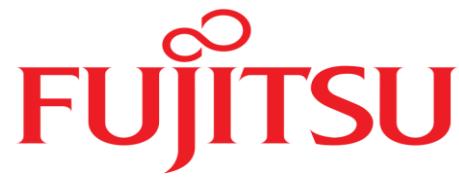


PRIMERGY TX1330 M5
Tower or 4U Rack server



Chapter	Folder	Content
	Cover	List of content, Instructions for usage of this configurator, abbreviations
	Description	System Description for easier understanding
1		describes base unit of TX1330 M5
2	Base	describes rack mount kits and services
3	CPU	Order code and Infos of processors
4	RAM	DDR4 System memory (RAM)
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 Components
12	LAN_FC_IB	Fibre Channel Controller
13		Infiniband Controller (n.a. for TX1330 M5)
14	PSU	Power supply units, power cables, country specific opt.
15	USB_devices	Keyboards, Mice, USB devices
16	others	System Management, ATD, RS232 port, TPM module

Instructions

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

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

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

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

Chapter xx - description of chapter

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

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

<-- order code E-part (bold) --
<-- order code L-part (bold)
<-- "name" of this part

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

<--requires a free PCIe slot --> means total amount of PCIe slots reduced
<--indicates how often this part can be configured in the related Server

For further information see:

Link to datasheet:

<https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-py-tx1330-m5.pdf>

[\(internet\)](https://www.fujitsu.com/fts/products/computing/servers/primergy/index.html)

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

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

Abbreviations

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

PRIMERGY TX1330 M5 Server offers 2 types base units with 3 drive mounting areas:

choose base unit

- Tower
- Rack

accessible drive area (purple color code) optional with

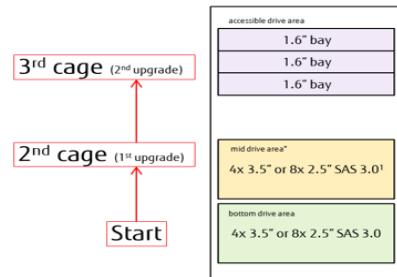
- for up to 3x 1.6" bay for optical drives or back up drives (standard)
- or optional 3rd cage for up to 4x 3.5" SAS/SATA 3.0 LFF HDD
(then only a 9.5mm ODD can be configured)
- or optional 3rd cage for up to 8x 2.5" SAS/SATA 3.0 SFF HDD or SSD
(then 1x 1.6" ODD/backup drive combination can be configured)
- or optional 3rd cage for up to 4x 2.5" NVMe SSD
(then 1x 1.6" ODD/backup drive combination can be configured)

mid drive area (yellow color code) - optional with

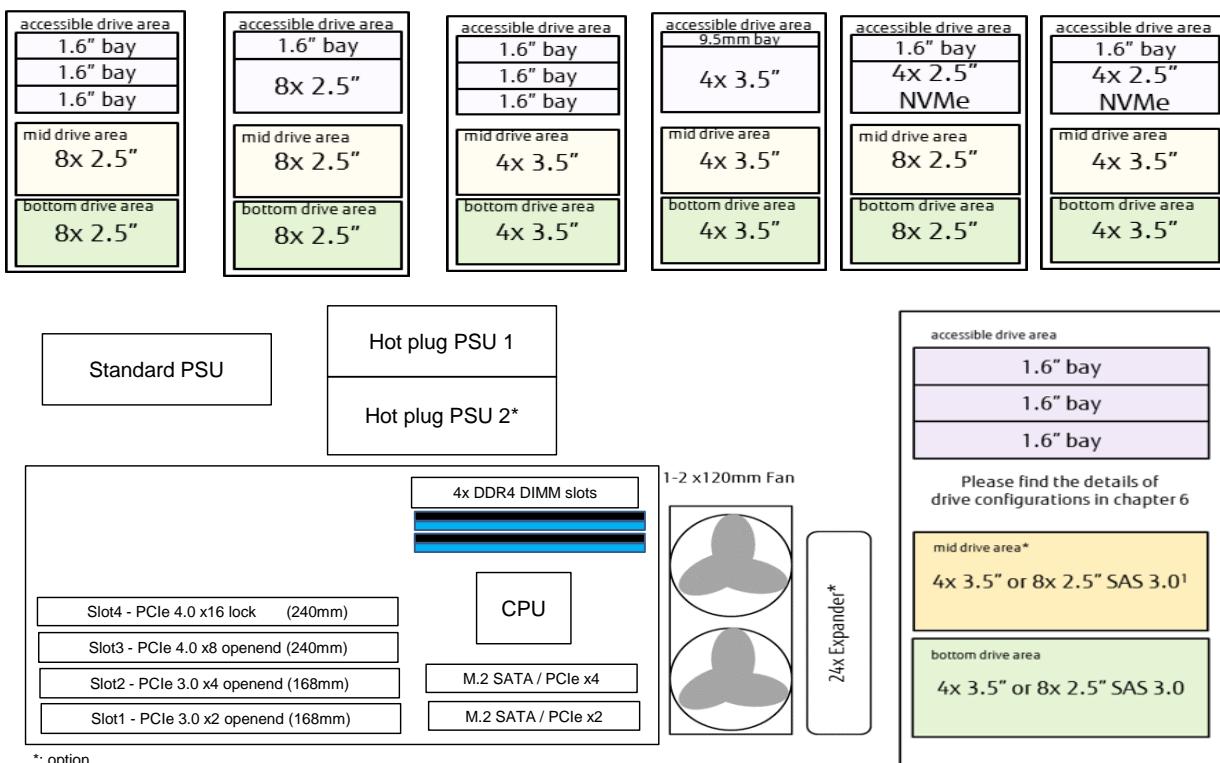
- space for 2nd cage with up to 4x 3.5" SAS/SATA 3.0 LFF HDD
- or space for 2nd cage for up to 2.5" SAS/SATA 3.0 SFF HDD or SSD

bottom drive area (green color code) - mandatory with

- space for up to 4x 3.5" SAS/SATA 3.0 LFF HDD
- or space for up to 8x 2.5" SAS/SATA 3.0 SFF HDD or SSD



Please find all details, possible and released configurations in the chapter 6 - "HD_cage"



Chapter 1 - base unit**Start****Power supply units & cooling**

For the PRIMERGY TX1330 M5 you can choose between a standard power supply unit (PSU) with 300W / 450W or an hot plug PSU with 500W / 900W (opt. redundant). In case you choose the hot plug PSU you will get redundant Fans as well.

Server Management

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

Platform

Fujitsu Systemboard D3931 based on Chipset Intel® C256

> cables for connection to the modular or onboard controllers included

> Xeon E2300 series CPUs or Pentium CPU

Slots:

Slot 4 PCIe 4.0 x8 or x16 (with lock) - supports GPGPU/GPU or RAID card option

Slot 3 PCIe 4.0 x8 or x0 (open end) - supports RAID card option

Slot 2 PCIe 3.0 x4 (open end)

Slot 1 PCIe 3.0 x4 (open end)

*Slot 4 and Slot 3 can be switched 2x PCIe 4.0 x8 or 1x PCIe 4.0 x16

System RAM

Up to DDR4-3200 MHz

4 memory slots for max. 128GB DDR4 RAM.

LAN

2x Intel i210 Gigabit Ethernet

Software

ServerView Suite Software incl. ServerView Installation Manager, Management Software and Updates is optional available

Connectivity**Interfaces at rear side**

2x LAN RJ45 (1 Gbit)

1x service LAN RJ45 (1 Gbit)

1x Display port

1x VGA (15 pins)

2x USB 3.2 Gen2x1 Type A

4x USB 2.0 Type A

1x RS-232-C (serial, 9 pin) - optional

Interfaces at front

1x USB 3.2 Gen2x2 Type C

1x USB 3.2 Gen1x1 Type A

Interfaces internal

2x internal USB 3.2 Gen1x1 connectors for backup devices

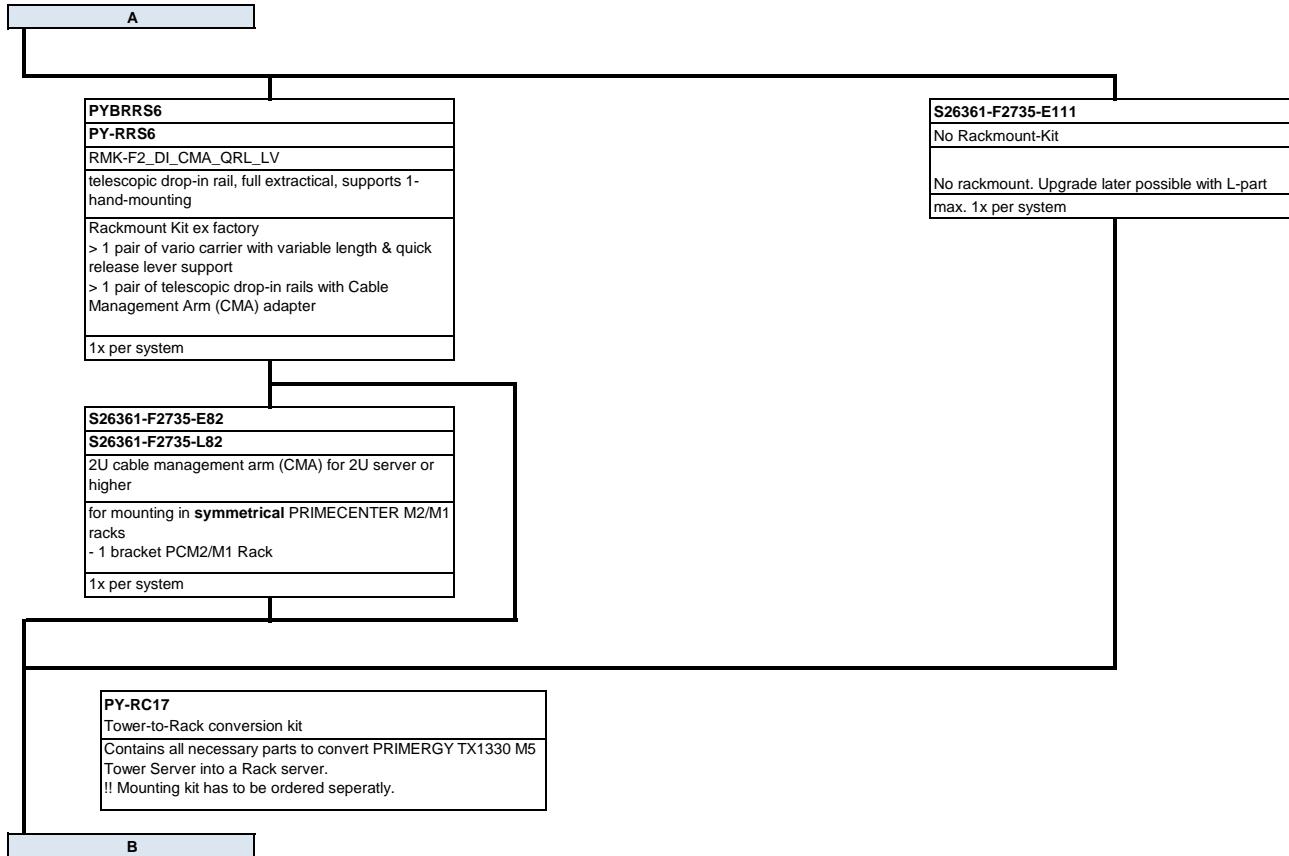
2x M.2 (80mm and 110mm)modules: 1x SATA/NVMe(PCIe x4) and 1x SATA/NVMe(PCIe x2)

1x Mini SATA (4x SATA 6G)

Tower
PYT1335TNS
TX1330 M5 Base Unit standard 300W Gold PSU
PYT1335TNM
TX1330 M5 Base Unit redundant Fan and hot plug PSU
PYT1335TPS *For Lot9 regulation: will be available in Nov. 2022.
TX1330 M5 Base Unit standard 450W Platinum PSU

Rack
to create an Rack Base Unit w/ standard PSU you can use the Tower-to-Rack conversion kit (PY-RC17)
PYT1335RNM
TX1330 M5 Base Unit redundant Fan and hot plug PSU

B**A**

Chapter 2 - Rack architecture

Chapter 2' - Options for Base Unit**B**

For later upgrade to redundancy the following PSU-kits are available:

Std to Redundant Fan/PSU Upgrade Kit consisting of a redundant Fans w/ Airduct, PSU cage and backplane Does not contain any PSU module	PY-TKPC01
--	-----------

C

Chapter 3 - CPU**B**

One of following CPU's has to be selected for an orderable basic unit

Pentium (Rocket Lake)		order code (BTO)	order code (Loose delivery)
64-bit Intel Pentium processor supporting DDR4 @ 2666MHz			
Pentium Gold G6405 2C/4T 4.1GHz 4MB 2666MHz 58W		PYBCP63C1	-
Xeon E-23xx (Rocket Lake-E)		order code (BTO)	order code (Loose delivery)
64-bit Intel Xeon processor supporting DDR4 @ 3200MHz			
Xeon E-2314	4C/4T 2.8GHz 8MB 3200MHz Turbo 65W	PYBCP63E1	-
Xeon E-2324G	4C/4T 3.1GHz 8MB 3200MHz Turbo 65W	PYBCP63E5	-
Xeon E-2334	4C/8T 3.4GHz 8MB 3200MHz Turbo 65W	PYBCP63E2	-
Xeon E-2374G	4C/8T 3.7GHz 8MB 3200MHz Turbo 80W	PYBCP63E7	-
Xeon E-2336	6C/12T 2.9GHz 12MB 3200MHz Turbo 65W	PYBCP63E3	-
Xeon E-2356G	6C/12T 3.2GHz 12MB 3200MHz Turbo 80W	PYBCP63E6	-
Xeon E-2386G	6C/12T 3.5GHz 12MB 3200MHz Turbo 95W	PYBCP63E9	-
Xeon E-2378	8C/16T 2.6GHz 16MB 3200MHz Turbo 65W	PYBCP63E4	-
Xeon E-2378G	8C/16T 2.8GHz 16MB 3200MHz Turbo 80W	PYBCP63E8	-
Xeon E-2388G	8C/16T 3.2GHz 16MB 3200MHz Turbo 95W	PYBCP63EA	-

C

Chapter 4 - DDR4 System memory

B

There are 2 memory banks with 2 DIMM slots each.

Single channel memory configuration allow maximum flexibility:

Additional memory can be configured as single memory modules.

Dual channel memory configurations for maximum performance:

For optimum performance memory has to be configured in pairs of memory modules with identical size.

Max. 128GB unbuffered DDR4 RAM for UDIMMs with 32GB moduls

Note:** Memory is not included in the base unit and has to be configured separately, min 1x.

Memory module is not included in the base unit and has to be configured min 1x memory modules.

All memory module installing in one system must be identical. Any mix of different memory modules with different order code is not supported.

8GB DDR4 Unbuffered DIMM 3200MHz 1R x8		order code (BTO)	order code (loose delivery)
8GB (1x8GB) 1Rx8 DDR4-3200 U ECC	single rank	PYBME08UG2	PY-ME08UG2
16GB DDR4 Unbuffered DIMM 3200MHz 1R x8		order code (BTO)	order code (loose delivery)
16GB (1x16GB) 1Rx8 DDR4-3200 U ECC	single rank	PYBME16UG3	PY-ME16UG3
32GB DDR4 Unbuffered DIMM 3200MHz 2R x8		order code (BTO)	order code (loose delivery)
32GB (1x32GB) 2Rx8 DDR4-3200 U ECC	dual rank	PYBME32UG2	PY-ME32UG2
min 1x / max 4x for System			

C

Chapter 5 - Graphics cards

E

PYBVG4T1 (available in June, 2022)	PYBVG4T2 (available in August, 2022)
PY-VG4T1 (available in June, 2022)	PY-VG4T2 (available in August, 2022)
NVIDIA T400	NVIDIA T400
NVIDIA T400 2GB GDDR6	NVIDIA T400 4GB GDDR6
PCIe 3.0 x16	PCIe 3.0 x16
Connectors: 3x Mini-DP	Connectors: 3x Mini-DP
Adapter need to be ordered separately.	Adapter need to be ordered separately.
full height bracket	full height bracket
max. 1x per system	max. 1x per system

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

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

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

The high end optional NVIDIA Quadro graphic card offers triple head operation and fully 3D video support.
Remote Video direction via iRMC must be disabled.
 Only one card per server is allowed.

PYBVG4A8 (available in August, 2022)
PY-VG4A8 (available in August, 2022)
NVIDIA A2
NVIDIA A2 Card with 16GB GDDR6 RAM, PCIe Gen4 x8, Full-Height, 60W
PCIe x8 (Gen4) - single width, Full-Height bracket, no external power cable, 60W
Limitation: TBD
max. 1x per system

F

Chapter 6 - HD drive cage

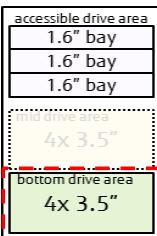
**G** Definition:

HD drive cage = metal box providing 4 bays for 3.5" HDD or 8 bays for 2.5" HDD/SSD (see sample pictures left). Please choose one of the drive cage kits of the following pages. Each kit contains all relevant parts (metal cage, SAS 3.0 backplanes, SAS 3.0 cables and mounting materials). Kits for more than 8x SAS 3.0 HDD contain a 24x SAS 3.0 Expander.

The red dotted line highlights the content of each drive cage kit.

- 1) indicates the order code of the complete kit, explanation & describes the content
- 2) lists the recommended or possible RAID controllers with the related order code
- 3) describes how many drive bays for ODD / backup drives are available
- 4) lists the available upgrade kit options after purchase.
- 5) Remark

! for upgrades in the accessible drive area the mid drive area must be completed first!

**1) PYBBA34S8**

Basic 3.5" kit for 4x SAS 3.0 HDD mounted in the bottom drive area

1x 3.5" kit for up to 4x 3.5" HDD incl. SAS 3.0 Backplane & SAS 3.0 cable mounted in bottom drive area

2a) recommended RAID configuration

1x PYBSR3FB	PRAID CP500i RAID Contr.	S26361-F4042-E2	PRAID EP520i - 2GB Cache
1x PYBSR4FA	PRAID CP600i FH	S26361-F4042-E4	PRAID EP540i - 4GB Cache
1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E8	PRAID EP580i - 8GB Cache
		PYBSR4C63	PRAID EP640i FH - 4GB Cache
		PYBSR4C6	PRAID EP680i FH - 8GB Cache

3) accessible drive area

3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available

3) PYBBA24PH

4x 2.5" NVMe kit incl. BPL & cables for accessible drive area** (occupied 2x1.6" bays)

4) PY-BA34S8

4x 3.5" HDD kit for mid drive area

4) PY-BA34S9

4x 3.5" HDD kit incl. Expander, SAS 3.0 BPL & cables for accessible drive area*

4) PY-BA24PH

4x 2.5" NVMe kit incl. BPL & cables for accessible drive area**

4) Restriction

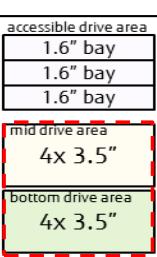
upgrade of mid drive area and 4x 2.5" NVMe kit in accessible drive area requires hot plug PSU Base Unit

5) Remark

up to 4x SATA HDD can be operated using the onboard RAID Controller

*) PY-BA34S8 is mandatory

**) PRAID EP540i NVMe FH/S26361-F4042-E24, PRAID EP580i NVMe FH/S26361-F4042-E28 or PRAID EP680i NVMe FH/PYBSR4C62 RAID controller required

**1) PYBBA38S4**

Medium 3.5" kit for 8x SAS 3.0 HDD mounted in the bottom and mid drive area

2x 3.5" HDD cages for up to 8x 3.5" HDD incl. SAS 3.0 Backplanes & SAS 3.0 cables mounted in the bottom and mid drive area

1) Restriction

redundant Base Unit (PYT1335TNM, PYT1335RNM) required

2a) recommended RAID configuration

1x PYBSR3FB	PRAID CP500i RAID Contr.	S26361-F4042-E2	PRAID EP520i - 2GB Cache
1x PYBSR4FA	PRAID CP600i FH	S26361-F4042-E4	PRAID EP540i - 4GB Cache
1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E8	PRAID EP580i - 8GB Cache
		PYBSR4C63	PRAID EP640i FH - 4GB Cache
		PYBSR4C6	PRAID EP680i FH - 8GB Cache

3) accessible drive area

3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available

3) PYBBA24PH

4x 2.5" NVMe kit incl. BPL & cables for accessible drive area** (occupied 2x1.6" bays)

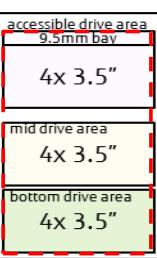
4) PY-BA34S8

4x 3.5" HDD kit incl. Expander, SAS 3.0 BPL & cables for accessible drive area

4) PY-BA24PH

4x 2.5" NVMe kit incl. BPL & cables for accessible drive area**

**) PRAID EP540i NVMe FH/S26361-F4042-E24, PRAID EP580i NVMe FH/S26361-F4042-E28 or PRAID EP680i NVMe FH/PYBSR4C62 RAID controller required

**1) PYBBA3TS2**

Maximum 3.5" kit for 12x HDD mounted in the bottom, mid & accessible drive area

3x 3.5" HDD cages for bottom, mid and accessible drive area for up to 12x 3.5" HDD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cables. HDD cage (acc. Area) are mounted directly to the housing - higher noise levels may occur

1) Restriction

redundant Base Unit (PYT1335TNM, PYT1335RNM) required

2a) recommended RAID configuration

1x PYBSC3FB	PSAS CP503i HBA SAS Contr.	S26361-F4042-E2	PRAID EP520i - 2GB Cache
1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E4	PRAID EP540i - 4GB Cache
1x PYBSC4FA	PSAS CP600i FH	S26361-F4042-E8	PRAID EP580i - 8GB Cache
1x PYBSR4FA	PRAID CP600i FH	PYBSR4C63	PRAID EP640i FH - 4GB Cache
		PYBSR4C6	PRAID EP680i FH - 8GB Cache

3) accessible drive area

!! 1x 9.5mm bay for ultra slim DVD or Blu Ray available

accessible drive area	1) PYBBA28SP Basic 2.5" kit for 8x SAS 3.0 HDD or SSD mounted in the bottom drive area basic 2.5" HDD kit for up to 8x 2.5" SAS 3.0 HDD or SSD incl. SAS 3.0 Backplane & SAS 3.0 cable		
mid drive area	2a) recommended RAID configuration		
1.6" bay	1x PYBSR3FB	PRAID CP500i RAID Contr.	S26361-F4042-E2
1.6" bay	1x PYBSR4FA	PRAID CP600i FH	S26361-F4042-E4
1.6" bay	1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E8
bottom drive area			PYBSR4C63
8x 2.5"			PYBSR4C6
3) accessible drive area	3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives		
3) PYBBA24PH	4x 2.5" NVMe kit incl. BPL & cables for accessible drive area** (occupied 2x1.6" bays)		
4) PY-BA28SM	8x 2.5" HDD kit for mid drive area incl. Expander, SAS 3.0 BPL & cables		
4) PY-BA28SN	8x 2.5" HDD kit SAS 3.0 BPL & cables for accessible drive area*		
4) PY-BA24PH	4x 2.5" NVMe kit incl. BPL & cables for accessible drive area**		
4) Restriction	upgrade of mid drive area and 4x 2.5" NVMe kit in accessible drive area requires hot plug PSU Base Unit		
5) Remark	up to 4x SATA HDD can be operated using the onboard RAID Controller		

*) PY-BA28SM is mandatory

**) PRAID EP540i NVMe FH/S26361-F4042-E24, PRAID EP580i NVMe FH/S26361-F4042-E28 or PRAID EP680i NVMe FH/PYBSR4C62 RAID controller required

accessible drive area	1) PYBBA2SS8 mid 2.5" kit for 16x SAS 3.0 HDD or SSD mounted in the bottom & mid drive area mid 2.5" HDD kit for up to 16x 2.5" SAS 3.0 HDD or SSD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable		
mid drive area	1) Restriction redundant Base Unit (PYT1335TNM, PYT1335RNM) required		
1.6" bay	1x PYBSC3FB	PSAS CP503i HBA SAS Contr.	S26361-F4042-E2
1.6" bay	1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E4
1.6" bay	1x PYBSC4FA	PSAS CP600i FH	S26361-F4042-E8
bottom drive area	1x PYBSR4FA	PRAID CP600i FH	PYBSR4C63
8x 2.5"			PYBSR4C6
3) accessible drive area	3x 1.6" bays for DVD, Blu Ray, LTO or RDX drives or additional HDD cages available		
3) PYBBA24PH	4x 2.5" NVMe kit incl. BPL & cables for accessible drive area** (occupied 2x1.6" bays)		
4) PY-BA28SN	8x 2.5" HDD kit SAS 3.0 BPL & cables for accessible drive area		
4) PY-BA24PH	4x 2.5" NVMe kit incl. BPL & cables for accessible drive area**		

**) PRAID EP540i NVMe FH/S26361-F4042-E24, PRAID EP580i NVMe FH/S26361-F4042-E28 or PRAID EP680i NVMe FH/PYBSR4C62 RAID controller required

accessible drive area	1) PYBBA2LS5 Supreme 2.5" kit for 24x SAS 3.0 HDD or SSD mounted in the bottom, mid and accessible drive area Supreme 2.5" HDD kit for up to 24x 2.5" SAS 3.0 HDD or SSD incl. 24x SAS 3.0 Expander, SAS 3.0 Backplanes & SAS 3.0 cable. ! HDD cages are mounted directly to the housing - higher noise levels may occur		
mid drive area	1) Restriction redundant Base Unit (PYT1335TNM, PYT1335RNM) required		
1.6" bay	1x PYBSC3FB	PSAS CP503i HBA SAS Contr.	S26361-F4042-E2
1.6" bay	1x PYBSC3MA2	PSAS CP 2100-8i FH	S26361-F4042-E4
1.6" bay	1x PYBSC4FA	PSAS CP600i FH	S26361-F4042-E8
bottom drive area	1x PYBSR4FA	PRAID CP600i FH	PYBSR4C63
8x 2.5"			PYBSR4C6
3) accessible drive area	1x 1.6" bays for DVD, Blu Ray, LTO or RDX drives available		
no upgrades possible			

H

Chapter 7 - SAS / RAID Controller

H

See pictures in folder Base / HD_cage for details of combinations

onboard SATA controller with SW-RAID

max number of drives depends on base units

onboard controller for SATA HDD or SSD drives

6 ports 3, 6Gb/s SATA HDD/SSD	based on Intel chipset	No Cache	SW-RAID 0, 1, 10	1x	onboard, included
-------------------------------	------------------------	----------	------------------	----	-------------------

OS support matrix:

Windows Server 2022	Supported
Windows Server 2019	Supported
Red Hat Enterprise Linux 8.4, 8.5, 8.6	Supported
SUSE Linux Enterprise Server 15 SP3, SP4	Supported
VMware ESXi	Not supported

Support OS may vary by system.

internal HBA and RAID controller, no 2nd Level cache

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

PRAID CP600i FH available from 2023/05	No Cache	RAID 0, 1, 10	1x	PYBSR4FA	PY-SR4FA
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x FH PCIe 4.0 x8 (int.) slot, based on LSI SAS3808					
PSAS CP600i FH available from 2023/05	No Cache	HBA, no RAID	1x	PYBSC4FA	PY-SC4FA
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 drives without expander requires 1x FH PCIe 4.0 x8 (int.) slot, based on LSI SAS3816; IT FW stack without RAID functionality					
Internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP500i RAID Contr.	No Cache	RAID 0, 1, 10, 5, 50	1x	PYBSR3FB	PY-SR3FB
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					
PSAS CP503i HBA SAS Contr.	No Cache	HBA, no RAID	1x	PYBSC3FB	PY-SC3FB
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality					

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

PSAS CP 2100-8i FH	No Cache	HBA + RAID 0, 1, 10, 5	1x	PYBSC3MA2	PY-SC3MA2
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x FH PCIe 3.0 x8 (int.) slot					

internal RAID controller with 2nd Level cache

internal RAID controllers for SAS, SATA HDD or SSD drives

PRAID EP640i FH available from 2023/02	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	PYBSR4C63	PY-SR4C63
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander includes FastPath and SafeStore Advanced SW-Licence, CacheCode is no longer supported requires 1x FH PCIe 4.0 x8 (int.) slot, based on LSI SAS3908					
PRAID EP680i FH available from 2022/11	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	PYBSR4C6	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) includes FastPath and SafeStore Advanced SW-Licence, CacheCode is no longer supported requires 1x FH PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6 and PYBSR4C62 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 EP520i RAID Contr. FH	2GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E2	S26361-F4042-L502
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 devices without expander Includes Fastpath and SafeStore Advanced SW-Licence requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP540i RAID Contr. FH	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E4	S26361-F4042-L514
PRAID EP580i RAID Contr. FH	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E8	S26361-F4042-L508
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, based on LSI SAS3516, without expander, up to 16 SAS/SATA devices are supported. (the configuration for 4 x4 NVMe drives require a different order number, please see below) includes FastPath and SafeStore Advanced SW-Licence, CacheCode is no longer supported requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 (FYI: S26361-F4042-E4 and E24, S26361-F4042-E8 and E28 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)					

optional Flash Backup Unit (FBU), Transportable Flash module (TFM) is already included

FBU Option for PRAID EP5xx / EP6xx: Supercap securing the power supply of the RAID controller in case of power failure including cable with 55cm length

Internal RAID controllers for PCIe SSD drives

PRAID EP680i NVMe FH available from 202	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	PYBSR4C62	PY-SR4C6
up to 4 x4 NVMe drives are supported. (the configuration for SAS/SATA only requires a different order number, please see above) includes FastPath and SafeStore Advanced SW-Licence, CacheCode is no longer supported requires 1x FH PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6 and PYBSR4C62 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)					

internal RAID controllers for PCIe SSD drives

PRAID EP540i RAID NVMe FH	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E24	S26361-F4042-L514
PRAID EP580i RAID NVMe FH	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	S26361-F4042-E28	S26361-F4042-L508

16 ports for NVMe PCIe SSD, based on LSI SAS3516

up to 4 x4 NVMe devices are supported. (the configuration for SAS/SATA only require a different order number, please see above)

includes FastPath and SafeStore Advanced SW-Licence, CacheCode is no longer supported

requires 1x FH PCIe 3.0 x8 (int.) slot, based on LSI SAS3516

(FYI: S26361-F4042-E4 and E24, S26361-F4042-E8 and E28 are identical products. The 2nd Order number was only introduced for explicit ordering and cabling)

PSAS CP 2100-8i and PSAS CP503i for LTO / CP600i for LTO / PRAID EP540i NVMe / EP580i NVMe / EP680i NVMe cannot be mixed**PSAS CP 2100-8i for LTO and PSAS CP503i / CP600i cannot be mixed**

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

standard config: max. 1

for NVMe support only: max. 2x controllers: one PRAID EP540i / EP580i / EP680i NVMe for 4x NVMe; onboard or second RAID, HBA controller for SAS/SATA

up to **2x FBU** can be integrated per System

for PRAID EP540i / EP580i / EP680i NVMe, no FBU is allowed (performance)

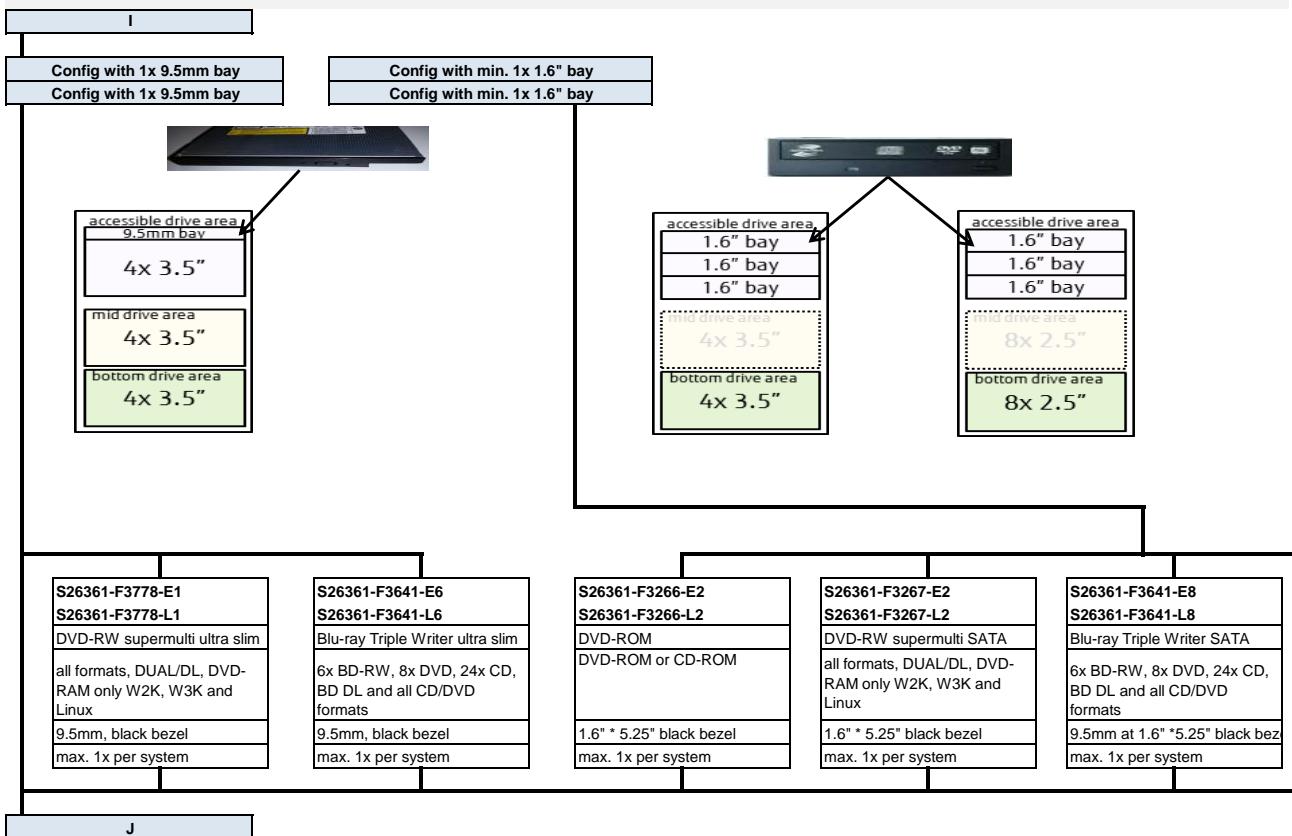
Expander configurations: Use PRAID EPxxx for optimal performance**Cable kit for upgrade cards: For upgrade L-parts RAID/HBA controller card(EP6xxi/CP6xxi), L-parts Cable kit is required.**

Cable Kit for EP6xxi/CP6xxi : PY-CBS097

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Chapter 8 - ODD optical disk drives

With most configurations the TX1330 M5 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 (see chapter 6). All bundles with limitations are highlighted with 2 exclamation marks in the front (e.g. "!! 1x 9.5mm ...")



Chapter 9 - backup drives

With most configurations the TX1330 M5 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				
8 ports 3, 6 & 12Gb/s SAS HBA Controller				
PSAS CP503i HBA SAS Contr.	requires 1x FH PCIe 3.0 x8, based on LSI SAS3408 / for LTO drives.	1x	PYBSC3FB1	PY-SC3FB
PSAS CP600i FH for LTO	requires 1x FH PCIe 4.0 x8 / for LTO drives available from 2023/05	1x	PYBSC4FA2	PY-SC4FA
PSAS CP 2100-8i FH for LTO	requires 1x FH PCIe 3.0 x8 / for LTO drives available from 2023/01	1x	PYBSC3MA4	PY-SC3MA2
LTO drives (Need to select one of following 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

K

SAS drives and SATA drives can be mixed, but cannot be used in one logical RAID volume.
 SAS drives require a dedicated SAS / RAID Controller
 Hard Disk Sector Format Information:
 512n HDD: 512 byte sectors on the drive media.
 512e (e-emulation) HDD: 4K physical sectors on the drive media with 512 byte logical configuration.
 512e HDD Disk Drives: VMware 6.0 or earlier is not supported.

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

DWPD: Drive Writes Per Day over 5 years.
 SED (=Self Encrypting Drives) require either a RAID controller with *SafeStore (SED) support or an HBA and in addition a software instance, supporting SED Key Management.
 It is strongly recommended to order SafeStore (SED) RAID controller with SED HDD or SSD devices for SafeStore (SED) functionality.

HDD Classes:

Economic (ECO) SATA: Entry Class Drives.
 Business-Critical (BC) -SATA=Nearline SATA Enterprise Drives / 7.2Krpm, SATA 6G.
 Business-Critical (BC) -SAS=Nearline SAS Enterprise Drives / 7.2Krpm, SAS 12G .
 Mission-Critical (MC)=SAS 10K and SAS 15K Enterprise Drives with max. performance and reliability.

Warranty:

SSD and SATA DOM have a built-in Wear-Out indicator. In this case the warranty for such a component, as an exception to the system warranty, is restricted to the time period until the indicator reaches the exhaust level.

2.5" (SFF) SATA SSD**SSD SAS 2.5" Write Intensive (SFF) Enterprise with hot plug/hot replace tray**

based on Seagate Nytro3732 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS40NGA	PY-SS40NGA
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS80NGA	PY-SS80NGA
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10		PYBSS16NGA	PY-SS16NGA
400GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS40NGW	PY-SS40NGW
800GB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS80NGW	PY-SS80NGW
1.6TB	2.5" (SFF)	SAS 12Gb/s	Write Intensive	10	SED	PYBSS16NGW	PY-SS16NGW

max. 24x - depending on base unit & configuration

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

based on Seagate Nytro3532 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
800GB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS80NPF	PY-SS80NPF
1.6TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS16NPF	PY-SS16NPF
3.2TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS32NPF	PY-SS32NPF
6.4TB	2.5" (SFF)	SAS 12Gb/s	Mixed Use	3		PYBSS64NPF	PY-SS64NPF

max. 24x - depending on base unit & configuration

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

based on Seagate Nytro3332 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
960GB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS96NNJ	PY-SS96NNJ
1.92TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS19NNH	PY-SS19NNH
3.84TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS38NNH	PY-SS38NNH
7.68TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS76NNH	PY-SS76NNH
15.36TB	2.5" (SFF)	SAS 12Gb/s	Read Intensive	1		PYBSS15NNG	PY-SS15NNG

max. 24x - 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. 24x - depending on base unit & configuration

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

max. 24x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Samsung PM893 drives							
<i>Capacity</i>	<i>Formfactor</i>	<i>Interface</i>	<i>Endurance</i>	<i>DWPD</i>		<i>order code E-part</i>	<i>order code L-part</i>
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. 24x - depending on base unit & configuration

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on Micron 5300 PRO drives							
<i>Capacity</i>	<i>Formfactor</i>	<i>Interface</i>	<i>Endurance</i>	<i>DWPD</i>		<i>order code E-part</i>	<i>order code L-part</i>
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. 24x - depending on base unit & configuration

2.5" (SFF) Hard drives

HDD SAS 2.5" 15K (SFF) Enterprise Mission Critical with hot plug/hot replace tray							
<i>Capacity</i>	<i>RPM</i>	<i>Interface</i>	<i>Sector</i>			<i>order code E-part</i>	<i>order code L-part</i>
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. 24x - depending on base unit & configuration

HDD SAS 2.5" 10K 512n (SFF) Enterprise Mission Critical with hot plug/hot replace tray							
<i>Capacity</i>	<i>RPM</i>	<i>Interface</i>	<i>Sector</i>			<i>order code E-part</i>	<i>order code L-part</i>
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. 24x - depending on base unit & configuration

HDD SAS 2.5" 10K 512e (SFF) Enterprise Mission Critical with hot plug/hot replace tray					
<i>Capacity</i>	<i>RPM</i>	<i>Interface</i>	<i>Sector</i>	<i>order code E-part</i>	<i>order code L-part</i>
600GB	10 000	SAS 12Gb/s	512e	S26361-F5730-E160	S26361-F5730-L160
1.2TB	10 000	SAS 12Gb/s	512e	S26361-F5730-E112	S26361-F5730-L112
1.8TB	10 000	SAS 12Gb/s	512e	S26361-F5730-E118	S26361-F5730-L118
2.4TB	10 000	SAS 12Gb/s	512e	S26361-F5543-E124	S26361-F5543-L124
1.8TB	10 000	SAS 12Gb/s	512e	PYBSH181DU	PY-SH181DU
2.4TB	10 000	SAS 12Gb/s	512e	S26361-F5582-E124	S26361-F5582-L124

max. 24x - depending on base unit & configuration

HDD SATA 2.5" 7.2K 512n (SFF) Enterprise Business Critical with hot plug/hot replace tray					
<i>Capacity</i>	<i>RPM</i>	<i>Interface</i>	<i>Sector</i>	<i>order code E-part</i>	<i>order code L-part</i>
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. 24x - depending on base unit & configuration

The HDDs not released with PRAID EP5x0i ([S26361-F4042-E2/E4/E8](#))

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

max. 24x - depending on base unit & configuration

L1

L1

3.5" (LFF) SATA SSD

SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray
based on Samsung PM897 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
480GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS48NK8	PY-TS48NK8
960GB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS96NK8	PY-TS96NK8
1.92TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS19NK8	PY-TS19NK8
3.84TB	3.5" (LFF)	SATA 6Gb/s	Mixed Use	3		PYBTS38NK8	PY-TS38NK8

max. 12x - depending on base unit & configuration

SSD SATA 3.5" Mixed Use (LFF) 2.5" SSD Enterprise with 3.5" hot plug/hot replace tray
based on Micron 5300 MAX drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E240	S26361-F5775-L240
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E480	S26361-F5775-L480
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E960	S26361-F5775-L960
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		S26361-F5775-E192	S26361-F5775-L192
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,5		S26361-F5775-E384	S26361-F5775-L384

max. 12x - depending on base unit & configuration

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

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

max. 12x - depending on base unit & configuration

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

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

max. 12x - depending on base unit & configuration

3.5" (LFF) Hard drives

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

max. 12x - depending on base unit & configuration

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

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

max. 12x - depending on base unit & configuration

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

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
6TB	7 200	SAS 12Gb/s	512e		PYBCH6T7B9	PY-CH6T7B9
8TB	7 200	SAS 12Gb/s	512e		S26361-F5635-E800	S26361-F5635-L800
12TB	7 200	SAS 12Gb/s	512e		PYBCHCT7B7	PY-CHCT7B7
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	will be available in CQ3'23	PYBCHLT7B	PY-CHLT7B
6TB	7 200	SAS 12Gb/s	512e	SED	PYBCH6T7BU	PY-CH6T7BU
8TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5584-E800	S26361-F5584-L800
12TB	7 200	SAS 12Gb/s	512e	SED	PYBCHCT7BW	PY-CHCT7BW
14TB	7 200	SAS 12Gb/s	512e	SED	PYBCHET7BV	PY-CHET7BV
16TB	7 200	SAS 12Gb/s	512e	SED	S26361-F5624-E160	S26361-F5624-L160
18TB	7 200	SAS 12Gb/s	512e	SED	PYBCHJT7BT	PY-CHJT7BT
20TB	7 200	SAS 12Gb/s	512e	FIPS will be available in CQ3'23	PYBCHLT7BS	PY-CHLT7BS

max. 12x - depending on base unit & configuration

L2

L2

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

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512n		PYBBH1T7B9	PY-BH1T7B9
2TB	7 200	SATA 6Gb/s	512n		PYBBH2T7B9	PY-BH2T7B9
4TB	7 200	SATA 6Gb/s	512n		PYBBH4T7B9	PY-BH4T7B9

max. 12x - depending on base unit & configuration

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

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
6TB	7 200	SATA 6Gb/s	512e		PYBBH6T7E9	PY-BH6T7E9
8TB	7 200	SATA 6Gb/s	512e		S26361-F5638-E800	S26361-F5638-L800
12TB	7 200	SATA 6Gb/s	512e		PYBBHCT7E4	PY-BHCT7E4
14TB	7 200	SATA 6Gb/s	512e		PYBBHET7E4	PY-BHET7E4
16TB	7 200	SAS 12Gb/s	512e		S26361-F3904-E160	S26361-F3904-L160
18TB	7 200	SAS 12Gb/s	512e		PYBBHJT7E2	PY-BHJT7E2
20TB	7 200	SATA 6Gb/s	512e	will be available in CQ3'23	PYBBHLT7E	PY-BHLT7E

max. 12x - depending on base unit & configuration

ECO-SATA drive cannot be mixed with SAS HDD drives in same RAID Controller

HDD SATA 3.5" 7.2K (LFF) ECO with hot plug/hot replace tray

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	7 200	SATA 6Gb/s	512e		S26361-F3951-E100	S26361-F3951-L100

max. 12x - depending on base unit & configuration

will be available in CQ1'23

HDD SATA 3.5" 5.4K (LFF) ECO with hot plug/hot replace tray

Capacity	RPM	Interface	Sector		order code E-part	order code L-part
1TB	5 400	SATA 6Gb/s	512e		PYBPH1TFE	PY-PH1TFE
2TB	5 400	SATA 6Gb/s	512e		PYBPH2TFE	PY-PH2TFE

max. 12x - depending on base unit & configuration

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

Capacity	Formfactor	Interface		Category		order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s		Boot		S26361-F5816-E240	S26361-F5816-L240

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

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

max. 1x per Server; 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.

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

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

Capacity	Formfactor	Interface	DWPD	Category		order code E-part	order code L-part
240GB	M.2	SATA 6Gb/s	1,5	Boot		S26361-F5787-E240	S26361-F5787-L240
480GB	M.2	SATA 6Gb/s	1,5	Boot		S26361-F5787-E480	S26361-F5787-L480
960GB	M.2 2280	SATA 6Gb/s	1,5	Boot	will be available in CQ1'23	PYBMF96YN	PY-MF96YN

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

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

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

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

Dual M.2

PDUAL CP100 and M.2 drive cannot be mixed

PDUAL CP100, dual M.2 for booting, non hot-plug available from 2023/01							
Capacity	Formfactor	Interface		Category		order code E-part	order code L-part
n/a	AIC	PCIe		Boot	FH	PYBDMCP24	PY-DMCP24
PDUAL CP100 is a carrier 2x M.2 SATA modules and offers RAID1 with 2x M.2 modules.							
PDUAL CP100 is designed for use as a Hardware-mirrored (RAID1) boot device for Hypervisor, which cannot be supported by M.2 via the onboard chipset Software RAID.							
Supported RAID level : RAID1 only, 2x M.2 modules need to be ordered separately.							
Supported M.2 Modules : SSD SATA M.2 240GB/480GB, and 240GB for VMware ESXi. (S26361-F5787-E240/L240/E480/L480 or S26361-F5816-E240/L240)							
Windows 2022 support: For PY-DMCP24, Firmware Package 2.3.21.2009 or later is required. PYBDMCP24 is shipped with the required Firmware Package							
To manage the CP100, iRMC 1.13S or later is required							
max. 1x per Server, requires 2x SSD SATA M.2 drives.							

2.5" (SFF) PCIe-SSD

2.5" PCIe-SSDs require a RAID Controller
RAID Controller : PRAID EP540i/580i

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

based on Kioxia CM6-V drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS16PD6	PY-BS16PD6
3.2TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS32PD6	PY-BS32PD6
6.4TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS64PD6	PY-BS64PD6
12.8TB	2.5" (SFF)	PCIe4.0 x4	Mixed Use	3		PYBBS12PD6	PY-BS12PD6

max. 4x - depending on base unit & configuration

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

based on Intel DC P4610 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	4;1		S26361-F5737-E160	S26361-F5737-L160
3.2TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3,7		S26361-F5737-E320	S26361-F5737-L320
6.4TB	2.5" (SFF)	PCIe3.0 x4	Mixed Use	3,1		S26361-F5737-E640	S26361-F5737-L640

max. 4x - depending on base unit & configuration

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

based on Kioxia CM6-R drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
960GB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS96PE6	PY-BS96PE6
1.92TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS19PE6	PY-BS19PE6
3.84TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS38PE6	PY-BS38PE6
7.68TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS76PE6	PY-BS76PE6
15.36TB	2.5" (SFF)	PCIe4.0 x4	Read Intensive	1		PYBBS15PE6	PY-BS15PE6

max. 4x - depending on base unit & configuration

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

based on Intel DC P4510 drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	1,0		S26361-F5738-E100	S26361-F5738-L100
2TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,7		S26361-F5738-E200	S26361-F5738-L200
4TB	2.5" (SFF)	PCIe3.0 x4	Read Intensive	0,8		S26361-F5738-E400	S26361-F5738-L400

max. 4x - depending on base unit & configuration

M

Chapter 11 - Communication / Ethernet Network Components

M

PRIMERGY TX1330 M5 provides default Intel LAN on Motherboard:

- 2x Controller Intel I210 1000BASE-T, provides
- 2x RJ45 ports, 10M/100M/1G autonegotiate for 10M/100M/1G capable Ethernet network infrastructure
- Wake-On LAN supported on both ports
- PXE and iSCSI boot support
- Maximum one port can be configured as a shared Management LAN port

Ethernet Network PCIe Adapters

Intel 1GbE BEASE-T for PCIe

PLAN CP 2x1Gbit Cu Intel I350-T2	2x	Intel, 1GTx2port	S26361-F4610-E2	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4	2x	Intel, 1GTx4port	S26361-F4610-E4	S26361-F4610-L504

max. 2 adapters per system

Broadcom 1GbE BEASE-T for PCIe

PLAN CP BCM5719-4P 4X 1000BASE-T	2x	Broadcom, 1GTx4port	PYBLA284 <small>available from 2023/1</small>	PY-LA284 <small>available from 2023/1</small>
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max. 2 adapters per system

Intel 10GbE BEASE-T for PCIe

PLAN EP X710-T2L 2X 10GBASE-T	2x	Intel, 10GTx2port	PYBLA342	PY-LA342
PLAN EP X710-T4L 4X 10GBASE-T	2x	Intel, 10GTx4port	PYBLA344	PY-LA344

max. 2 adapters per system

Broadcom 10GbE BEASE-T for PCIe

PLAN EP P210TP 2X 10GBASE-T	2x	Broadcom, 10GTx2port	PYBLA3K2 <small>available from 2023/1</small>	PY-LA3K2 <small>available from 2023/1</small>
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max. 2 adapters per system

Intel 10GbE for PCIe

Each cage consumes 1x optical SFP+ transceiver per port.
Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.

All ports on this card need to install the same Parts Number of optical module.

PLAN EP X710-DA2 2x10Gb SFP+	2x	Intel, 10Gx2port	S26361-F3640-E2	S26361-F3640-L502
PLAN EP X710-DA4 4x10Gb SFP+	2x	Intel, 10Gx4port	S26361-F3640-E4	S26361-F3640-L504

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

SFP+ Optical Transceiver 10G Single Rate SR	4x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	4x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate	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. 4 adapters per server system

Broadcom 10GbE for PCIe

Each cage consumes 1x optical SFP+ transceiver per port.
Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.

All ports on this card need to install the same Parts Number of optical module.

PLAN EP P210P 2x10Gb SFP+	2x	Broadcom, 10Gx2port	PYBLA3J2 <small>available from 2023/1</small>	PY-LA3J2 <small>available from 2023/1</small>
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Optional, 10Gb SFP+ optical transceiver module, select one per cage

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

max. 1x per port

max. 2x adapters per system

Intel 25GbE for PCIe

Each cage consumes 1x optical SFP28 or SFP+ transceiver per port.

Intel adapters support 1Gbps line rate per-port in addition, with the Intel-branded 10G/1G Dual Rate SFP+ Optical Transceiver Modules.

All ports on this card need to install the same Parts Number of optical module.

10G SFP BTO is not available for 25G cards, please select L parts.

PLAN EP E810-XXVDA2 2X 25G SFP28	2x	Intel, 25Gx2port	PYBLA402	PY-LA402
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Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.

SFP28 25G SR E25GSFP28SRX LC	2x	Intel, 25G SR SFP28	PYBSFPS56	PY-SFPS56
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max. 1x per port

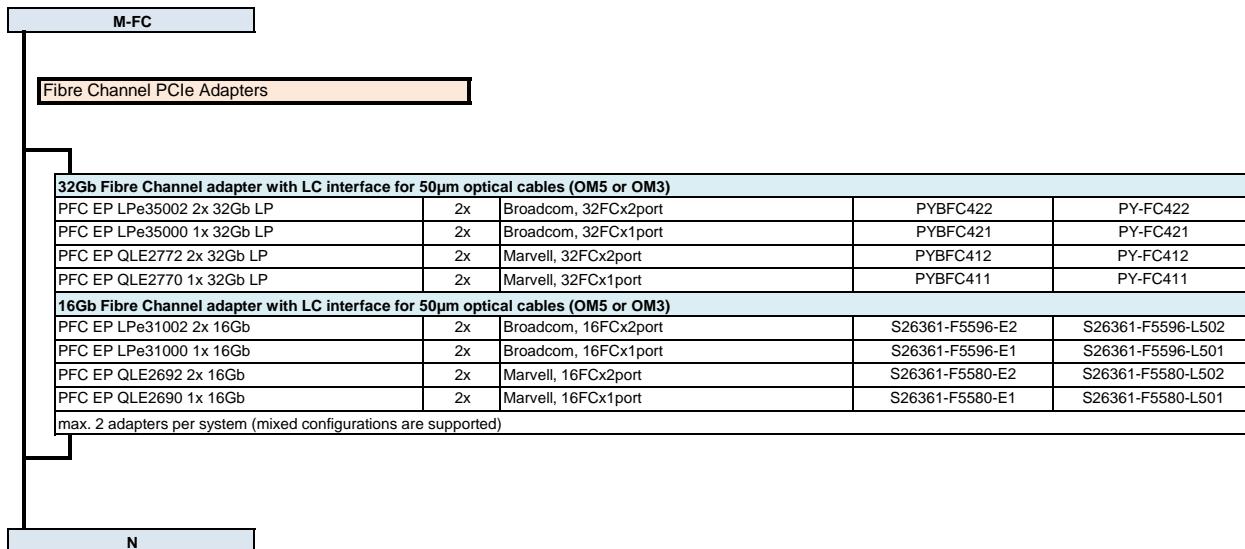
Optional, 10Gb SFP+ optical transceiver module, select one per cage

SFP+ Optical Transceiver 10G Single Rate SR	2x	Intel, 1G/10G SR SFP+	S26361-F3986-L5
SFP+ Optical Transceiver 10G Single Rate LR	2x	Intel, 1G/10G LR SFP+	S26361-F3986-L6

max. 1x per port

max. 4x adapters per system

Mellanox 25GbE for PCIe				
Each cage consumes 1x optical SFP28 or SFP+ transceiver per port.				
All ports on this card need to install the same Parts Number of optical module.				
10G SFP BTO is not available for 25G cards, please select L parts.				
PLAN EP MCX4-LX 25Gb 2p SFP28	2x	Mellanox, 25Gx2port	S26361-F4054-E2	S26361-F4054-L502
Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.				
SFP28 Optical Transceiver 25G SR MMWavelength	2x	Mellanox, 25G SR SFP28	S26361-F4054-E701	S26361-F4054-L701
ASLC <i>max. 1x per port</i>				
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	2x	Finisar, 10G SR SFP+	S26361-F3986-L3	
SFP+ Optical Transceiver 10G Single Rate LR	2x	Finisar, 10G LR SFP+	S26361-F3986-L4	
SFP+ Optical Transceiver 10G/10G Dual Rate	2x	Intel, 1G/10G SR SFP+	S26361-F3986-L5	
SFP+ Optical Transceiver 10G/10G Dual Rate	2x	Intel, 1G/10G LR SFP+	S26361-F3986-L6	
<i>max. 1x per port</i>				
max. 4x adapters per system				
M - FC				

Chapter 12 - Communication / Fibre Channel Components

Chapter 14 - Power supply unit, power cable, country specific options

N	Red. Base Unit (No redundant PSU is included)			No PSU is included in base unit. Need to be chosen 1x PSU at least. You have a choice 500W or 900W. A second redundant power supply shall be used same as first one in a redundant base unit and requires an additional country specific power cord. Dummy module is required if 1st PSU only.
Std. Base Unit				*available from 2022, Dec. *available from 2022, Dec.
PYBPU501 PY-PU501 500W platinum power supply unit 500W PSU module platinum 1st or 2nd PSU for redundancy, 94% efficiency 100-240V, 50-60Hz occupies hot plug PSU slot max. 2x per system	PYBPU902 PY-PU902 900W platinum power supply unit 900W PSU module platinum 1st or 2nd PSU for redundancy, 94% efficiency 100-240V, 50-60Hz occupies hot plug PSU slot max. 2x per system	PYBPU503 PY-PU503 500W titanium power supply unit 500W PSU module platinum 1st or 2nd PSU for redundancy, 96% efficiency 220-240V, 50-60Hz occupies hot plug PSU slot max. 2x per system	PYBPU901 PY-PU901 900W titanium power supply unit 900W PSU module platinum 1st or 2nd PSU for redundancy, 96% efficiency 220-240V, 50-60Hz occupies hot plug PSU slot max. 2x per system	
			S26113-F574-E99 Dummy module instead PSU Dummy module for closing the 2nd PSU hole, in case only 1 PSU is equipped closes hot plug PSU slot max. 1x per system	
Power cord option for Tower Server, 1x per PSU				
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		
Cable powercord (Thailand), 1.8m, rack or wall	T26139-Y1753-E10	T26139-Y1753-L10		
Cable powercord (Taiwan), 1.8m, rack or wall	T26139-Y1757-E10	T26139-Y1757-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		
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 (Thailand), 1.8m, rack or wall	T26139-Y1753-E10	T26139-Y1753-L10		
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-L10		
Cable powercord (UK, IR), 1.8m, grey	-	T26139-Y1744-L10		
Cable powercord (I), 1.8m, grey	-	T26139-Y1745-L10		
Cable powercord (DK), 1.8m, grey	-	T26139-Y1746-L10		
Cable powercord (ISR), 2.5m, black	-	T26139-Y1747-L18		
no power cord	T26139-Y3850-E10	-		
Region Kits, required to order one of them, 1x per System				
Region Kit APAC/EMEA, Contains warranty sheet and safety instructions for APAC and EMEA	S26361-F1452-E100	-		
Region Kit America, Contains warranty sheet, registration hints and safety instructions for America	S26361-F1452-E130	-		
Region Kit Europe, Contains warranty sheet and safety instructions in German, English, French, Spanish, Italian, Polish, Russian and Welsh language.	S26361-F1452-E140	-	(Sales region for EMEA only)	
Region Kit China for CCC option required systems, Contains warranty sheet and safety instructions for China,	S26361-F1452-E101	-		(Sales region for APAC only)
Certifications, optional 1x per system				
Certification for China, (CCC). Reduced component selection possible, only with no power cord option necessary to be selected always when "region kit China (S26361-F1452-E101)" is selected	S26361-F3301-E120	-		
O				

Chapter 15 - Accessories**O**<http://www.fujitsu.com/fts/products/computing/peripheral/accessories/index-facts.html>**USB Mouse:**

Mouse M520 Black	S26381-K467-L100
Mouse M520 Grey	S26381-K467-L101
Mouse M530 Black	S26381-K468-L100
Mouse M530 Grey	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
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P

Chapter 16 - Others (Energy Star restriction)**P****S26361-F3301-E241**

E-Star Fam1 Certification

RX/TX13x0 Mx E-Star Fam1

Limits configuration in accordance

with Energy Star requirements

max. 1x per system

limitations for E-Star Fam1certification.

please make sure to follow the guidelines below in order meet ENERGY STAR V3.0 Fam1 requirements:

use 2x redundant PSU

do not use one of the following CPUs : Pentium Gold G6405, Xeon E-2314/E-2324G/E-2334/E-2374G/E-2336

use total 16GB DIMMs or more

do not use more than 8x HDD, SSDs (8 is ok)

*12x 3.5", 16x/24x 2.5" kits are not supported.

do not use PCIe SSD

do not use total 3 RAID/FC/GFX cards or more

ENERGY STAR-configurationen will be labeled:

PRIMERGY TX1330 M5 E-Star Fam1

non ENERGY STAR-configurationen will be labeled:

PRIMERGY TX1330 M5

Q

Chapter 16 - Others (ErP Lot 9 restriction)

Region Kits, 1x per System	Region Kits, 1x per System	*Region kit Europe must be ordered for shipment to ship in EU and EFTA countries to apply ErP Lot9 restriction	
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		
ErP Lot9 Restriction for 8x 2.5" HDDs configuration, 1x per System	ErP Lot9 Restriction for 8x 3.5" HDDs configuration, 1x per System	ErP Lot9 Restriction for 9-12x 3.5" HDDs configuration, 1x per System	ErP Lot9 Restriction for 16 9-24x 2.5" HDDs configuration, 1x per System
ErP Lot9 conf. for 8x 2.5" HDDs	PYBETL14	ErP Lot9 conf. for 8x 3.5" HDDs	PYBETL15
Restriction for ErP Lot 9 directive,	Restriction for ErP Lot 9 directive,	Restriction for ErP Lot 9 directive,	Restriction for ErP Lot 9 directive,
Limitation	Limitation	Limitation	Limitation
<ul style="list-style-type: none"> ■ Not allowed are: <ul style="list-style-type: none"> - Pentium Gold G6405 - Xeon® E-2314 - Xeon® E-2324G - Red-900W-PSU - All 2.5" SAS 2.4TB disks - All 3.5" disks - 4x 2.5" NVMe Kit - GFX cards (Nvidia T400) ■ Restrict to Max. 8 HDD/SSDs ■ 4x/8x/12x 3.5" kit is not supported 	<ul style="list-style-type: none"> ■ Not allowed are: <ul style="list-style-type: none"> - Pentium Gold G6405 - Xeon® E-2314 - Xeon® E-2324G - Xeon® E-2334 - Xeon® E-2374G - GPU cards (Nvidia T400) - Red-900W-PSU - 1G LAN cards ■ Restrict to Max 8 HDD/SSD/PCIe-SSDs ■ 8x/16x/24x 2.5" kit is not supported 	<ul style="list-style-type: none"> ■ Not allowed are: <ul style="list-style-type: none"> - Pentium Gold G6405 - Xeon® E-2314 - Xeon® E-2324G - Xeon® E-2334 - Xeon® E-2374G - Xeon® E-2336 - Xeon® E-23566 - Xeon® E-2378 - 1G LAN cards - Red-900W-PSU ■ Restrict to between 9 and 12 HDD/SSDs ■ 8x/16x/24x 2.5" kit is not supported 	<ul style="list-style-type: none"> ■ Not allowed are: <ul style="list-style-type: none"> - Pentium Gold G6405 - Xeon® E-2314 - Xeon® E-2324G - Xeon® E-2334 - Xeon® E-2374G - Xeon® E-2336 - Xeon® E-23566 - Xeon® E-2378 - 1G LAN cards - Red-900W-PSU ■ Restrict to between 9 and 24 HDD/SSD/PCIe-SSD ■ Max. 2 RAID/GFX cards (Total max. 2 ex-2x RAID cards and 1x GFX card is not ok) ■ All 3.5" kit and 24x 2.5" kit is not supported

RAID card = internal RAID/HBA cards
GFX card = Nvidia T400

END

Chapter 16 - others

P**PYBRMC44****PY-RMC44**

iRMC advanced pack

integrated remote Management controller activation key for graphical
console redirection and remote media redirection

max. 1x per system

Executing system updates, controlling the hardware setup or
running diagnostic tests on components are frequent tasks
of IT administrators to ensure a continuous 24x7 server
operation. ServerView embedded Lifecycle Management (eLCM)
for Fujitsu PRIMERGY servers greatly supports such routine
tasks by consolidating and enhancing management functions
directly available ("embedded") within the server.

PYBLCM14**embedded Lifecycle Management (eLCM)**

Server Online Update

OS driver Update

Hardware firmware update

Server Offline Update

Hardware update via Update Manager Express

PrimeCollect

Autonomous creation of Primecollect archives

Creation and use of PrimeCollect archives over AIS connect

Custom Image (Jukebox function)

Automatic and manual download of CD and DVD Images

Automatic and manual start of CD and DVD Images

max. 1x per system

Loose delivery

eLCM Activation Pack

(Node Locked License)

PY-LCM14**options contains:**

- Paper with TAN for Licensekey

S26361-F3776-E340

Cool-safe ® Advanced Thermal design see right side

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

General rules for ATD40 and ATD45:

ATD40 and ATD45 use high performance cooling components

ATD40:

- 480GB M.2 can not be supported

Base unit with Standard PSU:

- SSD/HDD can be supported up to 4x 3.5" or 8x 2.5" in bottom drive area.

ATD45:

- 480GB M.2 can not be supported

Base unit with Standard PSU:

- SSD/HDD can be supported up to 4x 3.5" or 8x 2.5" in bottom drive area.

Base unit with Redundant PSU:

- CPU can be supported up to 80W if SSD/HDD cage is occupied in accessible drive area.

S26361-F3776-E345

Cool-safe ® Advanced Thermal design see right side

enables the PRIMERGY Server to cope with temperatures from 5-45° in
operating mode due to extended Fan settings

this setting can be activated ex factory only

max. 1x per system

S26361-F3552-E100 will be EOL at end-Sep	PYBTPM16
S26361-F3552-L100	PY-TPM16
TPM 2.0 module	TPM 2.0 module
Microsoft Windows Server 2022 not supported	Microsoft Windows Server 2022 only supported
max. 1x per system	required for Microsoft Windows Server 2022 max. 1x per system

When using Windows Server 2022 as host OS, PYBTPM16 / PY-TPM16 is required.
In case Windows Server 2022 is guest OS, the TPM is not necessary.

OS support matrix:

Operating system for host OS	S26361-F3552-E100 S26361-F3552-L100	PYBTPM16 PY-TPM16
Windows Server 2022	-	required
Windows Server 2019	supported	supported
Red Hat Enterprise Linux 8	supported	supported
SUSE Linux Enterprise Server 15	-	-
VMware ESXi 7.0	supported	supported

Support OS may vary by system.

PYBCOM09
PY-COM09
serial port (RS232)
mounted on rear wall
max. 1x per system

S26361-F3776-E10
Silent TX configuration
This is possible in an office environment. Components which lead to a general increase of fan speed are excluded from the configuration.
this setting can be activated ex factory only
max. 1x per system

Excluded from the configurations:

- All SSDs
- All SAS disks
- All PCI cards
- ATD40/ATD45 options
- LTO drives
- Restrict to:
 - Up to 2x 3.5" HDDs
 - Up to 4x 2.5" HDDs

PYBFOP09
PY-FOP09
4U Rack Front Bezel for TX1330 M5
not for tower base units
max. 1x per system

Your Server is ready

Date of change	Configurator revision	Folder / order code / description	What has been changed / comment	Name
14.04.2022			First release	Y. Narita
14.04.2022	ErP Lot9		Updated the restriction	Y. Narita
15.04.2022	CPU		corrected cache size of Xeon E-2388G	A. Iwata
19.04.2022	ErP Lot9		Updated the restriction due to development team's update	Y. Narita
21.04.2022	ODD		Remove the wrong image	Y. Narita
21.04.2022	HD_cage		Remove the wrong descriptions	Y. Narita
22.04.2022	HD_SSD		corrected the the description about "as soon as available" for SAS 16TB and SAS SED 16TB	Y. Sugiyama
22.04.2022	HD_cage		Delete the comments	Y. Narita
02.05.2022	RAID		added OS support matrix for SW-RAID	T. Sudou
11.05.2022	HD_SSD / S26361-F5816-E240		added the description "as soon as available" according to system T50 plan about VMware	Y. Sugiyama
19.05.2022	HD_cage, RAID		added PRAID/PSAS CP600i, PRAID EP640i/EP680i/EP680i NVMe	T. Sudou
19.05.2022	backup		added PSAS CP600i for LTO	T. Sudou
30.05.2022	RAID		updated OS support matrix for SW-RAID, removed BSMI limitation from PSAS CP 2100-8i	T. Sudou
30.05.2022	others		added the comments for Rack Front Bezel	Y. Narita
01.06.2022	GFX		Remove the MiniDP-DP ADAPTER condition	T. Sasaki
07.06.2022	HD_SSD		corrected CP100 code from LP to FH	T. Sudou
16.06.2022	1,10	change_history	Introduce this history table with a new style	
28.06.2022	1,11	RAID	added Cable Kit for EP6xx/CP6xx: PY-CBS097	H.Okabe
07.07.2022	1,12	GFX	Add A2	T. Sasaki
14.07.2022	1.13	LAN	Added Broadcom LAN. PYBLA284,PY-LA284 PYBLA3K2,PY-LA3K2 PYBLA3J2,PY-LA3J2	Y.Ikuta
25.07.2022	1,14	others	deleted "Nvidia T400 can not be supported." about ATD40/ATD45	H.Okabe
28.07.2022	1,15	backup	removed "as soon as available" from LTO drives	T. Sudou
01.08.2022	1,16	PSU	added new Titanium PSUs PYBPU503, PY-PU503, PY-PU503B8	Y.Narita
05.08.2022	1,17	HD_SSD	corrected the description about restriction of HDD SATA 2.5" 7.2K 512e. (S26361-F3907-*)	Y. Sugiyama
08.08.2022	1,18	LAN	Released some LAN cards. S26361-F4610-E4/S26361-F4610-L504 PYBLA344/PY-LA344 S26361-F3640-E2/S26361-F3640-L502	Y.Ikuta
22.08.2022	1,18	n/a	avoided to open multi windows when this file is opened >no change about the description	Y. Sugiyama
22.08.2022	1,19	others	updated Notes for TPM2.0	T. Sudou
24.08.2022	1,20	ErP Lot9	Add new new ErP Lot9 Restriction: PYBETL21 Remove limitation that below products cannnot be ordered with ErP Lot9 Restriction - Red 900W PSU (PYBETL14/PYBETL15/PYBETL16) - Xeon® E-2336 / Xeon® E-2356G / Xeon® E-2378 (PYBETL16) - 1G LAN cards (PYBETL16) Remove limitation that RAID/GFX cards Max. qty. is 2 (PYBETL16) Change the restriction about orderable qty. of HDD/SSD/PCIe-SSDs. from 0-16pcs to 9-24pcs and change the name of PYBETL16 (PYBETL16)	H.Okabe
25.08.2022	1,21	HD_SSD	removed the description "as soon as available" according to T50 report	Y. Sugiyama
30.08.2022	1,22	LAN/FC	Released LAN/FC cards. PY*LA402 PY*FC412 PY*FC411 S26361-F5580-E2/L502 S26361-F5580-E1/L501	
08.09.2022	1,23	HD_cage	Released HD_cages. PYBBA3TS2 PYBBA2SS8 PYBBA2LS5 PY-BA34S9 PY-BA28SM PY-BA28SN	H.Okabe
26.09.2022	1,24	HD_SSD	updated Notes on max. No for M.2 SATA SSD updated Notes for PDUAL CP100	T. Sudou
26.09.2022	1,24	RAID	added SLES15 SP4 to OS support matrix for SW-RAID updated FBU description to add EP6xx S26361-F4042-E155, S26361-F4042-L110	T. Sudou
04.10.2022	1,25	backup	added PSAS CP 2100-8i FH for LTO PYBSC3MA4, PY-SC3MA2	T. Sudou
04.10.2022	1,25	RAID	added Note for PSAS CP 2100-8i FH for LTO	T. Sudou
05.10.2022	1,26	PSU	added 900W titanium PSUs PYBPU901 / PY-PU901	J. Okubo / Y. Narita
21.10.2022	1,27	HD_SSD	updated the EOL status for SSD PCIe "Intel P4610/P4510" according to Sales Status added the HDD BC-SATA/SAS 20TB "PY*CHLT7B/PY*CHLT7BS/PY*BHLT7E" added the HDD ECO-SATA 5.4K "PY*PH1TFE/PY*PH2TFE" added the M.2 SSD SATA 960GB "PY*MF96YN"	Y. Sugiyama