PRIMERGY TX1320 M5
Compact Tower Server

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13		Infiniband Controller (n.a. for TX1320 M5)
14	PSU	Power supply units, power cables, country specific opt.
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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 prerequesites, technical back ground, configuration rules, limitations, …

S26361-F4610-E2	<-- order code E-part (bold) --
S26361-F4610-L3	<-- order code L-part (bold)
PLAN 2x1Gb Ethern. Controller	<-- "name" of this part
i350-T2 chip (based on Intel Powerville) offers 2x1Gb RJ45 connectors	<--description of this part, in same cases as well description of content
PCIe Gen2 x4 full height card	<--requires a free PCIe slot --> means total amount of PCIe slots reduced
max. 6x per system	<--indicates how 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-tx1320-m5.pdf

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

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

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

Abbreviations

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

The PRIMERGY TX1320 M5 Server is available in 3 versions:

Start

choose base unit

- Easy change base unit for 2x 3.5” non hot plug HDD w/std. PSU
- hot plug base base unit for 4x/8x 2.5” hot plug HDD/SSD w/std. PSU
- hot plug base base unit for 4x/8x 2.5” hot plug HDD/SSD w/red. PSU
  in case of 4x 2.5” the drives may be NVMe

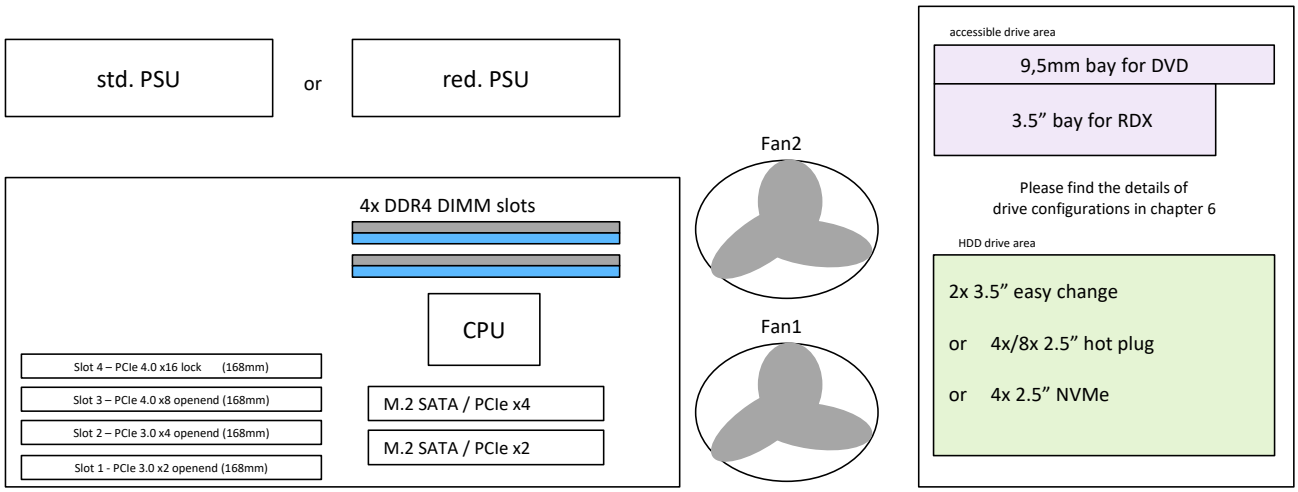
choose backup option

- Independent from the base unit you can configure an RDX backup drive

choose optical drive

- Select 9,5mm DVD or Blu Ray drive

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



recommended components for TX1320 M5	#
embedded Lifecycle Management (eLCM)	1x

Chapter 1 - base unit

Start

Base Unit
For the PRIMERGY TX 1320 M5 you can choose between different base units:
- a version using a standard PSU and supporting up to 2x 3.5" easy change (non hot plug) SATA HDDs
- a version using either a standard or an hot plug PSU and supporting up to 4x/8x 2.5" hot plug SAS/SATA HDDs or 4x 2.5" hot plug SAS/SATA HDDs and 4x 2.5" hot plug NVMe HDDs

HDD Extension Box
The base units supporting hot plug HDDs may be extended to 8x 2.5" HDD by using the optional 2nd HDD backplane.

Server Management
iRMC S6 (integrated Remote Management Controller) on-board with dedicated (or shared) 10/100/1000 Service LAN-port and integrated graphics controller. With the integrated onboard indicators and controls You can 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 and Pentium CPUs
Slots:
Slot 4 PCIe 4.0 x8 or x16 (with lock) - supports modular RAID and GPGPU/GPU option
Slot 3 PCIe 4.0 x8 or x0 (openend) - supports Raid card and Grafics Card option
Slot 2 PCIe 3.0 x4 (openend)
Slot 1 PCIe 3.0 x4 (openend)
All PCIe slots are low profile (lp) with supporting cards w/ max 168mm length
***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	Interfaces at front
2x LAN RJ45 (1 Gbit)	1x USB 3.2 Gen2x2 Type C
1x service LAN RJ45 (1 Gbit)	1x USB 3.2 Gen1x1 Type A
1x Display port	Interfaces internal
1x VGA (15 pins)	2x internal USB 3.2 Gen1x1 connectors for backup devices
2x USB 3.2 Gen2x1 Type A	2x M.2 (80mm and 110mm)modules: 1x SATA/NVMe(PCIe x4) and 1x SATA/NVMe(PCIe x2)
4x USB 2.0 Type A	1x Mini SATA (4x SATA 6G)
1x RS-232-C (serial, 9 pin) - optional	

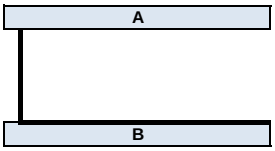
For converting the base units with standard PSU, to converet redundant PSU use this conversion kit:
PY-TKPC02

hot plug HDD
PYT1325T2S *EOL in EMEA market due to Erp Lot9 regulation
TX1320 M5 SFF Base Unit w/ std. PSU (2.5" HDD)
PYT1325T2M
TX1320 M5 SFF Base Unit w/ red. PSU (2.5" HDD)

easy change HDD
PYT1325T3S *EOL in EMEA market due to Erp Lot9 regulation
TX1320 M5 LFF Base Unit w/ std. PSU (3.5" HDD)
PYT1325TAI *Only in EMEA market
TX1320 M5 LFF Base Unit w/ red. PSU (3.5" HDD)

A

Chapter 2 - Rack architecture



Rackmount not supported by TX1320 M5

Chapter 3- CPU

B

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

Pentium (Rocket Lake) 64-bit Intel Pentium processor supporting DDR4 @ 2666MHz		order code (BTO)	order code (Loose delivery)
Pentium Gold G6405	2C/4T 4.1GHz 4MB 2666MHz 58W	PYBCP63C1	-
Xeon E-23xx (Rocket Lake-E) 64-bit Intel Xeon processor supporting DDR4 @ 3200MHz		order code (BTO)	order code (Loose delivery)
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.
PYBME08UG2 will be EOL on January 5th 2024
New order code for 8GB are added, but mixed configuration between PYBME08UG2, PY-ME08UG2 and PYBME08UG4, PY-ME08UG4 are not supported
New order code of PYBME08UG4, PY-ME08UG4 will be available at end of December

8GB DDR4 Unbuffered DIMM 3200MHz 1R x8		**order code (BTO)**	**order code (loose delivery)**
8GB (1x8GB) 1Rx8 DDR4-3200 U ECC	single rank	PYBME08UG2 [EOL]	PY-ME08UG2
8GB DDR4 Unbuffered DIMM 3200MHz 1R x8		**order code (BTO)**	**order code (loose delivery)**
8GB (1x8GB) 1Rx8 DDR4-3200 U ECC	single rank	PYBME08UG4	PY-ME08UG4
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

D

PYBVG4T2L **PY-VG4T2L**
NVIDIA T400
NVIDIA T400 4GB GDDR6 PCIe 3.0 x16 Connectors: 3x Mini-DP no cable kit included power cables from PSU need to be ordered separately.
Attention: Fan speed and noise level will be increased when installed.
Low profile
max. 1x per system

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

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

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

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

PYBVG4A8L **PY-VG4A8L**
NVIDIA A2
NVIDIA A2 Card with 16GB GDDR6 RAM.
PCIe *8 (Gen4) - single width, Low-Profile bracket, no exlernal power cable, 60W
Only available for PYT1325T2M
Limitation: - ATD40 and ATD45 can not be supported. - NVMe extension kit can not be supported. - CPU can be supported up to 80W. No support 95W CPU.
max. 1x per system

PYBVG4L1L **PY-VG4L1L**
NVIDIA L4
NVIDIA L4 24GB GDDR6 memory. PCIe Gen4
PCIe *16 (Gen4) - single width, Low-Profile bracket, no exlernal power cable, 70W
Only available for PYT1325T2M
Limitation: - ATD40 and ATD45 can not be supported. - NVMe extension kit can not be supported. - CPU can be supported up to 80W. No support 95W CPU.
max. 1x per system

PY-TKGP03
Cooling kit for GPU with SFF Base Unit
Contains all necessary parts to support NVIDIA A2/L4
Only available for PYT1325T2M
Updating system information with using the Chassis ID Prom tool is necessary

Cooling kit for GPU is required when NVIDIA A2/L4 is ordered as loose delivery.

E

Chapter 6 - HD drive cage

E

Definition:
TX1320 M5 is availabel in 3 basic versions:
1. Base unit for 2x 3.5" non hot plug SATA HDD w/ std. PSU
2. Base base unit for 4x/8x 2.5" hot plug SAS/SATA HDD w/ std. PSU
3. Base base unit for 4x/8x 2.5" hot plug SAS/SATA HDD w/ hot plug PSU

In case of 2.5" SAS/SATA base unit you can configure an 2nd HDD Backplane for a total of 8x 2,5" hot plug HDD
The base unit using hot plug PSU may be updated with 4x 2.5" NVMe for a total of 8x 2,5" hot plug HDD (4x SAS/SATA + 4x NVMe)

1. for SFF SAS/SATA base unit w/ hot plug PSU only

2. RAID controller PRAID EP540i NVMe, PRAID EP580i NVMe, PRAID EP680i NVMe or PRAID EP 3258-16i NVMe required
EP540i NVMe = S26361-F4042-E224, EP580i NVMe = S26361-F4042-E228
EP680i NVMe = PYBSR4C62L
EP 3258-16i NVMe = PYBSR4MA4L

3. RAID/SAS controller for 4x SAS/SATA also requiered
(Not supported with onboard SATA controller)

1. for SFF SAS/SATA base units only

PYBBA24SD **PY-BA24SD**
2nd HDD Backplae
offers 4x SFF (2,5") hot plug HDD
max. 1x per system

PYBBA24PG **PY-BA24PG**
NVMe extension kit
adds 4x PCIe SSD bays to 4x SFF (2,5") hot plug HDD bays
max. 1x per system

F

Chapter 7 - SAS / RAID Controller

F

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

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

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**

internal HBA and RAID controller, no 2nd Level cache

internal RAID / HBA controllers for SAS, SATA HDD or SSD drives -Cancelled-					
PRAID CP600i LP	No Cache	RAID 0, 1, 10	1x	**PYBSR4FAL**	**PY-SR4FA**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3808					
PSAS CP600i LP	No Cache	HBA, no RAID	1x	**PYBSC4FAL**	**PY-SC4FA**
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 16 drives without expander requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3816; IT FW stack without RAID functionality					
internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PRAID CP500i RAID Contr.	No Cache	RAID 0, 1, 10, 5, 50	1x	**PYBSR3FBL**	**PY-SR3FB**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408					
PSAS CP503i HBA SAS Contr.	No Cache	HBA, no RAID	1x	**PYBSC3FBL**	**PY-SC3FB**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality					

internal RAID / HBA controllers for SAS, SATA HDD or SSD drives					
PSAS CP 2100-8i LP	No Cache	HBA + RAID 0, 1, 10, 5	1x	**PYBSC3MA2L**	**PY-SC3MA2**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander requires 1x LP PCIe 3.0 x8 (int.) slot					

internal RAID controller with 2nd Level cache

internal RAID controllers for SAS, SATA HDD or SSD drives					
PRAID EP640i LP	4GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C63L**	**PY-SR4C63**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, supports up to 8 drives without expander includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3908					
PRAID EP680i LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C6L**	**PY-SR4C6**
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 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, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6L and PYBSR4C62L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
internal RAID controllers for SAS, SATA HDD or SSD drives					
PRAID EP520i RAID Contr. LP	2GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	**S26361-F4042-E202**	**S26361-F4042-L502**
8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, supports up to 8 devices without expander includes Fastpath and SafeStore Advanced SW-Licence requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516					
PRAID EP540i RAID Contr. LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	**S26361-F4042-E214**	**S26361-F4042-L514**
PRAID EP580i RAID Contr. LP	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	**S26361-F4042-E208**	**S26361-F4042-L508**
16 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, based on LSI SAS3516, without expander, up to 16 SAS/SATA devices are supported. (the configuration for 4 x 4 NVMe drives require a different order number, please see below) includes FastPath and SafeStore Advanced SW-Licence, CacheCade is no longer supported requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 (FYI: S26361-F4042-E214 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicite 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 lenght			1x	**S26361-F4042-E155**	**S26361-F4042-L110**

internal RAID controllers for PCIe SSD drives					
PRAID EP680i NVMe LP	8GB Cache	RAID 0, 1, 10, 5, 50, 6, 60	1x	**PYBSR4C62L**	**PY-SR4C6**
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, CacheCade is no longer supported requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3916 (FYI: PYBSR4C6L and PYBSR4C62L are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					
internal RAID controllers for PCIe SSD drives					
PRAID EP540i RAID NVMe LP	4GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	**S26361-F4042-E224**	**S26361-F4042-L514**
PRAID EP580i RAID NVMe LP	8GB Cache	RAID 0,1,1E,10,5,50,6,60	1x	**S26361-F4042-E228**	**S26361-F4042-L508**
16 ports 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, CacheCade is no longer supported requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3516 (FYI: S26361-F4042-E214 and E224, S26361-F4042-E208 and E228 are identical products. The 2nd Order number was only introduced for explicite ordering and cabling)					

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

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

PSAS CP 2100-8i and PRAID EP540i NVMe / EP580i NVMe / EP680i NVMe 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 or PRAID EP 3258-16i NVMe for 4x NVMe; second RAID, HBA controller for SAS/SATA

up to **1x FBU** can be integrated per System
for PRAID EP540i / EP580i / EP680i NVMe, no FBU is allowed (performance)

Expander configurations: Use PRAID EPxxxi for optimal performance

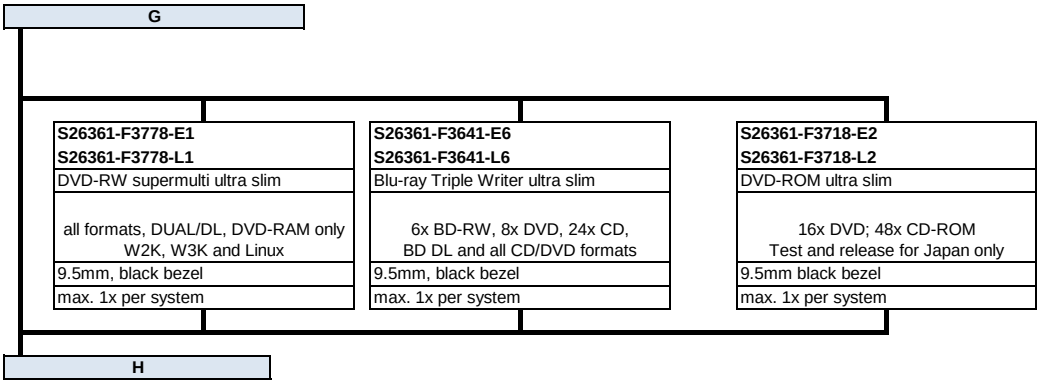
Cable kit for upgrade cards: For upgrade L-parts RAID/HBA controller card(EP6xxi/CP6xxi), L-parts Cable kit is required.
Cable Kit for EP6xxi/CP6xxi : PY-CBS096

PRAID EP 3252-8i / EP 3254-8i / EP 3258-16i and PRAID EP540i NVMe / EP580i NVMe / EP680i NVMe cannot be mixed

PRAID EP 3258-16i NVMe and PSAS CP503i / CP600i / PRAID CP500i / CP600i / EP520i / EP540i / EP580i / EP640i / EP680i cannot be mixed

G

Chapter 8 - ODD optical disk drives



Chapter 9 - backup drives

TX1320 M5 is availabel in three basic versions:
1. Base unit for 2x 3.5" non hot plug HDD w/ std. PSU
2. Base base unit for 4x/8x 2.5" hot plug HDD w/ std. PSU
3. Base base unit for 4x/8x 2.5" hot plug HDD w/ hot plug PSU
In any case an RDX backup drive may be configured.

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RDX drive				
RDX drive is not including Cartridge.				
RDX Drive cage (w/o cartriges)	USB 3.0, 3.5 inch / Half Height	1x	**S26361-F3750-E5**	**S26361-F3750-L5**

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

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Chapter 10 - storage drives

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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

EOL, as long as stock available

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. 8x - depending on base unit & configuration

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			**PY-SS80NGF**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10			**PY-SS16NGF**
800GB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED		**PY-SS80NGG**
1.6TB	2.5" (SFF)	SAS 24Gb/s	Write Intensive	10	SED		**PY-SS16NGG**

max. 8x - depending on base unit & configuration

EOL, as long as stock available

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. 8x - depending on base unit & configuration

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

based on **Kioxia PM7** drives

Capacity	Formfactor	Interface	Endurance	DWPD		order code E-part	order code L-part
1.6TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3			**PY-SS16NPM**
3.2TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3			**PY-SS32NPM**
6.4TB	2.5" (SFF)	SAS 24Gb/s	Mixed Use	3			**PY-SS64NPM**

max. 8x - depending on base unit & configuration

EOL, as long as stock available

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. 8x - depending on base unit & configuration

SSD SAS 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on **Kioxia PM7** drives							
Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
1.92TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1			**PY-SS19NNM**
3.84TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1			**PY-SS38NNL**
7.68TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1			**PY-SS76NNM**
15.36TB	2.5" (SFF)	SAS 24Gb/s	Read Intensive	1			**PY-SS15NNL**
max. 8x - depending on base unit & configuration							

The SSDs not released with PRAID CP500i

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 - depending on base unit & configuration							

EOL, as long as stock available

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 - depending on base unit & configuration							

SSD SATA 2.5" Mixed Use (SFF) Enterprise with hot plug/hot replace tray							
based on **Micron 5300 MAX** drives							
Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
240GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		**S26361-F5776-E240**	**S26361-F5776-L240**
480GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		**S26361-F5776-E480**	**S26361-F5776-L480**
960GB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		**S26361-F5776-E960**	**S26361-F5776-L960**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	5,0		**S26361-F5776-E192**	**S26361-F5776-L192**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Mixed Use	3,5		**S26361-F5776-E384**	**S26361-F5776-L384**
max. 8x - depending on base unit & configuration							

The SSDs not released with PRAID CP500i

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 - depending on base unit & configuration							

EOL, as long as stock available

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 - depending on base unit & configuration							

SSD SATA 2.5" Read Intensive (SFF) Enterprise with hot plug/hot replace tray							
based on **Micron 5300 PRO** drives							
Capacity	*Formfactor*	*Interface*	*Endurance*	*DWPD*		*order code E-part*	*order code L-part*
240GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		**S26361-F5783-E240**	**S26361-F5783-L240**
480GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		**S26361-F5783-E480**	**S26361-F5783-L480**
960GB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		**S26361-F5783-E960**	**S26361-F5783-L960**
1.92TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,5		**S26361-F5783-E192**	**S26361-F5783-L192**
3.84TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	1,2		**S26361-F5783-E384**	**S26361-F5783-L384**
7.68TB	2.5" (SFF)	SATA 6Gb/s	Read Intensive	0,6		**S26361-F5783-E768**	**S26361-F5783-L768**
max. 8x - depending on base unit & configuration							

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 - depending on base unit & configuration

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
300GB	10 000	SAS 12Gb/s	512n		**S26361-F5729-E130**	**S26361-F5729-L130**
600GB	10 000	SAS 12Gb/s	512n		**S26361-F5729-E160**	**S26361-F5729-L160**
1.2TB	10 000	SAS 12Gb/s	512n		**S26361-F5729-E112**	**S26361-F5729-L112**
300GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH301EU**	**PY-SH301EU**
600GB	10 000	SAS 12Gb/s	512n	SED	**PYBSH601EU**	**PY-SH601EU**
1.2TB	10 000	SAS 12Gb/s	512n	SED	**PYBSH121EU**	**PY-SH121EU**

max. 8x - depending on base unit & configuration

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
600GB	10 000	SAS 12Gb/s	512e		**S26361-F5730-E160**	**S26361-F5730-L160**
1.2TB	10 000	SAS 12Gb/s	512e		**S26361-F5730-E112**	**S26361-F5730-L112**
1.8TB	10 000	SAS 12Gb/s	512e		**S26361-F5730-E118**	**S26361-F5730-L118**
2.4TB	10 000	SAS 12Gb/s	512e		**S26361-F5543-E124**	**S26361-F5543-L124**
1.8TB	10 000	SAS 12Gb/s	512e	SED	**PYBSH181DU**	**PY-SH181DU**
2.4TB	10 000	SAS 12Gb/s	512e	SED	**S26361-F5582-E124**	**S26361-F5582-L124**

max. 8x - depending on base unit & configuration

EOL, as long as stock available

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

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

max. 8x - depending on base unit & configuration

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

EOL, as long as stock available

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
1TB	7 200	SATA 6Gb/s	512e		**S26361-F3907-E100**	**S26361-F3907-L100**
2TB	7 200	SATA 6Gb/s	512e		**S26361-F3907-E200**	**S26361-F3907-L200**

max. 8x - depending on base unit & configuration

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3.5" NON hot plug Drives for internal bays

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
1TB	7 200	SATA 6Gb/s	512n	EOL, as long as stock available	**PYBBH1T2B4**	**PY-BH1T2B4**
2TB	7 200	SATA 6Gb/s	512n		**PYBBH2T2B4**	**PY-BH2T2B4**
4TB	7 200	SATA 6Gb/s	512n		**PYBBH4T2B4**	**PY-BH4T2B4**
max. 2x - depending on base unit & configuration						

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

6TB	7 200	SATA 6Gb/s	512e		**PYBBH6T2E4**	**PY-BH6T2E4**
8TB	7 200	SATA 6Gb/s	512e		**S26361-F5639-E800**	**S26361-F5639-L800**
12TB	7 200	SATA 6Gb/s	512e	EOL, as long as stock available	**PYBBHCT2E4**	**PY-BHCT2E4**
max. 2x - depending on base unit & configuration						

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

EOL, as long as stock available

HDD SATA 3.5" 7.2K (LFF) ECO with **NON** 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-F3952-E100**	**S26361-F3952-L100**
max. 2x - depending on base unit & configuration						

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

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

Capacity	*RPM*	*Interface*	*Sector*		*order code E-part*	*order code L-part*
1TB	5 400	SATA 6Gb/s	512e		**PYBPH1T4E**	**PY-PH1T4E**
2TB	5 400	SATA 6Gb/s	512e		**PYBPH2T4E**	**PY-PH2T4E**
max. 2x - 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		**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 on Motherboard cannot be mixed

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

Capacity	*Formfactor*	*Interface*		*Category*		*order code E-part*	*order code L-part*
n/a	AIC	PCIe		Boot	LP	**PYBDMCP24L**	**PY-DMCP24**
PDUAL CP100 is a carrier 2x M.2 SATA modules and offers RAID1 with 2x M.2 modules.							
PDUAL CP100 is designed for use as a Hardware-mirrored (RAID1) boot device for Hypervisor, which cannot be supported by M.2 via the onboard chipset Software RAID.							
Supported RAID level : RAID1 only, 2x M.2 modules need to be ordered separately.							
Supported M.2 Modules : SSD SATA M.2 240GB/480GB, and 240GB for VMware ESXi. (S26361-F5787-E240/L240/E480/L480 or S26361-F5816-E240/L240)							
Windows 2022 support: For PY-DMCP24, Firmware Package 2.3.21.2009 or later is required. PYBDMCP24L is shipped with the required Firmware Package							
To manage the CP100, iRMC 1.13S or later is required							
max. 1x per Server, requires 2x SSD SATA M.2 drives.							

RAID PRESET option

Component			*order code E-part*	*order code L-part*
pre-config. RAID1 Array for M.2 in PDUAL			**S26361-F5659-E13**	**-**
This option allows pre-configuration of 2x M.2 modules to a RAID1 Array with PDUAL CP100 ex factory.				
max. 1x per Server, requires 1x PDUAL CP100.				

2.5" PCIe-SSDs require a RAID Controller

2.5" (SFF) PCIe-SSD

EOL, as long as stock available

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

based on **Kioxia CM6-V** drives

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

max. 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

EOL, as long as stock available

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

based on **Kioxia CM6-R** drives

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

max. 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

K

Chapter 11 - Communications / Ethernet Network Components

K

PRIMERGY TX1320 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

Network PCIe Adapters

Intel 1GbE BEASE-T for PCIe				
PLAN CP 2x1Gbit Cu Intel I350-T2 LP	2x	Intel, 1GTx2port	S26361-F4610-E202	S26361-F4610-L502
PLAN CP 4x1Gbit Cu Intel I350-T4 LP	2x	Intel, 1GTx4port	S26361-F4610-E204	S26361-F4610-L504
max. 2 adapters per system				
Broadcom 1GbE BEASE-T for PCIe				
PLAN CP BCM5719-4P 4X 1000BASE-T PCIe LP	2x	Broadcom, 1GTx4port	PYBLA284L	PY-LA284
max. 2 adapters per system **Attention: Fan speed and noise level will be increased when installed.**				
Intel 10GbE BEASE-T for PCIe				
PLAN EP X710-T2L 2x10GBASE-T LP	2x	Intel, 10GTx2port	PYBLA342L	PY-LA342
PLAN EP X710-T4L 4x10GBASE-T LP	2x	Intel, 10GTx4port	PYBLA344L	PY-LA344
max. 4 adapters per server system				
Broadcom 10GbE BEASE-T for PCIe				
PLAN EP P210TP 2X 10GBASE-T PCIe LP	2x	Broadcom, 10GTx2port	PYBLA3K2L	PY-LA3K2
max. 2 adapters per system **Attention: Fan speed and noise level will be increased when installed.**				
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+ LP	2x	Intel, 10Gx2port	S26361-F3640-E202	S26361-F3640-L502
PLAN EP X710-DA4 4x10Gb SFP+	2x	Intel, 10Gx4port	S26361-F3640-E204	S26361-F3640-L504
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	4x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	4x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	4x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	4x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				
max. 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.** **Attention: Fan speed and noise level will be increased when installed.**				
PLAN EP P210P 2x10Gb SFP PCIe LP	2x	Broadcom, 10Gx2port	PYBLA3J2L	PY-LA3J2
Optional, 10Gb SFP+ optical transceiver module, select one per cage				
SFP+ Optical Transceiver 10G Single Rate SR	2x	Finisar, 10G SR SFP+	S26361-F3986-E3	S26361-F3986-L3
SFP+ Optical Transceiver 10G Single Rate LR	2x	Finisar, 10G LR SFP+	S26361-F3986-E4	S26361-F3986-L4
SFP+ Optical Transceiver 10G/1G Dual Rate SR	2x	Intel, 1G/10G SR SFP+	S26361-F3986-E5	S26361-F3986-L5
SFP+ Optical Transceiver 10G/1G Dual Rate LR	2x	Intel, 1G/10G LR SFP+	S26361-F3986-E6	S26361-F3986-L6
max. 1x per port				
max. 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 2x25Gb LP	2x	Intel, 25Gx2port	PYBLA402L	PY-LA402
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
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. 2x adapters per system				

Mellanox 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 MCX4-LX 25Gb 2p SFP28 LP	2x	Mellanox, 25Gx2port	S26361-F4054-E202	S26361-F4054-L502
Optional, 25Gb SFP28 optical transceiver module with LC connector, each cage consumes one.				
SFP28 Optical Transceiver 25G SR MMA2P00-AS LC	2x	Mellanox, 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 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/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. 4x adapters per system				

L

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

L

Std. Base Unit

For converting the base unit **PYT1325T2S** from standard PSU to redundant PSU use this conversion kit: **PY-TKPC02**

Red. Base Unit (No redundant PSU is included)

No PSU is included in base unit. Need to be chosen 1x redundant PSU at least. A second redundant power requires an additional country specific power cord. Dummy module is required if 1st PSU only.

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

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

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

PYBBBG04 **PY-BBG04**
Fujitsu Battery Unit *)
380W(peak), 280W(continuous) 12V battery module 4 min. backup time for gracefull shutdown
Battery
occupies hot plug PSU slot
max. 1x per system

*) = Fujitsu Battery Unit requires one modular power supply

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**	**-**

Region Kits, required to order one of them, 1x per System	build-in order code	loose delivery order code	
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,	**S26361-F1452-E140**	**-**	(Sales region for EMEIA only)
Region Kit China for CCC option required systems, Contains warranty sheet and safety instructions for	**S26361-F1452-E101**	**-**	(Sales region for APAC only)

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

M

Chapter 15 - Accessories

M

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

USB Mouse:		
Mouse M520 Black	**S26381-K467-L100**	**APAC only**
Mouse M520 Grey	**S26381-K467-L101**	**APAC only**
Mouse M530 Black	**S26381-K468-L100**	**EOL in December 2023**
Mouse M530 Grey	**S26381-K468-L101**	**EOL in December 2023**

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**	**APAC only**
Czech/Slovak	**S26381-K521-L104**	**EOL in December 2023**
US 104 keys (US keyboard + US layout)	**S26381-K521-L110**	**EOL in December 2023**
Germany	**S26381-K521-L120**	**EOL in December 2023**
Germany / Int	**S26381-K521-L122**	**EOL in December 2023**
France	**S26381-K521-L140**	**APAC only**
Sweden / Finland	**S26381-K521-L154**	**EOL in December 2023**
United Kingdom	**S26381-K521-L165**	**EOL in December 2023**
Switzerland	**S26381-K521-L170**	**EOL in December 2023**
Spain	**S26381-K521-L180**	**APAC only**
Italy	**S26381-K521-L185**	**EOL in December 2023**

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

N

Chapter 16 - others (Energy Star restrictions)

N

will be expired after 2024-1-11

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

will be effective after 2024-1-12

PYBES21
E-Star Fam1 Certification
RX/TX13x0 Mx E-Star Fam1
Limits configuration in accordance
for ENERGY STAR V4.0
max. 1x per system

limitations for E-Star Fam1certification.

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

<ENERGY STAR V3.0 / S26361-F3301-E241>
use 2x redundant PSU
do not use one of the following CPUs : Pentium Gold G6405; Xeon E-2314/E-2324G/E-2334/E-2374G
use total 16GB or more DIMMs
do not use more than two PCIe cards (RAID, LAN, …) (two is ok)

<ENERGY STAR V4.0 / PYBES21>
use one of the following CPUs : Xeon E-2378G/E-2388G
use total 32GB or more DIMMs
use less than five SATA SSDs(Max. 4x: including M.2 SSD) / do not use any HDDs
do not use any PCIe cards (RAID, LAN, …)

ENERGY STAR-configurationen will be labeld: PRIMERGY TX1320 M5 E-Star Fam1
non ENERGY STAR-configurationen will be labeld: PRIMERGY TX1320 M5

O

Chapter 16 - Others (ErP Lot 9 restriction)

O

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

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

ErP Lot9 Restriction for 2x HDDs conf, 1x per System	
ErP Lot9 conf. for 2x HDDs	PYBETL8

Restriction for ErP Lot 9 directive,

Limitation

- Restrict to Max. 2 HDD/SSDs
- Restrict to Max. 1 RAID/GFX cards (RAID card and GFX card can not be mixed.)

ErP Lot9 Restriction for 2x/4x HDDs configuration, 1x per System	
ErP Lot9 conf. for 2x/4x HDDs	PYBETL9

Restriction for ErP Lot 9 directive,

Limitation

- Not allowed are:
  - Pentium Gold G6405
  - Xeon E-2314
  - Xeon E-2324G
- NVMe/HDD extension kit is not supported

ErP Lot9 Restriction for 8x HDDs configuration, 1x per System	
ErP Lot9 conf. for 8x HDDs	PYBETL10

Restriction for ErP Lot 9 directive,

Limitation

- Not allowed are:
  - Pentium Gold G6405
  - Xeon E-2314
  - Xeon E-2324G
  - GFX cards(Nvidia T400)

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

P

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

others

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**

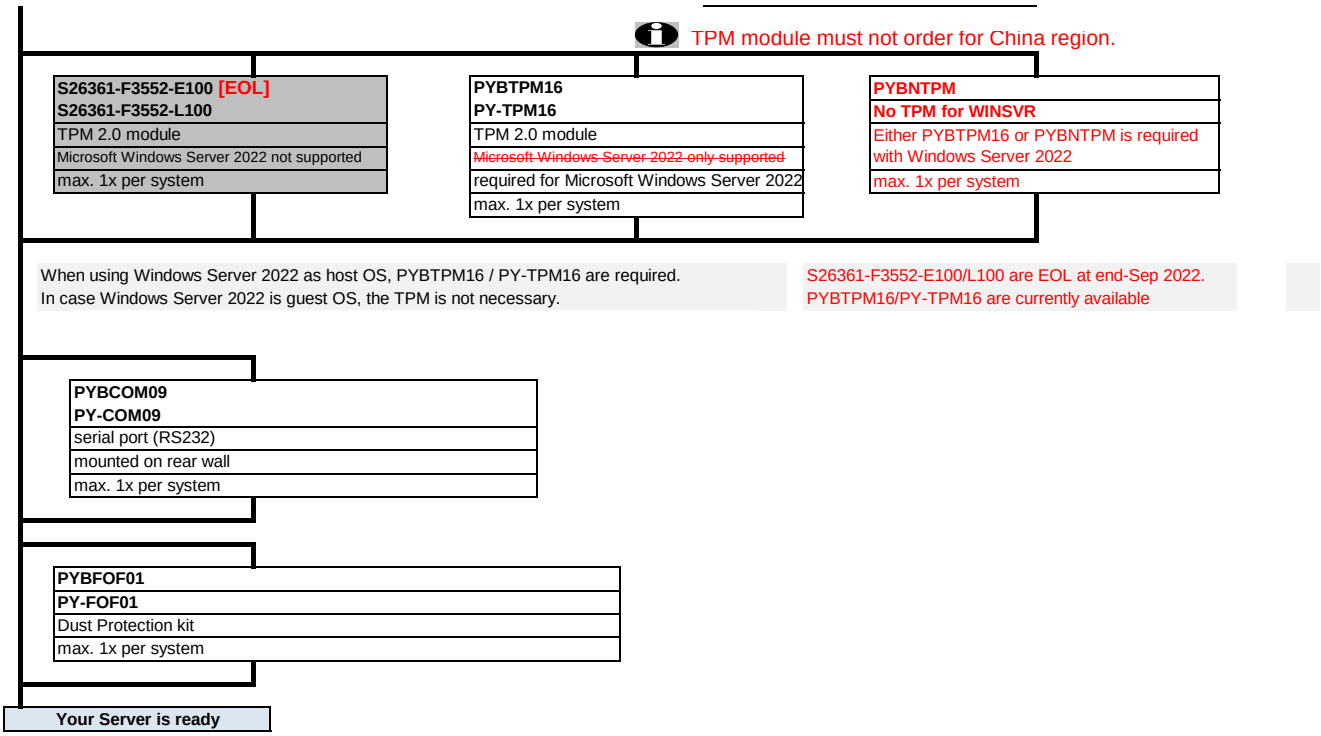
iRMC MicroSD card option			
Capacity	Interface	E-parts	L-parts
64GB	SDXC	~~PYBMD64R1~~	PY-MD64R1
128GB	SDXC	~~PYBMD12R1~~	PY-MD12R1
max. 1x per system, instead of 16GB MicroSD card			

cancelled to release the E-parts
cancelled to release the E-parts

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

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

General rules for ATD40 and ATD45:
ATD40 and ATD45 use high performance cooling components
ATD40: - CPU can be supported up to 80W. No support 95W CPU. - Fujitsu Battery Unit can not be supported. - NVIDIA A2 can not be supported. - NVIDIA L4 can not be supported. - Broadcom 1GbE BEASE-T for PCIe/10GbE BEASE-T for PCIe/ 10GbE for PCIe can not be supported.
ATD45: - Base unit with Standard PSU can not be supported - 480GB M.2 can not be supported - CPU can be supported up to 80W. No support 95W CPU. - Nvidia T400 can not be supported. - Fujitsu Battery Unit can not be supported. - NVIDIA A2 can not be supported. - NVIDIA L4 can not be supported. - Broadcom 1GbE BEASE-T for PCIe/10GbE BEASE-T for PCIe/ 10GbE for PCIe can not be supported.


TPM module must not order for China region.
S26361-F3552-E100 [EOL]
S26361-F3552-L100
TPM 2.0 module
Microsoft Windows Server 2022 not supported
max. 1x per system
PYBTPM16
PY-TPM16
TPM 2.0 module
Microsoft Windows Server 2022 only supported
required for Microsoft Windows Server 2022
max. 1x per system
PYBNTPM
No TPM for WINSVR
Either PYBTPM16 or PYBNTPM is required with Windows Server 2022
max. 1x per system
When using Windows Server 2022 as host OS, PYBTPM16 / PY-TPM16 are required.
In case Windows Server 2022 is guest OS, the TPM is not necessary.
S26361-F3552-E100/L100 are EOL at end-Sep 2022.
PYBTPM16/PY-TPM16 are currently available
PYBCOM09
PY-COM09
serial port (RS232)
mounted on rear wall
max. 1x per system
PYBFOF01
PY-FOF01
Dust Protection kit
max. 1x per system
Your Server is ready

Date of change	Configurator revision	Folder / order code / description	What has been changed / comment
14.04.2022			First release
15.04.2022		CPU	corrected cache size of Xeon E-2388G
02.05.2022		RAID	added OS support matrix for SW-RAID
11.05.2022		HD_SSD / S26361-F5816-E240/L240 / updated	added the description "as soon as available" according to system T50 plan about VMware
17.05.2022		base	corrected the order code
19.05.2022		RAID	added PRAID/PSAS CP600i, PRAID EP640i/EP680i/EP680i NVMe
19.05.2022		HD_cage	added PRAID EP680i NVMe
30.05.2022		RAID	updated OS support matrix for SW-RAID, removed BSMI limitation from PSAS CP 2100-8i
01.06.2022		GFX	Remove the MiniDP-DP ADAPTER condition
16.06.2022	1,08	change_history	Introduce this history table with a new style
		HD_cage	added the restriction for NVMe extension kit
28.06.2022	1,09	RAID	added Cable Kit for EP6xxi/CP6xxi: PY-CBS096
13.07.2022	1.10	LAN	Added Broadcom LAN: PYBLA284L,PY-LA284 PYBLA3K2L,PY-LA3K2 PYBLA3J2L,PY-LA3J2
25.07.2022	1,11	others	deleted "Nvidia T400 can not be supported." about ATD40
25.07.2022	1,12	PSU	added new Titanium PSUs PYBPU503, PY-PU503, PY-PU503B8
08.08.2022	1,13	LAN	Released some LAN cards: S26361-F4610-E204/S26361-F4610-L504 PYBLA344L/PY-LA344 S26361-F3640-E204/S26361-F3640-L504
22.08.2022	1,14	others	updated Notes for TPM2.0
25.08.2022	1,15	HD_SSD / S26361-F5816-E240/L240 / updated	removed the description "as soon as available" according to T50 report
30.08.2022	1,16	LAN	Released PYBLA402L / PY-LA402.
09.09.2022	1,17	RAID	added SLES15 SP4 to OS support matrix for SW-RAID
09.09.2022	1,17	HD_SSD	updated Notes on max. No for M.2 SATA SSD updated Notes for PDUAL CP100
26.09.2022	1,18	RAID	updated FBU description to add EP6xx S26361-F4042-E155, S26361-F4042-L110
21.10.2022	1,19	HD_SSD	updated the EOL status for SSD PCIe "Intel P4610/P4510" according to Sales Status added the HDD ECO-SATA 5.4K "PY*PH1T4E/PY*PH2T4E" added the M.2 SSD SATA 960GB "PY*MF96YN"
04.11.2022	1.20	HD_SSD	added RAID PRESET option S26361-F5659-E13
04.11.2022	1.20	RAID	added PRAID EP 3252-8i PYBSR4MA1L, PY-SR4MA1 PRAID EP 3254-8i PYBSR4MA2L, PY-SR4MA2 PRAID EP 3258-16i (NVMe) PYBSR4MA3L, PYBSR4MA4L, PY-SR4MA3 FBU for EP 325x PYBFBM012, PY-FBM01
04.11.2022	1.20	HD_cage	added PRAID EP 3258-16i NVMe
24.11.2022	1.21	base	removed "will be available in Nov. 2022" from PYT1325TAN added remark to PYT1325T2S/PYT1325T3S
03.02.2023	1,22	RAID	added RHEL 8.7 to OS support matrix for SW-RAID updated availability schedules
23.02.2023	1.23	PSU	added Fujitsu Battery Unit PYBBBG04 / PY-BBG04
13.04.2023	1,24	GFX	added NVIDIA A2 and L4 .
18.04.2023	1,25	RAID	updated availability schedules
09.05.2023	1,26	HD_SSD	updated availability schedules for ECO-SATA and M.2 SATA 960GB
15.05.2023	1,27	RAID	added RHEL 9.1 to OS support matrix for SW-RAID updated availability schedules
19.05.2023	1.28	PSU, others	removed the description "will be available in CY2023, 2Q." about Fujitsu Battery Unit updated general rules for ATD40 and ATD45
19.05.2023	1.28	HD_cage	added the restriction for NVMe extension kit
15.06.2023	1.30	RAID	cancelled PSAS CP600i, PRAID CP600i, PRAID EP 3252-8i, PRAID EP 3254-8i, PRAID EP 3258-16i, PRAID EP 3258-16i NVMe
16.06.2023	1.31	GFX, LAN	added the attenction about noise
31.07.2023	1.32	HD_SSD	added the PCIe-SSD "Kioxia CM7 series"
31.07.2023	1.33	HD_SSD	revised the order codes for Kioxia CM7 15.36TB
07.08.2023	1.34	RAID	added RHEL 8.8, 9.2 and SLES15 SP5 to OS support matrix for SW-RAID
22.08.2023	1.35	GFX	change the released shedule(PYxVG4L1L/PYxVG4A8L/PY-TKGP03)
23.08.2023	1.36	others	updated General rules for ATD40 and ATD45
08.09.2023	1,37	HD_SSD	added the EOL status for HDD SAS 15K and HDD 2.5" BC-SATA/SAS
19.09.2023	1.38	Energy Star restrictions	added E-Star Fam1 Certification for ENERGY STAR V4.0
22.09.2023	1,39	HD_SSD	updated availability schedules added the following drives as new products -Samsung PM897a/PM893a as SSD SATA
03.10.2023	1.40	RAM, others	Add new order code for 8GB UDIMM, and current BTO order code will be EOL Add new TPM
13.10.2023	1,41	HD_SSD	updated the EOL information for PCIe-SSD
23.10.2023	1.42	GFX	released NVIDIA A2/L4
30.10.2023	1,43	HD_SSD	revised the information about 2.5" SSD SATA for Samsung PM893a/PM897a
06.11.2023	1.44	RAID	updated Note for onboard SATA SW-RAID
20.11.2023	1.45	Energy Star restrictions	added the guidelines for ENERGY STAR V4.0
01.12.2023	1.46	Description	added embedded Lifecycle Management (eLCM) to recommended components
19.12.2023	1.47	RAM	update PYBME08UG2 which is EOLed
20.12.2023	1.48	RAM	update PYBME08UG2 EOL date
21.12.2023	1.49	USB devices	update Mouse and keyboard status
22.12.2023	1.50	RAM	change PYBME08UG2 EOL date
16.02.2024	1.51	others	added the iRMC MicroSD card option for eLCM
01.03.2024	1.52	HD_SSD	added the restriction for SSD SATA PM893a/PM897a updated availability schedule
04.03.2024	1.53	others	remove PY-TPM19 and PYBTPM19 add PYBNTPM and information
25.03.2024	1.54	others	revised the descriptuon about iRMC MicroSD card option for eLCM
03.06.2024	1.55	HD_SSD	updated availability schedule for SSD SATA
27.08.2024	1.56	HD_SSD	added Kioxia PM7 as SSD SAS for L-parts
26.09.2024	1.57	HD_SSD	added the EOL information for 3.5" HDD 7.2K SATA
30.09.2024	1.58	others	updated the avalability status and order codes for iRMC MicroSD card