in accordance with Energy Star requirements for systems with 2 CPU</div> <div>max. 1x per system</div>	
1 CPU Variant not allowed are:      limitations for E-Star Fam1 certification		2 CPU Variant not allowed are:      limitations for E-Star Fam2 certification	
<div>- 2 CPU configuration</div> <div>- CPU Xeon Bronze 3408</div> <div>- CPU Xeon Silver 4410Y</div> <div>- CPU Xeon Silver 4416+</div> <div>- CPU Xeon Gold 5415+</div> <div>- CPU Xeon Gold 6426Y</div> <div>- CPU Xeon Gold 6434</div> <div>- CPU Xeon platinum 8444H</div> <div>- CPU Xeon Gold 5416S</div> <div>- CPU Xeon Silver 4410T</div> <div>- 900W platinum PSU</div> <div>- 1600W platinum PSU</div> <div>- 2200W platinum PSU</div>		<div>- 1 CPU configuration</div> <div>- CPU Xeon Silver 4410Y</div> <div>- CPU Xeon Silver 4416+</div> <div>- CPU Xeon Gold 5415+</div> <div>- CPU Xeon Gold 6426Y</div> <div>- CPU Xeon Gold 6434</div> <div>- CPU Xeon platinum 8444H</div> <div>- CPU Xeon Gold 5416S</div> <div>- CPU Xeon Silver 4410T</div> <div>- 900W platinum PSU</div> <div>- 1600W platinum PSU</div> <div>- 2200W platinum PSU</div>	
ENERGY STAR-configurations with one CPU will be labeled: ENERGY STAR-configurations with two CPU will be labeled: non ENERGY STAR-configurations will be labeled:			
PRIMERGY TX2550 M7 E-Star Fam1 PRIMERGY TX2550 M7 E-Star Fam2 PRIMERGY TX2550 M7			
U			

## Chapter 18 - others (ErP Lot 9 restriction)

U

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

## Region Kits, 1x per System

Region Kit APAC/EMEA/India,  
Contains warranty sheet and safety instructions  
for APAC, EMEA and India

S26361-F1452-E100

## Region Kit America,

Contains warranty sheet, registration hints and  
safety instructions for America

S26361-F1452-E130

## Region Kits, 1x per System

## Region Kit Europe\*

Contains warranty sheet and safety instructions  
in German, English, French, Spanish, Italian,  
Polish, Russian and Welsh language

S26361-F1452-E140

## Restriction for ErP Lot 9 directive,

Not allowed: (For all base unit)

- 500W platinum PSU
- 900W platinum PSU
- 1600W platinum PSU
- 2200W platinum PSU

need to select one of PYBETL17 or PYBETL18

## ErP Lot9 Restriction for 16GB DIMM, 1x per System

## For 2.5" base unit only

2.5" base unit: PYT2557T2N, PYT2557TBN, PYT2557TCN, PYT2557R2N,  
PYT2557RAN

ErP Lot9 configuration 1

PYBETL17

## ErP Lot9 Restriction for &gt;=32GB DIMM, 1x per System

## For all 3.5", 2.5" base unit

3.5" base unit: PYT2557T3N, PYT2557TAN, PYT2557R3N  
2.5" base unit: PYT2557T2N, PYT2557TBN, PYT2557TCN, PYT2557R2N,  
PYT2557RAN

ErP Lot 9 configuration 2

PYBETL18

Restriction for ErP Lot 9 directive,  
\* this option is NOT available for 3.5" base unit.

(For PYT2557T2N, PYT2557TBN, PYT2557TCN, PYT2557R2N,  
PYT2557RAN)

Not allowed:

- CPU: Bronze 3408U (PYBCP65XR)
- NVIDIA T400 (PYBVG4T2L)
- NVMe SSD (PYBBA24PJ, PYBBA24PK, PYBCBE024,  
PYBCBE025)

Max qty of 1G LAN card restricted to max. 2

1G LAN: S26361-F4610-E204, PYBLA284L, PYBLA284

Restriction for ErP Lot 9 directive,

(For PYT2557T3N, PYT2557TAN, PYT2557R3N,  
PYT2557T2N, PYT2557TBN, PYT2557TCN, PYT2557R2N,  
PYT2557RAN)

Not allowed:

- CPU: Bronze 3408U (PYBCP65XR)
- DIMM: 16GB DIMM (PYBME16SL)

V



## Chapter 19 - others

V

## 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

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

will be available in CQ4'24

## iRMC MicroSD card option

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

128GB	32GB	7.1TB (external)
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

Loose delivery

eLCM Activation Pack  
(Node Locked License)

**PY-LCM14**

options contains:

- Paper with TAN for Licensekey

Advanced Thermal Design is not available with LTO drives.

PY TX2550 M7 Tower 4x3.5' basic and PY TX2550 M7 Tower 8x2.5' basic do not support ATD options! For the detail, refer to the 'Therma chapter'.

**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 Chapter15-Thermal Rule**

this setting can be activated ex factory only  
max. 1x per system

**PYBCOM08****PY-COM08**

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

**PYBVAP08****PY-VAP08**

Front VGA Option  
VGA Interface  
does NOT occupy PCI slot  
max. 1x per system

**PYBTPM14****PY-TPM14**

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

will be EOL in CQ2'24

**PYBTPM20****PY-TPM20**

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

will be available in CQ1'24

**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 EOL in CQ2'24  
PYBTPM20/PY-TPM20 will be an alternative in CQ1'24  
because new TPM supports mandatory to fit to new Windows requirement  
New TPM are backward compatible with former TPMs.

**PY-FOP17**

4U Rack Front Bezel  
Front Bezel on front Base  
max. 1x per system

Your server is ready

## Chapter 20 - Thermal Rule

**Basic Model(PYT2557T3N / PYT2557T2N) ATD40 and ATD45 can't be supported.**

## Basic model

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	FH PCIe / GPGPU on PCI Riser	
No limitation	No limitation	No limitation			Level1-6 / Nvidia T400	Not support	35C

## Basic model for PCIe Level7

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	FH PCIe / GPGPU on PCI Riser	
CPU A	16GB - 64GB DDR5	on board SATA or RAID controller on slot1.			Level1-7 / Nvidia T400	Not support	30C
CPU B							
CPU C	Not support	Not support					
CPU D							

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

**Standard Model(PYT2557TAN/PYT2557TBN/PYT2557TCN/PYT2557R3N/PYT2557R2N/PYT2557RAN)**

## Standard model for ATD45

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	FH PCIe / GPGPU on PCI Riser	
No limitation	No limitation	No limitation			Level1-4 / Nvidia T400	Not support	45C

\* SSD support only. HDD can't be supported. LTO can't be supported.

## Standard model for ATD40

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	FH PCIe / GPGPU on PCI Riser	
No limitation	No limitation	No limitation			Level1-5 / Nvidia T400	Not support	40C

\* SSD support only. HDD can't be supported. LTO can't be supported.

## Standard model

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	GPGPU on PCI Riser / FH PCIe	
No limitation	No limitation	No limitation			Level1-6 / Nvidia T400	Not support	35C

## Standard model for FH PCIe/GPGPU on PCI Riser

CPU	Memory	Drive bay			Option card		Ambient Temp.
		4x3.5"	8x3.5"	8x2.5"	LP PCIe / Nvidia T400	GPGPU on PCI Riser / FH PCIe	
No limitation	No limitation	No limitation			Level1-6 / Nvidia T400	GPGPU Group A / Level1-6 GPGPU Group B / Level1-6	30C

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

## Standard model for PCIe Level7

CPU	Memory	Drive bay			Option card		Ambient Temp.
		8x3.5"	12x3.5"	8x2.5"	LP PCIe / Nvidia T400	FH PCIe / GPGPU on PCI Riser	
CPU A	16GB - 64GB DDR5	on board SATA or RAID controller on slot1.			Level1-7 / Nvidia T400	Not support	30C
CPU B							
CPU C	Not support	Not support					
CPU D							

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

**Option card: PCIe Level for Thermal condition**

Card		Product Number	LP	PCIe Level
		FH		
RAID/SAS	PDUAL CP100	PYBDMCP24	PYBDMCP24L	Level4
	PDUAL CP300	PYBDMCP35	PYBDMCP35L	Level5
	PSAS CP600e FH / LP	PYBSC4FAE	PYBSC4FAEL	Level3
	PSAS CP600i LP		PYBSC4FAL	Level3
	PSAS CP600i LP for LTO		PYBSC4FA2L	Level3
	PRAID CP600i LP		PYBSR4FAL	Level3
	PRAID EP640i LP		PYBSR4C63L	Level3
	PRAID EP680i LP / NVMe FH / LP	- / PYBSR4C62	PYBSR4C6L / PYBSR4C62L	Level3
	PRAID EP680e RAID Contr. FH/LP	PYBSR4C6E	PYBSR4C6EL	Level3
	PSAS CP2100-8i LP		PYBSC3MA2L	Level3
	PSAS CP2200-16i LP / NVMe FH / LP	- / PYBSC4MA2	PYBSC4MA1L / PYBSC4MA2L	Level4
	PSAS CP 2200-16i LP for LTO		PYBSC4MA3L	Level4
	PRAID EP3252-8i LP		PYBSR4MA1L	Level4
	PRAID EP3254-8i LP		PYBSR4MA2L	Level4
	PRAID EP3258-16i LP / NVMe FH / LP	- / PYBSR4MA4	PYBSR4MA3L / PYBSR4MA4L	Level4
	PRAID EP740i LP / NVMe FH / LP	(TBD)	(TBD)	Level4
FC	PFC EP LPe31000 1x 16Gb FH / LP	S26361-F5596-E1	S26361-F5596-E201	Level3
	PFC EP LPe31002 2x 16Gb FH / LP	S26361-F5596-E2	S26361-F5596-E202	Level3
	PFC EP LPe35000 1X 32GFC PCIe v4 / LP	PYBFC421	PYBFC421L	Level4
	PFC EP LPe35002 2X 32GFC PCIe v4 / LP	PYBFC422	PYBFC422L	Level4
	PFC EP LPe36000 1X 32GFC PCIe v4 / LP	PYBFC441	PYBFC441L	Level4
	PFC EP LPe36002 2X 32GFC PCIe v4 / LP	PYBFC442	PYBFC442L	Level4
	PFC EP QLE2690 1x 16Gb FH / LP	S26361-F5580-E1	S26361-F5580-E201	Level3
	PFC EP QLE2692 2x 16Gb FH / LP	S26361-F5580-E2	S26361-F5580-E202	Level3
	PFC EP QLE2770 1X 32GFC PCIe v4 / LP	PYBFC411	PYBFC411L	Level4
	PFC EP QLE2772 2X 32GFC PCIe v4 / LP	PYBFC412	PYBFC412L	Level4
	PFC EP QLE2870 1X 32GFC PCIe v4 / LP	PYBFC431	PYBFC431L	Level4
	PFC EP QLE2872 2X 32GFC PCIe v4 / LP	PYBFC432	PYBFC432L	Level4
LAN	PLAN CP 4x1Gbit Cu Intel I350-T4 LP	-	S26361-F4610-E204	Level1
	PLAN EP E810-CQDA2 2X 100G QSFP28 LP	PYBLA432	PYBLA432L	Level7
	PLAN EP E810-XXVDA2 2X 25G SFP28 FH / LP	PYBLA402	PYBLA402L	Level5
	PLAN EP E810-XXVDA4 4X 25G SFP28 LP	PYBLA404	PYBLA404L	Level7
	PLAN EP MCX6-DX 100Gb 2p QSFP28 LP	PYBLA412	PYBLA412L	Level7
	PLAN EP X710-DA2 2x10Gb SFP+ FH / LP	S26361-F3640-E2	S26361-F3640-E202	Level1
	PLAN EP X710-DA4 4x10Gb SFP+ FH / LP	S26361-F3640-E4	S26361-F3640-E204	Level3
	PLAN EP X710-T2L 2X 10GBASE-T FH / LP	PYBLA342	PYBLA342L	Level2
	PLAN EP X710-T4L 4X 10GBASE-T FH / LP	PYBLA344	PYBLA344L	Level3
	PLAN CP BCM5719-4P 4X 1000BASE-T PCIe FH / LP	PYBLA284	PYBLA284L	Level1
	PLAN EP P210P 2x10Gb SFP FH / LP	PYBLA3J2	PYBLA3J2L	Level3
	PLAN EP P210TP 2X 10GBASE-T PCIe FH / LP	PYBLA3K2	PYBLA3K2L	Level5
	PLAN EP MCX6-LX 25Gb 2p SFP28 PCIe FH / LP	PYBLA4024	PYBLA402L4	Level5
	PLAN EP P225P 25Gb 2p SFP28 PCIe FH / LP	PYBLA3H2	PYBLA3H2L	Level3
	PLAN EP P2100G 100Gb 2p QSFP56 PCIe LP	PYBLA442	PYBLA442L	Level5

**Option card: GPGPU Group**

Group	Card	Product Number
Group A	NVIDIA A2	PYBVG4A8
	NVIDIA L4	PYBVG4L1
	NVIDIA A16	PYBVG4A4
	NVIDIA A30	PYBVG4A5
	NVIDIA A40	PYBVG4A1
	NVIDIA L40	PYBVG4L2
	NVIDIA A100 80GB	PYBGP4A10
	NVIDIA RTX A4500	PYBVG4A7
	NVIDIA RTX 4000	PYBVG4L4
Group B	NVIDIA H100	PYBGP4H11
	NVIDIA RTX A6000	PYBVG4A2
	NVIDIA RTX 6000	PYBVG4L3
	NVIDIA L40S	PYBGP4L1

S

Date of change	Configurator revision	Folder / order code / description	What has been changed / comment	Name
22.02.2024	1.68	ODD	remove available date for DV122 and DR122	KonnoH
21.02.2024	1.67	HDD_SSD	removed the limitation about VMD/VROC for Kioxia CM7 updated availability schedule	Y. Sugiyama
16.02.2024	1.66	others	added the iRMC MicroSD card option for eLCM	Y. Sugiyama
14.02.2024	1.65	ODD	add the restriction of ODD	KonnoH
08.02.2024	1.64	RAID, backup, HDD_SSD	released PSAS CP 2200-16i (NVMe/LTO), PRAID EP 3258-16i NVMe, PDUAL CP300 and S26361-F5659-E13	T. Sudou
05.02.2024	1.63	LAN	MCX6-LX 25G OCPv3/PCIe released. Delete FH of E810-CQDA2, E810-XXVDA4, and MCX6-DX because thermal level 7 (or more) is not allowed to be used in FH slots.	F. Kanega
25.01.2024	1.62	RAM	Remove 96GB memory for EMR	H. Konno
23.01.2024	1.61	LAN	Add FH part numbers for x16 lane cards, E810-CQDA2, E810-XXVDA4 and MCX6-DX, they can be used with riser cards of x16 lane type and QPL tested them.	F. Kanega
16.01.2024	1.60	HDD_SSD	updated availability schedules removed BC-SAS 20TB SED due to cancellation	Y. Sugiyama
20.12.2023	1.59	GFX_FPGA	Update RTX6000 release	M.Takaoka
22.12.2023	1.58	HDD_SSD	added RAID PRESET option S26361-F5659-E13	T. Sudou
21.12.2023	1.57	LAN	Changing available date of Broadcom P225 and P2100G from CY2024 1Q to CY2024 2H because EMR test for initial release drops these two cards. These two requires test by system side and schedule is later than EMR initial release.	F. Kanega
20.12.2023	1.56	GFX_FPGA	Update RTX6000 shedule(Feb/2024)	M. Murayama
15.12.2023	1.55	GFX_FPGA	Add NVIDIA AI Enterprise Subscription License and Support	M. Murayama
11.12.2023	1.54	RAID, HDD_SSD	updated availability schedule	T. Sudou
01.12.2023	1.53	Description	Add embedded Lifecycle Management (eLCM) to recommended components	H.Okabe
29.11.2023	1.52	GFX_FPGA, PCI_riser_card, Thermal	Add information of L40S/RTX 4000	H.Okabe
17.11.2023	1.51	LAN, FC_IB	QLE287x released. Change schedule info of MCX6-LX and Broadcom 25/100G cards	F. Kanega
13.11.2023	1.50	Other (iRMC)	Add "iRMC standard/legacy Option" PYBSSS3 in others sheet.	H. Ogino
26.10.2023	1.49	RAM	Rmored DDR5 5600 memory	H. Konno
25.10.2023	1.48	HDD_SSD	updated the description about max qty for M.2 SATA/PCIe drives.	Y. Sugiyama
24.10.2023	1.47	RAM	Added DDR5 Registered DIMM 5600MHz	H.Konno
19.10.2023	1.46	HDD_SSD	released SED HDD/SSD	H.Okabe
18.10.2023	1.45	RAID	updated Note for Intel VROC (SATA RAID)	T. Sudou
16.10.2023	1.44	GFX_FPGA	Add L40S/RTX 4000	M.Takaoka
13.10.2023	1.43	HDD_SSD	updated availability schedule	T. Sudou
13.10.2023	1.43	RAID	released Intel VROC (VMD NVMe RAID)	T. Sudou
13.10.2023	1.42	HDD_SSD	updated the EOL informaiton for PCIe-SSD	Y. Sugiyama
04.10.2023	1.41	LAN	Add I350-T2 PCIe	F. Kanega
03.10.2023	1.40	ODD, others	Add new order code for half height ODDs, and current order code will be EOL Add new TPM	H. Konno
03.10.2023	1.39	RAID	released Intel VROC (SATA RAID)	T. Sudou
22.09.2023	1.38	HDD_SSD	added the limitation about VROC for PCIe-SSD	Y. Sugiyama
20.09.2023	1.37	HDD_SSD, HDD_SSD (short depth)	updated availability schedule added the following drives as new products -Samsung PM1653 as SSD SAS 2.5" -Samsung PM897a/PM893a as SSD SATA 2.5"/3.5"	Y. Sugiyama
19.09.2023	1.36	Energy Star	added E-Star Fam1/Fam2 Certification for ENERGY STAR V4.0	H.Okabe
14.09.2023	1.35	RAID, backup	updated availability schedule	T. Sudou
12.09.2023	1.34	Thermal	Modified thermal rule for FH PCIe/GPGPU on PCI Riser for clear information	H.Okabe
08.09.2023	1.33	HDD_SSD	added the EOL status for HDD SAS 15K and HDD 2.5" BC-SATA/SAS	Y. Sugiyama
04.09.2023	1.32	HDD_SSD	updated availability schedules for SSD SAS "PM7"	Y. Sugiyama
30.08.2023	1.31	HD_SSD, Thermal	added PDUAL CP300 PYBDMCP35, PYBDMCP35L, PY-DMCP35	T. Sudou
28.08.2023	1.30	PCI_riser_card	changed chapter name to 'PCI_riser_card' and updated description	H.Okabe
28.08.2023	1.29	Thermal	Adding MCX6-LX 25G and P(N)225P, P(N)2100G info to Thermal sheet	F. Kanega
31.07.2023	1.28	HD_SSD	revised the order codes for Kioxia CM7 15.36TB	Y. Sugiyama
31.07.2023	1.27	HD_SSD	added the PCIe-SSD "kioxia CM7 series"	Y. Sugiyama
28.07.2023	1.26	base, PCI_Riser	Separating PCI_Riser section to Chapter 14 from Chapter 1 - base unit	H.Okabe
20.07.2023	1.25	LAN	Adding Broadcom 25G/100G cards. Adding NVIDIA 25G cards. Deleting E810-CQDA2 and MCX6-DX 100G FH cards because thermal level is 7 and cannot be used it as FH.	F.Kanega
19.07.2023	1.24	GFX_FPGA	Delete A30X/A100X.	
14.07.2023	1.23	FC_IB	Delete the restriction of QLE277x because System T50 includes these cards and no issues.	F. Kanega
12.07.2023	1.22	Thermal	Revice the limitation for RTX A6000	S. Fujita
11.07.2023	1.21	RAID	updated availability schedule	T. Sudou
04.07.2023	1.20	GFX_FPGA	Added the RTX 6000	M.Takaoka
04.07.2023	1.19	Thermal	Added the limitation for RTX A6000	S. Fujita
30.06.2023	1.18	others	No TPM for WINSVR added	K. Nishihara
29.06.2023	1.17	Thermal	Modified for clear information	S. Fujita
22.06.2023	1.16	Base	Removed '1x USB 3.1 Gen1 (type A)' from Interfaces internal	S. Fujita
15.06.2023	1.15	HD_cage	Removed availability schedule for PYBBA28ST	T. Sudou
13.06.2023	1.14	GFX_FPGA	L4/L40 updated availability schedule	M.Takaoka
07.06.2023	1.13	RAID	added Intel VROC (SATA RAID) added Intel VROC Upgrade Key PYBRLVR02, PY-RLVR02 updated availability schedule	T. Sudou
06.06.2023	1.12	GFX_FPGA	Updated NVLink and L4 and L40, H100.	M. Takaoka/T. Sasaki
05.06.2023	1.11	HD_cage	Removed 'except for PCIeSSDs'	S. Fujita

02.06.2023	1.10	HD_SSD	updated availability schedule	T. Sudou
02.06.2023	1.09	Thermal	Added H100 limitation.	S. Fujita
02.06.2023	1.08	LAN	Change max number of Broadcom 10G LAN P210P, P210TP LP cards from 6 to 4. This is due to SA:233766419. Slot#3 and slot#10 cannot be used.	F. Kanega
02.06.2023	1.07	HD_cage	Remove the limitation for the number of disks from PYBBA24PJ/PYBBA24PK/PYBCBE024/PYBCBE025	S. Fujita
31.05.2023	1.06	HD_cage	Added PY-BA34SA/PY-BA34SB/PY-BA28SQ/PY-BA28SR/PY-BA28SS/PY-BA28ST/PY-BA24PJ/PY-BA24PK/PY-CBE024/PY-CBE025	S. Fujita
30.05.2023	1.05	HD_cage	Remove the limitation for the number of disks from PYBBA28SS updated availability schedule for PYBBA28ST	S. Fujita
23.05.2023	1.04	Thermal	Revice the detail	S. Fujita
22.05.2023	1.03	HD_SSD	removed the BC-SATA 20TB due to release cancel	Y. Sugiyama
16.05.2023	1.02	HD_SSD	changed the max qty from "2" to "1" for M.2 SSD due to not support of VROC	Y. Sugiyama
15.05.2023	1.01	RAID, backup	updated availability schedule	T. Sudou
26.04.2023	1.0		1st release	S. Fujita