PRIMERGY RX1330 M5
Rack server

# FUJITSU

| Chapter | Folder | Content |
|---|---|---|
| | Cover | List of content, Instructions for usage of this configurator, abbreviations |
| | Description | System Description for easier understanding |
| 1 | Base | describes base unit of RX1330 M5, HDD cage kits |
| 2 | | describes rack mount kits and services |
| 3 | CPU | Order code and Infos of processors |
| 4 | RAM | DDR4 System memory (RAM) |
| 5 | GFX | Graphics-cards |
| 6 | | |
| 7 | RAID | SAS / RAID Controller and components |
| 8 | ODD | optical disk drives (DVD, DVD-rw, Blu ray) |
| 9 | Backup | none |
| 10 | HD_SSD | Storage drives - PCIe SSD - SAS/SATA SSD & HDD |
| 11 | LAN_FC_IB | LAN Components |
| 12 | | Fibre Channel Controller |
| 13 | | |
| 14 | PSU | Power supply units, power cables, country specific opt. |
| 15 | USB_devices | none |
| 16 | others | System Management, ATD, RS232 port, TPM module, FH-Riser |

# 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.

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 |

New order code

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

**For further information see:**
Link to datasheet:
https://sp.ts.fujitsu.com/dmsp/Publications/public/ds-py-rx1330-m5.pdf

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

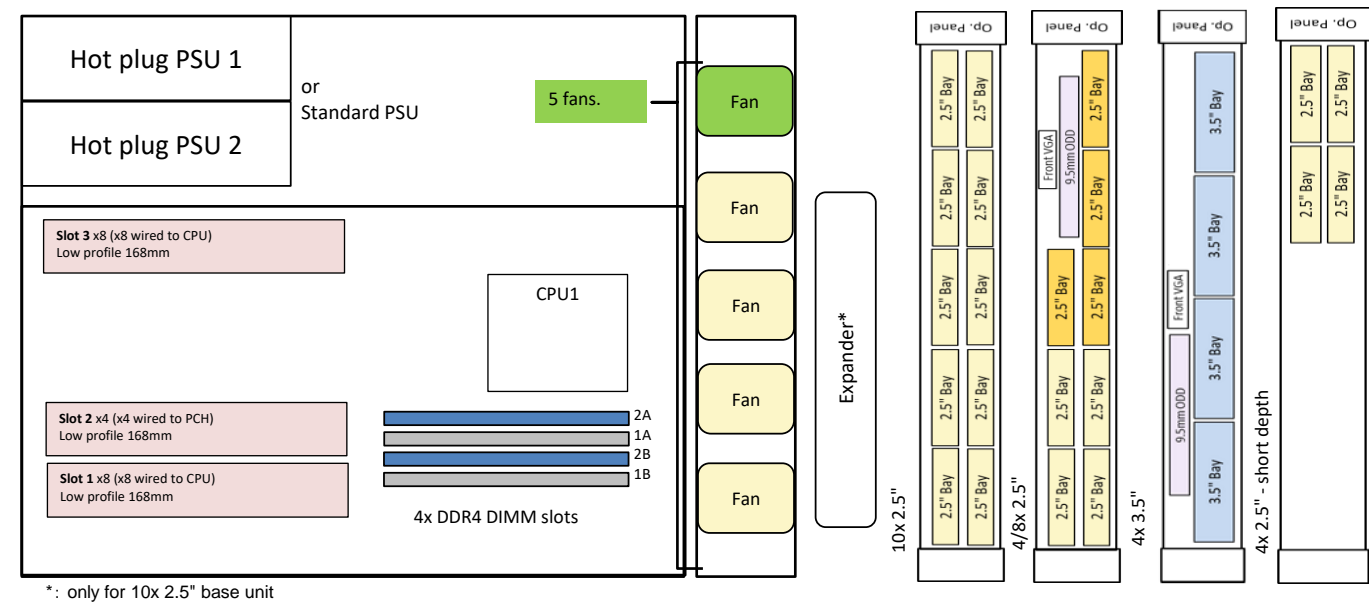https://extranet.ts.fujitsu.com/com/tools/configure/server/Pages/default.aspx
(extranet)

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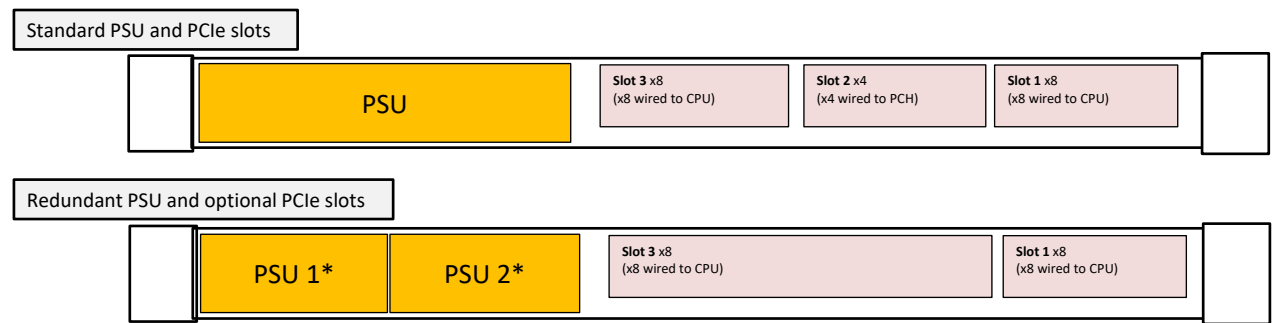
# Abbreviations

| | | |
|---|---|---|
| SAS | Drives, RAID | Serial attached SCSI Device (HDD, SSD, LTO drives); SAS2.0 = 6GBit/s; SAS3.0 = 12GBit/s |
| SATA | Drives, RAID | Serial ATA (HDD, SSD) current SATA speed = 6GBit/s |
| HDD | Drives | Hard disk drive (Non volatile storage device), 2.5" (SFF) or 3.5" (LFF) |
| SSD | Drives | Solid state disk (Non volatile storage device), 2.5" (SFF) |
| SFF | Drives | small form factor (=2.5") |
| LFF | Drives | large form factor (=3.5") |
| CPU | Processor | central processing unit ("processor") |
| RAID | Drives, RAID | RAID 0 = max speed, RAID 1 = mirroring, RAID 5 = 1 out of x drives is spare |
| Spaces | OS | Microsoft spaces, optimized in Win2012 R2 offers software RAID and storage tiering |
| vSAN | OS | |
| storage tiering | RAID | offers optimized storage allocation (fast area for "hot data"; slower area for "cold data") |
| hot data | Drives | Data which are currently being processed |
| cold data | Drives | Data which are currently not processed (only stored) |
| ODD | Drives | optical disk drive (i.e. DVD-player, DVD-burner, Blu ray player, blu ray burner) |
| OS | operating system | OS=operating system - required for running, organize and administrating the server |
| E-Part | "Einbau-Part" | "e.g. S26361-F1234-E240" 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-L240" ordercode with "L" means, the part will be shipped with extra package, may be as well with extra shipment |
| | | |
| | | |

## PRIMERGY RX1330 M5 schematics of the System board and fans
PYBBA24SC/PY-BA24SC: L-shape Backplane to upgrade from 4x to 8x 2,5" HDD

| Hot plug PSU 1 | | |
|---|---|---|
| Hot plug PSU 2 | or Standard PSU | |

5 fans.

Fan
Fan
Fan
Fan
Fan

Expander*

**Slot 3** x8 (x8 wired to CPU)
Low profile 168mm

CPU1

**Slot 2** x4 (x4 wired to PCH)
Low profile 168mm

**Slot 1** x8 (x8 wired to CPU)
Low profile 168mm

2A
1A
2B
1B

4x DDR4 DIMM slots

10x 2.5"
4/8x 2.5"
4x 3.5"
4x 2.5" - short depth

*: only for 10x 2.5" base unit

## PRIMERGY RX1330 M5 - Rear view with PSU and PCIe slots

Standard PSU and PCIe slots

PSU

| **Slot 3** x8 (x8 wired to CPU) | **Slot 2** x4 (x4 wired to PCH) | **Slot 1** x8 (x8 wired to CPU) |
|---|---|---|

Redundant PSU and optional PCIe slots

PSU 1*  PSU 2*

| **Slot 3** x8 (x8 wired to CPU) | **Slot 1** x8 (x8 wired to CPU) |
|---|---|

*: Option

**PRIMERGY RX1330 M5 - Front view**

RX1330 M5 4x3.5"

| 9.5mm ODD | Front VGA | | |
|---|---|---|---|
| 3.5" Bay | 3.5" Bay | 3.5" Bay | 3.5" Bay |

Op. Panel

RX1330 M5 4x2.5"

| 2.5" Bay | 2.5" Bay | 2.5" Bay | Front VGA | |
|---|---|---|---|---|
| | | | 9.5mm ODD | |
| 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay |

Op. Panel

Standard

Optional upgrade to 8x 2.5": PYBBA24SC/PY-BA24SC

RX1330 M5 10x2.5"

| 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay |
|---|---|---|---|---|
| 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay | 2.5" Bay |

Op. Panel

RX1330 M5 4x2.5" - short depth

Front VGA

| 2.5" Bay | 2.5" Bay |
|---|---|
| 2.5" Bay | 2.5" Bay |

Op. Panel
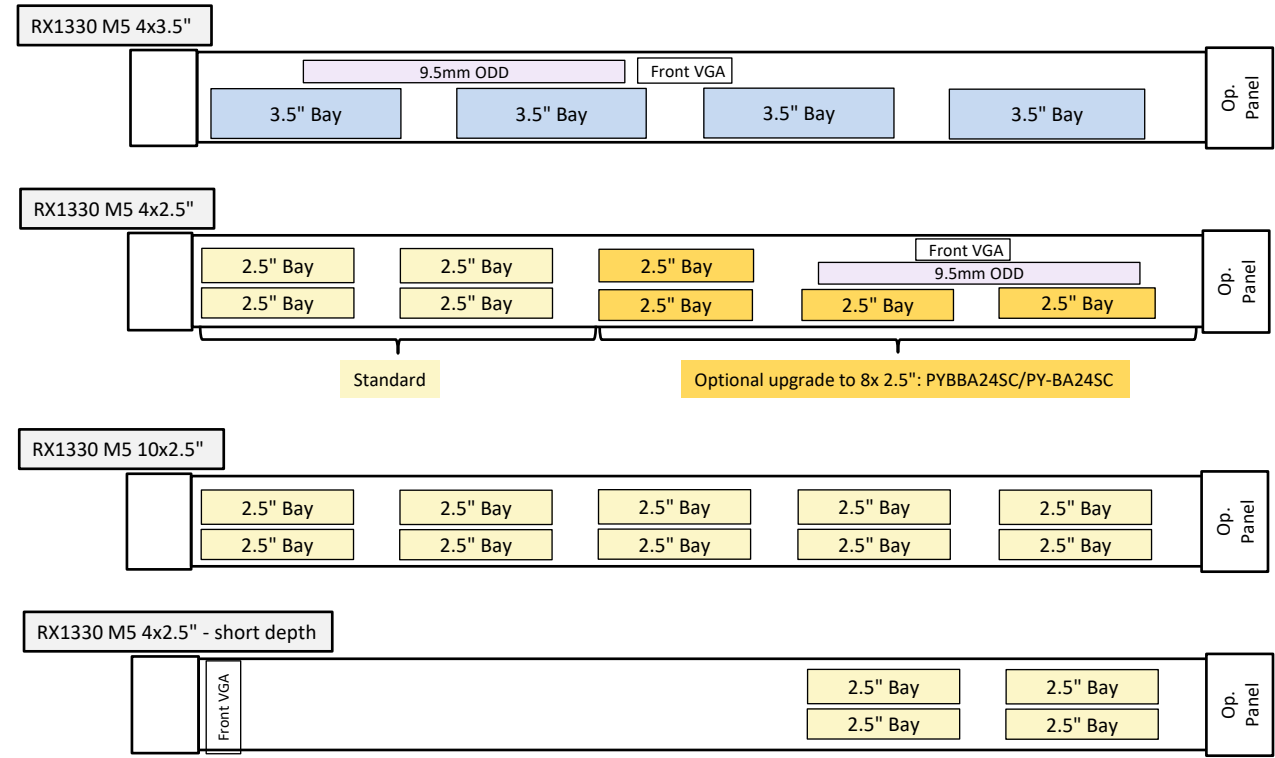
| recommended components for RX1330 M5 | # |
|---|---|
| embedded Lifecycle Management (eLCM) | 1x |

| Chapter 1 - base unit |
|---|

| Start |
|---|

**Power supply units & cooling**
The PRIMERGY RX1330 M5 offer fixed standard 300W power supply with 92% efficiency or bays for 1x or 2x hot plug (opt. redundant) power supply units of 500W/900W with up to 96% efficiency. The PRIMERGY RX1330 M5 is equipped non-hot plug fans (4+1 for redundant PSU).

**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 D3929 based on Chipset Intel® C256
> Xeon E2300 series CPUs and Pentium CPU
Slots: as standard 3 PCIe slots are on Board - please see schematics in "description"
> 3 PCIe slots low profile, 168 mm length, all are mechanically x8
  Slot 1 PCIe-Gen4 x8  - supports modular RAID functions, routed to CPU
  Slot 2 PCIe-Gen3 x4, routed to PCH
  Slot 3 PCIe-Gen4 x8, routed to CPU
The required riser cards for the above configuration are part of the standard delivery.
Slot 3 can also be upgraded to PCIe Gen4 x8 full height, 168mm length (!Slot 2 and it's riser is not available in this case!)
up to 4x NVMe drives 2,5" can be configured
Onboard RAID(Intel VROC(SATA RAID)) 0/1/10 6Gbit/s available for SATA drives
System RAM up to DDR4-3200 MHz
2x2 memory slots for max. 128GB* DDR4 RAM available, Please see folder "CPU" and "RAM" for further details.

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

| Connectivity | |
|---|---|
| Interfaces at rear side | Interfaces at front |
| -1 service LAN RJ45 (1 Gbit) | for base units with up to 8x drives: 2x USB 3.2 Gen1x1 Type A (on "ear"), 1x USB3.2 Gen2x2 Type C |
| - 1x VGA (15 pins) | for base units with 10 drives: 2x USB 3.2 Gen1x1 Type A (on "ear") |
| - 2x USB 3.2 Gen2x1 Type A,  2x USB 2.0 Type A | Interfaces internal |
| - 2x 1GbE LAN | - 1x M.2 SATA 6G/ PCIe x4, 1x M.2 SATA 6G/ PCIe x2 |
| | - 4x SATA 6G for HDD |
| | - 1x SATA 6G for ODD |
| | - 1x USB 3.2 Gen1x1 for MicroSD |

| RX1330 M5 4x 3.5" Rack Server | | |
|---|---|---|
| up to 4x 3.5" drives. D3929 system-board Std. Powersupply *EOL in EMEA market due to Erp Lot9 regulation | | PYR1335R3S |
| up to 4x 3.5" drives. D3929 system-board Red. Powersupply | | PYR1335R3M |

| RX1330 M5 4/8x 2.5" Rack Server | | |
|---|---|---|
| up to 4/8x 2.5" drives. D3929 system-board Std. Powersupply *EOL in EMEA market due to Erp Lot9 regulation | | PYR1335R2S |
| up to 4/8x 2.5" drives. D3929 system-board Red. Powersupply | | PYR1335R2M |
| up to 4x NVMe, up to 4x 2.5" drives. D3929 system-board Red. Powersupply | | PYR1335RAM |

| Upgrade Kit 4x 2.5" to 8x 2.5" | | |
|---|---|---|
| Including HDD cage, backplane and SAS 3.0 cables | PYBBA24SC | PY-BA24SC |

| RX1330 M5 10x 2.5" Rack Server | | |
|---|---|---|
| up to 10x 2.5" drives. D3929 system-board Red. Powersupply | | PYR1335RBM |

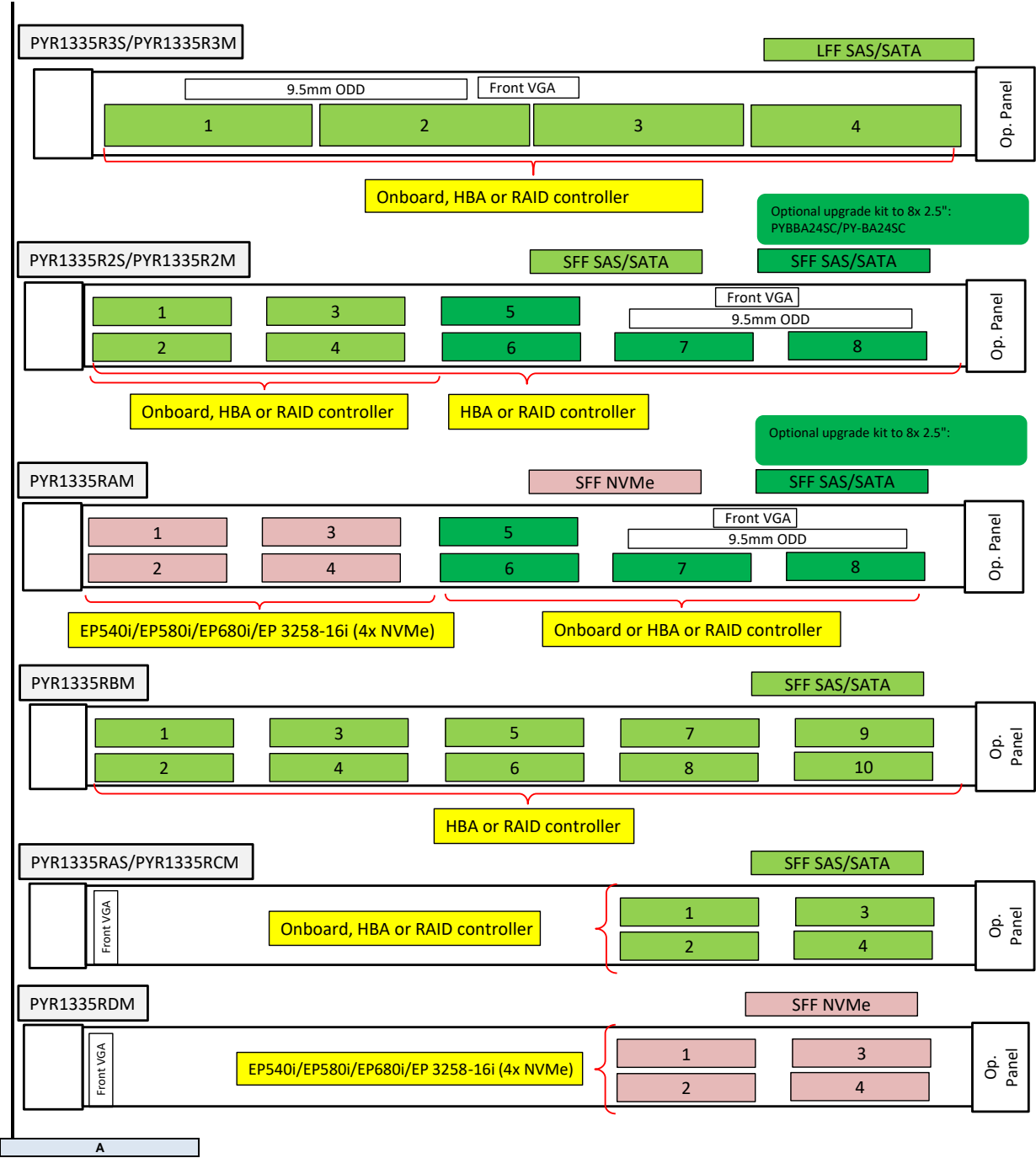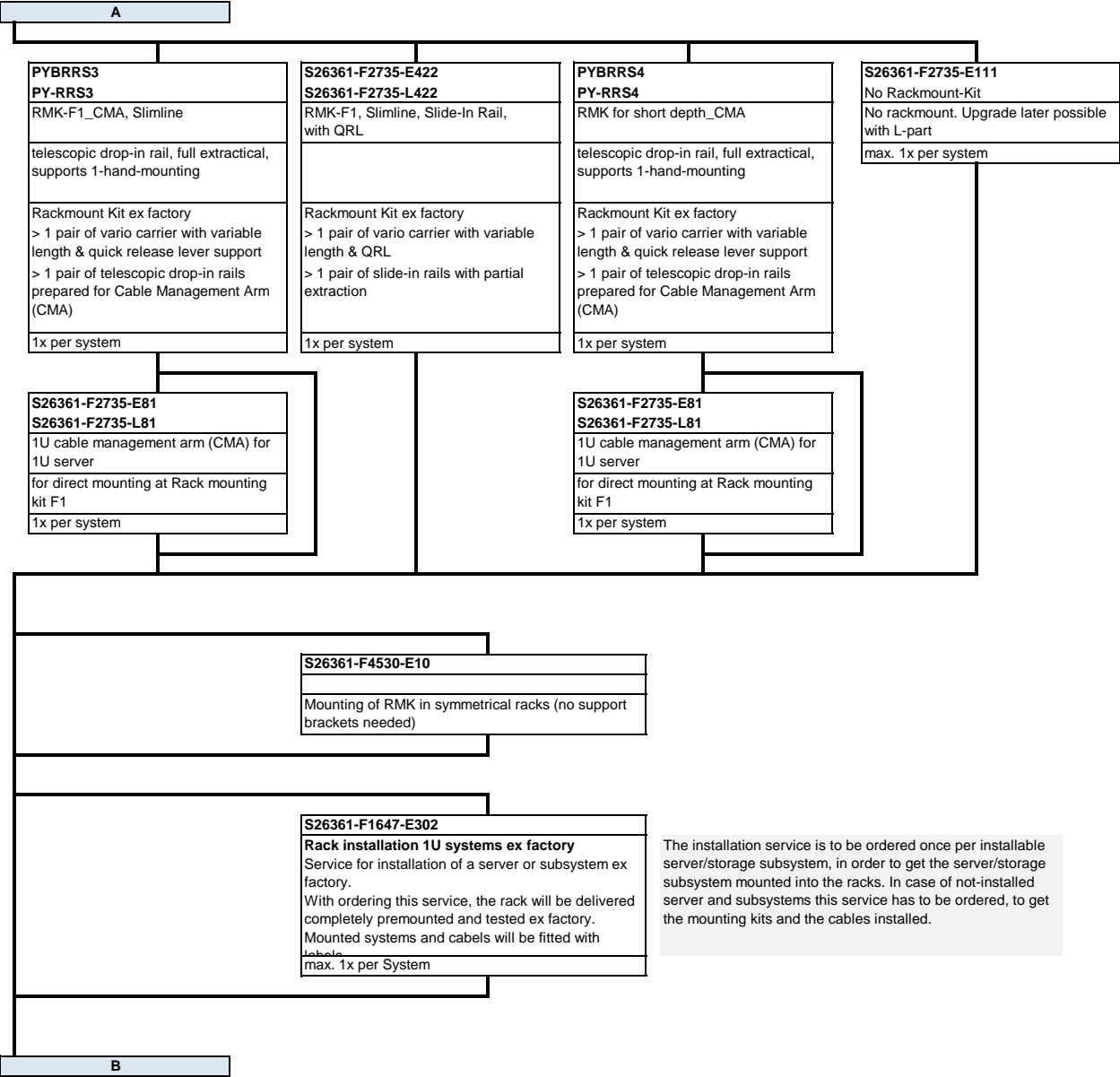| RX1330 M5 4x 2.5" short depth Rack Server | | |
|---|---|---|
| up to 4x 2.5" drives. D3929 system-board Std. Powersupply *EOL in EMEA market due to Erp Lot9 regulation | | PYR1335RAS |
| up to 4x 2.5" drives. D3929 system-board Red. Powersupply | | PYR1335RCM |
| up to 4x NVMe. D3929 system-board Red. Powersupply | | PYR1335RDM |

## PYR1335R3S/PYR1335R3M

LFF SAS/SATA

| 9.5mm ODD | Front VGA | | |
|---|---|---|---|
| 1 | 2 | 3 | 4 |

Onboard, HBA or RAID controller

Optional upgrade kit to 8x 2.5":
PYBBA24SC/PY-BA24SC

## PYR1335R2S/PYR1335R2M

SFF SAS/SATA    SFF SAS/SATA

| 1 | 3 | 5 | Front VGA | |
| 2 | 4 | 6 | 9.5mm ODD | |
| | | | 7 | 8 |

Onboard, HBA or RAID controller    HBA or RAID controller

Optional upgrade kit to 8x 2.5":

## PYR1335RAM

SFF NVMe    SFF SAS/SATA

| 1 | 3 | 5 | Front VGA | |
| 2 | 4 | 6 | 9.5mm ODD | |
| | | | 7 | 8 |

EP540i/EP580i/EP680i/EP 3258-16i (4x NVMe)    Onboard or HBA or RAID controller

## PYR1335RBM

SFF SAS/SATA

| 1 | 3 | 5 | 7 | 9 |
| 2 | 4 | 6 | 8 | 10 |

HBA or RAID controller

## PYR1335RAS/PYR1335RCM

SFF SAS/SATA

Front VGA

Onboard, HBA or RAID controller

| 1 | 3 |
| 2 | 4 |

## PYR1335RDM

SFF NVMe

Front VGA

EP540i/EP580i/EP680i/EP 3258-16i (4x NVMe)

| 1 | 3 |
| 2 | 4 |

A

## Chapter 2 - Rack architecture

**A**

| PYBRRS3 PY-RRS3 | S26361-F2735-E422 S26361-F2735-L422 | PYBRRS4 PY-RRS4 | S26361-F2735-E111 |
|---|---|---|---|
| RMK-F1_CMA, Slimline | RMK-F1, Slimline, Slide-In Rail, with QRL | RMK for short depth_CMA | No Rackmount-Kit |
| telescopic drop-in rail, full extractical, supports 1-hand-mounting | | telescopic drop-in rail, full extractical, supports 1-hand-mounting | No rackmount. Upgrade later possible with L-part |
| | | | max. 1x per system |
| Rackmount Kit ex factory > 1 pair of vario carrier with variable length & quick release lever support > 1 pair of telescopic drop-in rails prepared for Cable Management Arm (CMA) | Rackmount Kit ex factory > 1 pair of vario carrier with variable length & QRL > 1 pair of slide-in rails with partial extraction | Rackmount Kit ex factory > 1 pair of vario carrier with variable length & quick release lever support > 1 pair of telescopic drop-in rails prepared for Cable Management Arm (CMA) | |
| 1x per system | 1x per system | 1x per system | |

| S26361-F2735-E81 S26361-F2735-L81 | S26361-F2735-E81 S26361-F2735-L81 |
|---|---|
| 1U cable management arm (CMA) for 1U server | 1U cable management arm (CMA) for 1U server |
| for direct mounting at Rack mounting kit F1 | for direct mounting at Rack mounting kit F1 |
| 1x per system | 1x per system |

| S26361-F4530-E10 |
|---|
| |
| Mounting of RMK in symmetrical racks (no support brackets needed) |

| S26361-F1647-E302 |
|---|
| **Rack installation 1U systems ex factory** Service for installation of a server or subsystem ex factory. With ordering this service, the rack will be delivered completely premounted and tested ex factory. Mounted systems and cabels will be fitted with labels |
| max. 1x per System |

The installation service is to be ordered once per installable server/storage subsystem, in order to get the server/storage subsystem mounted into the racks. In case of not-installed server and subsystems this service has to be ordered, to get the mounting kits and the cables installed.

**B**

| 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 |
|---|

*) Intel® Turbo Boost Technology is disabled on base units
   with standard power supply
   (PYR1335R3S, PYR1335R2S, PYR1335RAS)

**) not for base units with standard power supply
   (PYR1335R3S, PYR1335R2S, PYR1335RAS)

## 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

| | | order code (BTO) | order code (loose delivery) |
|---|---|---|---|
| **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

The Short depth base unit (**PYR1335RAS / PYR1335RCM / PYR1335RDM** ) does NOT support all GPU cards.

| E |
| --- |

The hight 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.

| ~~PYBVG4T1L~~ ~~(available in June, 2022)~~ | PYBVG4T2L |
| --- | --- |
| ~~PY-VG4T1L~~ ~~(available in June, 2022)~~ | PY-VG4T2L |
| ~~NVIDIA T400~~ | NVIDIA T400 |
| ~~NVIDIA T400~~ | NVIDIA T400 |
| ~~2GB PCIe 3.0 x16~~ | 4GB PCIe 3.0 x16 |
| ~~Connectors: 3x Mini-DP~~ | Connectors: 3x Mini-DP |
| ~~no cable kits included~~ | no cable kits included |
| ~~cable must be ordered seperately~~ | cable must be ordered seperately |
| ~~Low profile bracket~~ | Low profile 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-E13 |
| --- | --- |
| S26361-F4066-L12 | S26361-F4066-L13 |
| DP-VGA ADAPTER | DP-DVI ADAPTER |
| max. 3x per card | max. 3x per card |

| PYBVAP06 | PYBVAP07 |
| --- | --- |
| PY-VAP06 | PY-VAP07 |
| Front VGA connector (15-pin) | Front VGA connector (15-pin) |
| Front VGA connector (15-pin) including cable and front connector | Front VGA connector (15-pin) including cable and front connector |
| not for 10x2.5" and short depth base units | only for short depth base units |
| max. 1x per system | max. 1x per system |

| F |
| --- |

## Chapter 7 - SAS / RAID Controller

| F | See pictures in folder Base 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 explicit 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 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 83cm length | 1x | S26361-F4042-E183 | S26361-F4042-L110 |
|---|---|---|---|
| **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 (for 2nd. Ctrl in PYR1335RAM and for short depth model | 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 explicit 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 |

for base unit PYR1335RAM / PYR1335RDM :    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 explicit 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<br>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<br>(the configuration for up to 4 x4 NVMe drives requires a different order number, please see below)<br>requires 1x LP PCIe 4.0 x8 (int.) slot<br>(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 80cm length | | | 1x | **PYBFBM013** | **PY-FBM01** |
| **FBU Option for PRAID EP325x:** Supercap securing the power supply of the RAID controller in case of power failure including cable with 31cm length (for 2nd. Ctrl in PYR1335RAM) TBD | | | 1x | **PYBFBM011** | **PY-FBM01** |
| **FBU Option for PRAID EP325x:** Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length (for short depth model) | | | 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)<br>requires 1x LP PCIe 4.0 x8 (int.) slot<br>(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 80cm length | | | 1x | **PYBFBM013** | **PY-FBM01** |
| **FBU Option for PRAID EP325x:** Supercap securing the power supply of the RAID controller in case of power failure including cable with 46cm length (for short depth model) | | | 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):<br>standard config: max. 1<br>for PYR1335RAM only:   max. 2x controllers: one PRAID EP540i / EP580i / EP680i NVMe or PRAID EP 3258-16i NVMe for 4x NVMe; onboard or second PRAID EP540i / EP580i / EP680i / EP 3258-16i or first EP520i / EP640i / EP 3252-8i / EP 3254-8i / CP500i / CP600i or first PSAS CP503i / CP600i / CP 2100-8i contr. for 4x SAS/SATA | |
| up to **1x FBU** can be integrated per System<br>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, L-parts Cable kit is required.**<br>Cable Kit for EP6xxi/CP6xxi w/ standard: PY-CBS093 for standard base units<br>Cable Kit for EP6xxi/CP6xxi w/ short: PY-CBS094 for short depth base units | |
| **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

external HBA controller, no 2nd Level cache

| external HBA controllers for SAS HDD or SSD drives | | | | | |
|---|---|---|---|---|---|
| **PSAS CP600e LP** | No Cache | HBA, no RAID | 2x | **PYBSC4FAEL** | **PY-SC4FAE** |
| 16 ports 3, 6 & 12Gb/s SAS/SATA HDD/SSD, 4x SFF8644 (external Mini-SAS HD)<br>requires 1x LP PCIe 4.0 x8 (int.) slot, based on LSI SAS3816 | | | | | |
| external HBA controllers for SAS HDD or SSD drives   -EOL- | | | | | |
| **PSAS CP500e HBA SAS Contr. LP** | No Cache | HBA, no RAID | 2x | **PYBSC3FBEL** | **PY-SC3FBE** |
| 8 ports 3, 6 & 12Gb/s SAS/SATA HDD/ SSD, 2x SFF8644 (external Mini-SAS HD)<br>requires 1x LP PCIe 3.0 x8 (int.) slot, based on LSI SAS3408; IT FW stack without RAID functionality | | | | | |

H

## Chapter 8 - ODD optical disk drives

The base units with up to 8x HDD offer 1x 9.5mm optical drive bay

| I |
|---|
| **Config with 1x 9.5mm bay** |

**No ODD for 10x 2,5" HDD and short depth base units.**

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

| J |
|---|

## Chapter 10 - storage drives

| J |
|---|

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 |
|---|

<p style="text-align:right; color:red;">EOL, as long as stock available</p>

**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. 4x or 10x - 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. 4x or 10x - depending on base unit & configuration | | | | | | | |

<p style="text-align:right; color:red;">EOL, as long as stock available</p>

**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. 4x or 10x - depending on base unit & configuration | | | | | | | |

**SSD SAS 2.5" Mixed Use** (SFF) Enterprise with hot plug/hot replace tray
based on **Kioxia PM7** drives

| Capacity | Formfactor | Interface | Endurance | DWPD | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|---|
| 1.6TB | 2.5" (SFF) | SAS 24Gb/s | Mixed Use | 3 | | | **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. 4x or 10x - depending on base unit & configuration | | | | | | | |

<p style="text-align:right; color:red;">EOL, as long as stock available</p>

**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. 4x or 10x - depending on base unit & configuration | | | | | | | |

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

based on **Kioxia PM7** drives

| Capacity | Formfactor | Interface | Endurance | DWPD | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|---|
| 1.92TB | 2.5" (SFF) | SAS 24Gb/s | Read Intensive | 1 | | | **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. 4x or 10x - 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. 4x or 10x - 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. 4x or 10x - depending on base unit & configuration

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

based on **Micron 5300/5400 MAX** drives (240GB is 5300 MAX only)

| 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. 4x or 10x - 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. 4x or 10x - 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. 4x or 10x - depending on base unit & configuration

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

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

| Capacity | Formfactor | Interface | Endurance | DWPD | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|---|
| 240GB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5 | | S26361-F5783-E240 | S26361-F5783-L240 |
| 480GB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5 | | S26361-F5783-E480 | S26361-F5783-L480 |
| 960GB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5 | | S26361-F5783-E960 | S26361-F5783-L960 |
| 1.92TB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,5 | | S26361-F5783-E192 | S26361-F5783-L192 |
| 3.84TB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 1,2 | | S26361-F5783-E384 | S26361-F5783-L384 |
| 7.68TB | 2.5" (SFF) | SATA 6Gb/s | Read Intensive | 0,6 | | S26361-F5783-E768 | S26361-F5783-L768 |

max. 4x or 10x - 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. 4x or 10x - depending on base unit & configuration | | | | | | |

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 300GB | 10 000 | SAS 12Gb/s | 512n | | S26361-F5729-E130 | S26361-F5729-L130 |
| 600GB | 10 000 | SAS 12Gb/s | 512n | | S26361-F5729-E160 | S26361-F5729-L160 |
| 1.2TB | 10 000 | SAS 12Gb/s | 512n | | S26361-F5729-E112 | S26361-F5729-L112 |
| 300GB | 10 000 | SAS 12Gb/s | 512n | SED | PYBSH301EU | PY-SH301EU |
| 600GB | 10 000 | SAS 12Gb/s | 512n | SED | PYBSH601EU | PY-SH601EU |
| 1.2TB | 10 000 | SAS 12Gb/s | 512n | SED | PYBSH121EU | PY-SH121EU |
| max. 4x or 10x - depending on base unit & configuration | | | | | | |

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 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. 4x or 10x - depending on base unit & configuration | | | | | | |

EOL, as long as stock available

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 1TB | 7 200 | SATA 6Gb/s | 512n | | S26361-F3956-E100 | S26361-F3956-L100 |
| 2TB | 7 200 | SATA 6Gb/s | 512n | | S26361-F3956-E200 | S26361-F3956-L200 |
| max. 4x or 10x - 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. 4x or 10x - depending on base unit & configuration | | | | | | |

K

| K |
|---|

**3.5" (LFF) SATA SSD**

The SSDs not released with PRAID CP500i

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

based on **Samsung PM897a** drives

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

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

max. 4x - depending on base unit & configuration

EOL, as long as stock available

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

based on **Samsung PM897** drives

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

max. 4x - depending on base unit & configuration

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

based on **Micron 5300/5400 MAX** drives (240GB is 5300 MAX only)

| 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. 4x - depending on base unit & configuration

The SSDs not released with PRAID CP500i

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

based on **Samsung PM893a** drives

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

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

max. 4x - depending on base unit & configuration

EOL, as long as stock available

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

based on **Samsung PM893** drives

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

max. 4x - depending on base unit & configuration

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

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

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

max. 4x - depending on base unit & configuration

3.5" (LFF) Hard drives

EOL, as long as stock available

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 300GB | 15 000 | SAS 12Gb/s | 512n | HD_SSD | S26361-F5726-E530 | S26361-F5726-L530 |
| 600GB | 15 000 | SAS 12Gb/s | 512n | | S26361-F5726-E560 | S26361-F5726-L560 |
| 900GB | 15 000 | SAS 12Gb/s | 512n | | S26361-F5532-E590 | S26361-F5532-L590 |
| max. 4x - depending on base unit & configuration | | | | | | |

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 2TB | 7 200 | SAS 12Gb/s | 512n | | PYBCH2T7G4 | PY-CH2T7G4 |
| 4TB | 7 200 | SAS 12Gb/s | 512n | | PYBCH4T7G4 | PY-CH4T7G4 |
| max. 4x - 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 | EOL, as long as stock available | PYBCHET7B6 | PY-CHET7B6 |
| 16TB | 7 200 | SAS 12Gb/s | 512e | | S26361-F5571-E160 | S26361-F5571-L160 |
| 18TB | 7 200 | SAS 12Gb/s | 512e | EOL, as long as stock available | PYBCHJT7B2 | PY-CHJT7B2 |
| 6TB | 7 200 | SAS 12Gb/s | 512e | SED | PYBCH6T7BU | PY-CH6T7BU |
| 8TB | 7 200 | SAS 12Gb/s | 512e | SED | S26361-F5584-E800 | S26361-F5584-L800 |
| 12TB | 7 200 | SAS 12Gb/s | 512e | SED | PYBCHCT7BW | PY-CHCT7BW |
| 14TB | 7 200 | SAS 12Gb/s | 512e | SED EOL, as long as stock available | 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 EOL, as long as stock available | PYBCHJT7BT | PY-CHJT7BT |
| max. 4x - depending on base unit & configuration | | | | | | |

L

**L**

**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 | EOL, as long as stock available | PYBBH1T7B9 | PY-BH1T7B9 |
| 2TB | 7 200 | SATA 6Gb/s | 512n | | PYBBH2T7B9 | PY-BH2T7B9 |
| 4TB | 7 200 | SATA 6Gb/s | 512n | | PYBBH4T7B9 | PY-BH4T7B9 |

max. 4x - depending on base unit & configuration

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

| Capacity | RPM | Interface | Sector | | order code E-part | order code L-part |
|---|---|---|---|---|---|---|
| 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 | EOL, as long as stock available | PYBBHCT7E4 | PY-BHCT7E4 |
| 14TB | 7 200 | SATA 6Gb/s | 512e | EOL, as long as stock available | PYBBHET7E4 | PY-BHET7E4 |
| 16TB | 7 200 | SAS 12Gb/s | 512e | EOL, as long as stock available | S26361-F3904-E160 | S26361-F3904-L160 |
| 18TB | 7 200 | SAS 12Gb/s | 512e | EOL, as long as stock available | PYBBHJT7E2 | PY-BHJT7E2 |

max. 4x - 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" (SFF) PCIe-SSD | 2.5" PCIe-SSDs require a RAID Controller |
|---|---|

**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

**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

| M |
|---|

## Chapter 11 - Communications / Ethernet Network Components

| M |
|---|

PRIMERGY RX1330 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. 2x 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. 2x adapters per system | | | | |

| 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. 3x 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. 2x adapters per system | | | | |

| Intel 10GbE for PCIe | | | | |
|---|---|---|---|---|
| Each cage consumes 1x optical SFP+ transceiver per port.<br>Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.<br>**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 |
| **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 | | | | |

| Broadcom 10GbE for PCIe | | | | |
|---|---|---|---|---|
| Each cage consumes 1x optical SFP+ transceiver per port.<br>Dual rate 10G/1G support requires 10G/1G Dual Rate SFP+ Optical Transceiver Modules.<br>**All ports on this card need to install the same Parts Number of optical module.** | | | | |
| 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.<br>Intel adapters support 1Gbps line rate per-port in addition, with the Intel-branded 10G/1G Dual Rate SFP+ Optical Transceiver Modules.<br>**All ports on this card need to install the same Parts Number of optical module.**<br>**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 Optical Transceiver 25G SR E25GSFP28SRX LC | 2x | MMF / SR SFP28 module, Intel. Max reach supported 30m | PYBSFPS56 | PY-SFPS56 |
| *max. 1x per port* | | | | |
| **Optional, 10Gb SFP+ optical transceiver module, each cage consumes one.** | | | | |
| SFP+ Optical Transceiver 10G/1G Dual Rate SR | 2x | Intel, 1G/10G SR SFP+ | | S26361-F3986-L5 |
| SFP+ Optical Transceiver 10G/1G Dual Rate LR | 2x | Intel, 1G/10G LR SFP+ | | S26361-F3986-L6 |
| *max. 1x per port* | | | | |
| max. 3x adapters per system | | | | |
| | | | | |
| Mellanox 25GbE for PCIe | | | | |
| Each cage consumes 1x optical SFP28 or SFP+ transceiver per port.<br>**All ports on this card need to install the same Parts Number of optical module.**<br>**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, each cage consumes one.** | | | | |
| 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. 3x adapters per system | | | | |

N

## Chapter 12 - Communications / Fibre Channel Components

N

Fibre Channel PCIe Adapters

| 32Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3) | | | | |
|---|---|---|---|---|
| PFC EP LPe35002 2x 32Gb LP | 2x | Broadcom, 32GFCx2port | PYBFC422L | PY-FC422 |
| PFC EP LPe35000 1x 32Gb LP | 2x | Broadcom, 32GFCx1port | PYBFC421L | PY-FC421 |
| PFC EP QLE2772 2x 32Gb LP | 2x | Marvell, 32GFCx2port | PYBFC412L | PY-FC412 |
| PFC EP QLE2770 1x 32Gb LP | 2x | Marvell, 32GFCx1port | PYBFC411L | PY-FC411 |
| 16Gb Fibre Channel adapter with LC interface for 50µm optical cables (OM4 or OM3) | | | | |
| PFC EP LPe31002 2x 16Gb LP | 2x | Broadcom, 16GFCx2port | S26361-F5596-E202 | S26361-F5596-L502 |
| PFC EP LPe31000 1x 16Gb LP | 2x | Broadcom, 16GFCx1port | S26361-F5596-E201 | S26361-F5596-L501 |
| PFC EP QLE2692 2x 16Gb LP | 2x | Marvell, 16GFCx2port | S26361-F5580-E202 | S26361-F5580-L502 |
| PFC EP QLE2690 1x 16Gb LP | 2x | Marvell, 16GFCx1port | S26361-F5580-E201 | S26361-F5580-L501 |
| max. 2 adapters per system (mixed configurations are supported) | | | | |

O

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

| M |
| --- |

**Power supply unit**

**modular redundant Power Supply**

PSU for redundancy

occupies hot plug PSU slot, min. 1 / max. 2x per system

input nominal voltage (AC): 100V-240V, max: 90V-264V; input dropout 10ms/100% load, 47Hz-63Hz

| | | | | | |
| --- | --- | --- | --- | --- | --- |
| **500W platinum PSU** | 94% eff. | Connector type: C13 | | PYBPU501 | PY-PU501 |
| **500W titanium PSU** | 96% eff. | Connector type: C13, nom. 220-240V, max. 180-264V | *available from 2022, Dec. | PYBPU503 | PY-PU503 |
| **900W platinum PSU** | 94% eff. | Connector type: C13 *not support for short depth base units | | PYBPU902 | PY-PU902 |
| **900W titanium PSU** | 96% eff. | Connector type: C13, nom. 220-240V, max. 180-264V *not support for short depth base units | | PYBPU901 | PY-PU901 |

**FJBU: 4 min. backup time for gracefull shutdown, max 1 per system**

| | | | |
| --- | --- | --- | --- |
| **Fujitsu Battery Unit** | 380W(peak), 280W(continuous) 12V battery module | PYBBBG04 | PY-BBG04 |

**Dummy module instead PSU**

| | |
| --- | --- |
| **Dummy module** for closing the 2nd PSU hole, in case only 1 PSU is equipped, max. 1x per system | S26113-F574-E99 |

**FJBU: 4 min. backup time for gracefull shutdown, max 1 per system** *will be available CY2023, 1Q.

**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 | |

**Std to Redundant PSU Upgrade Kit**

| | |
| --- | --- |
| includes PSU cage and power backplane | PY-TKPC03 |

| **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, Italian, | S26361-F1452-E140 | - | (Sales region for EMEIA 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** | 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 | - |

| N |
| --- |

## Chapter 15 - Accessories

| N |
|---|

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

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

| O |
|---|

## Chapter 16 - others (Energy Star restrictions)

P

| will be expired after 2024-1-11 | will be effective after 2024-1-12 |
|---|---|

**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

**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
use total 16GB or more DIMMs
do not use more than 8x 2.5" (SFF) HDD, SSD      *10x 2.5" base unit is not supported.
do not use more than two PCIe cards (RAID, LAN, …) (two is ok)
4x 2.5" SAS/SATA short depth base units are not supported.

<ENERGY STAR V4.0 / PYBES21>
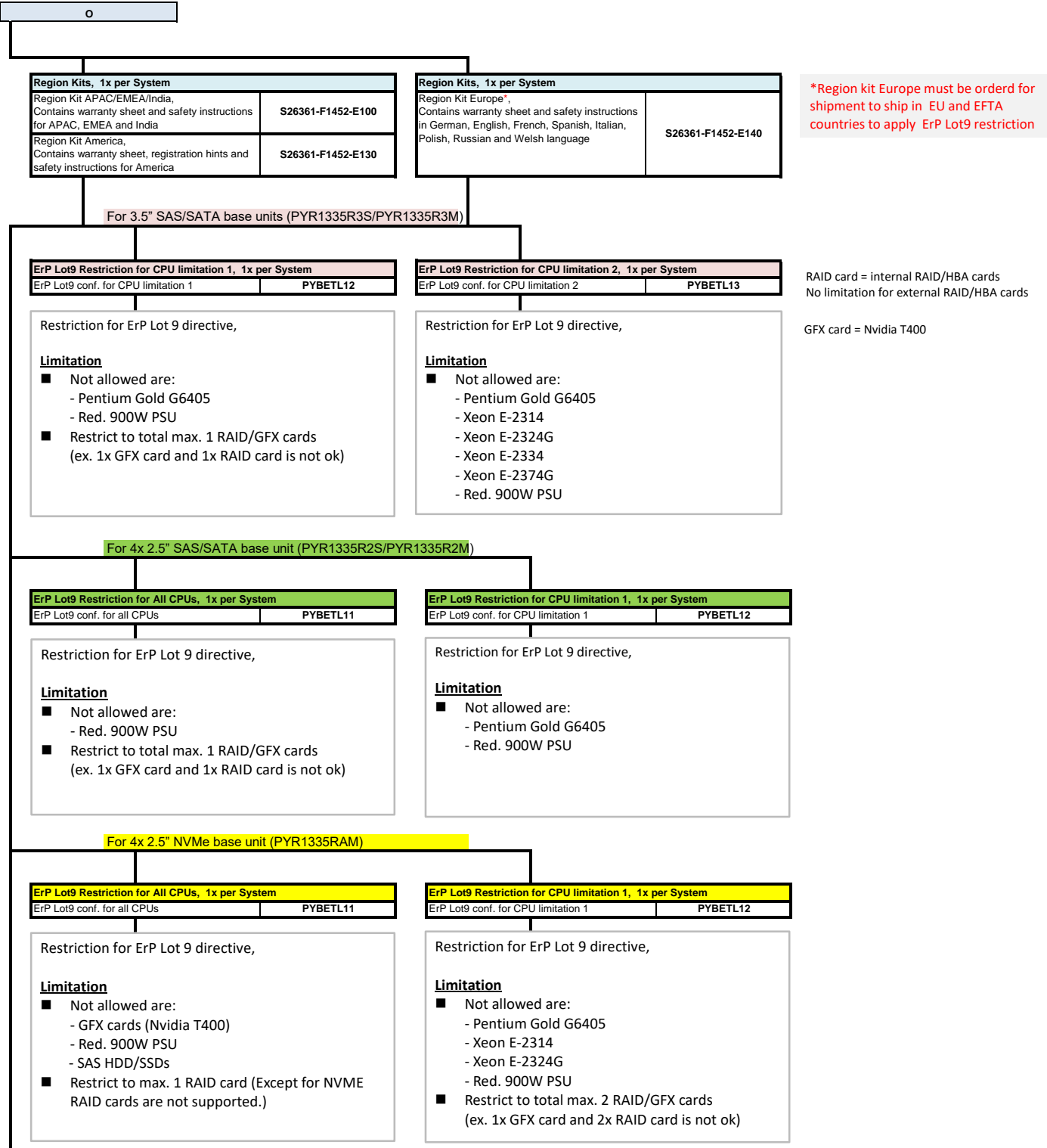use one of the following CPUs : Xeon E-2378G/E-2388G
use total 64GB or more DIMMs
use less than five SATA SSDs(Max. 4x: including M.2 SSD) / do not use any HDDs
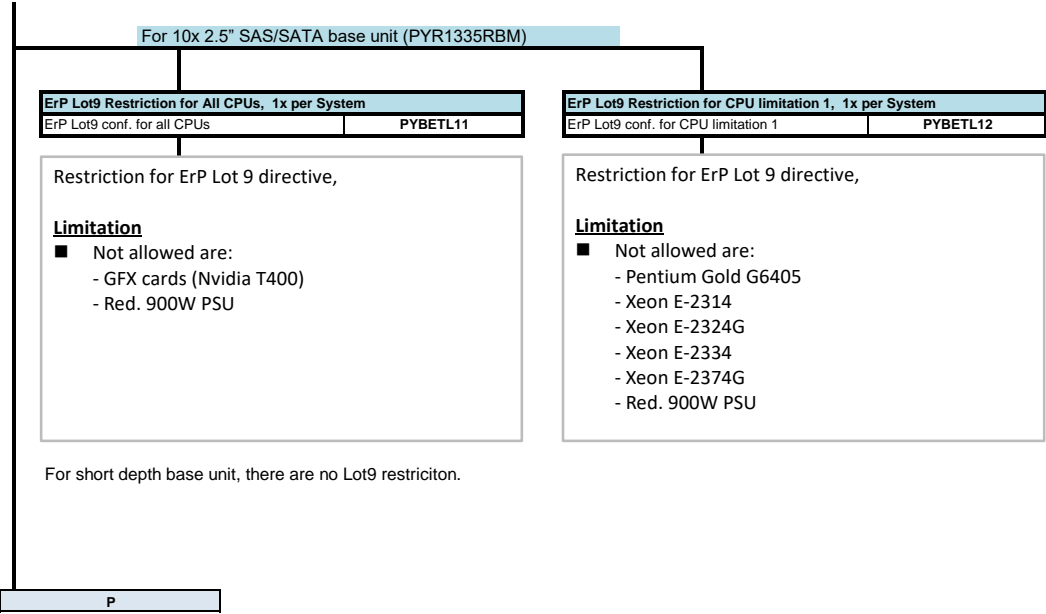do not use any PCIe cards (RAID, LAN, …)

ENERGY STAR-configurationen will be labeld:        PRIMERGY RX1330 M5 E-Star Fam1
non ENERGY STAR-configurationen will be labeld:    PRIMERGY RX1330 M5


Serial port option is not relevant for E-Star

Q

## 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

### For 3.5" SAS/SATA base units (PYR1335R3S/PYR1335R3M)

| ErP Lot9 Restriction for CPU limitation 1, 1x per System | |
|---|---|
| ErP Lot9 conf. for CPU limitation 1 | PYBETL12 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - Pentium Gold G6405
  - Red. 900W PSU
- Restrict to total max. 1 RAID/GFX cards
  (ex. 1x GFX card and 1x RAID card is not ok)

| ErP Lot9 Restriction for CPU limitation 2, 1x per System | |
|---|---|
| ErP Lot9 conf. for CPU limitation 2 | PYBETL13 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - Pentium Gold G6405
  - Xeon E-2314
  - Xeon E-2324G
  - Xeon E-2334
  - Xeon E-2374G
  - Red. 900W PSU

RAID card = internal RAID/HBA cards
No limitation for external RAID/HBA cards

GFX card = Nvidia T400

### For 4x 2.5" SAS/SATA base unit (PYR1335R2S/PYR1335R2M)

| ErP Lot9 Restriction for All CPUs, 1x per System | |
|---|---|
| ErP Lot9 conf. for all CPUs | PYBETL11 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - Red. 900W PSU
- Restrict to total max. 1 RAID/GFX cards
  (ex. 1x GFX card and 1x RAID card is not ok)

| ErP Lot9 Restriction for CPU limitation 1, 1x per System | |
|---|---|
| ErP Lot9 conf. for CPU limitation 1 | PYBETL12 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - Pentium Gold G6405
  - Red. 900W PSU

### For 4x 2.5" NVMe base unit (PYR1335RAM)

| ErP Lot9 Restriction for All CPUs, 1x per System | |
|---|---|
| ErP Lot9 conf. for all CPUs | PYBETL11 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - GFX cards (Nvidia T400)
  - Red. 900W PSU
  - SAS HDD/SSDs
- Restrict to max. 1 RAID card (Except for NVME RAID cards are not supported.)

| ErP Lot9 Restriction for CPU limitation 1, 1x per System | |
|---|---|
| ErP Lot9 conf. for CPU limitation 1 | PYBETL12 |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
  - Pentium Gold G6405
  - Xeon E-2314
  - Xeon E-2324G
  - Red. 900W PSU
- Restrict to total max. 2 RAID/GFX cards
  (ex. 1x GFX card and 2x RAID card is not ok)

For 10x 2.5" SAS/SATA base unit (PYR1335RBM)

| ErP Lot9 Restriction for All CPUs, 1x per System | |
|---|---|
| ErP Lot9 conf. for all CPUs | **PYBETL11** |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
    - GFX cards (Nvidia T400)
    - Red. 900W PSU

| ErP Lot9 Restriction for CPU limitation 1, 1x per System | |
|---|---|
| ErP Lot9 conf. for CPU limitation 1 | **PYBETL12** |

Restriction for ErP Lot 9 directive,

**Limitation**
- Not allowed are:
    - Pentium Gold G6405
    - Xeon E-2314
    - Xeon E-2324G
    - Xeon E-2334
    - Xeon E-2374G
    - Red. 900W PSU

For short depth base unit, there are no Lot9 restriciton.

| P |
|---|

## Chapter 16 - others

**Q**

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

iRMC S6 (integrated Remote Management Controller) onboard server mgmt with dedicated 10/100/1000 LAN-port and integrated graphics controller.

| 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 |

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.

| 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 | cancelled to release the E-parts |
| 128GB | SDXC | ~~PYBMD12R1~~ | PY-MD12R1 | cancelled to release the E-parts |
| max. 1x per system, instead of 16GB MicroSD card | | | | |

| 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

95W CPU: no ATD40 or ATD45

Nvidia T400: no ATD40 or ATD45

Fujitsu Battery Unit: no ATD40 or ATD45

PYR1335R3S, PYR1335R2S (std. PSU base units)  does not support ATD45

PYR1335RBM (10xSFF) does not support ATD45

PYR1335RAS, PYR1335RCM, PYR1335RDM (short depth) does not support ATD45

| PYR1335R3S | PYR1335R3M | PYR1335R2S | PYR1335R2M | PYR1335RBM | PYR1335RAM |
|---|---|---|---|---|---|
| std | red | std | red | red | red |
| LFF | LFF | SFF | SFF | 10xSFF | NVMe, SFF |
| ATD40 | ATD40 | ATD40 | ATD40 | ATD40 | ATD40 |
| | ATD45 | | ATD45 | | ATD45 |

| PYR1335RAS | PYR1335RCM | PYR1335RDM |
|---|---|---|
| std | red | red |
| SFF | SFF | SFF |
| ATD40 | ATD40 | ATD40 |
| | | |

ℹ️ TPM module must not order for China region.

| S26361-F3552-E100 [EOL]<br>S26361-F3552-L100 | PYBTPM16<br>PY-TPM16 | PYBNTPM<br>No TPM for WINSVR |
|---|---|---|
| TPM 2.0 Module | TPM 2.0 Module | Either PYBTPM16 or PYBNTPM is required with Windows Server 2022 |
| Microsoft Windows Server 2022 not support | ~~Microsoft Windows Server 2022 only suppor~~ | |
| max. 1x per system | required for Microsoft Windows Server 2022 | max. 1x per system |
| | 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.
Support OS may vary by system.

S26361-F3552-E100/L100 are EOL at end-Sep 2022.
PYBTPM16/PY-TPM16 are currently available

| PYBCOM09<br>PY-COM09 |
|---|
| serial port (RS232) |
| mounted on a low profile PCIe slot, max. 1x per system |
| max. 1x per system |

| PYBPRE847<br>PY-PRE847 |
|---|
| Full height riser card kit |
| Offers 1x FH PCIe 4.0 x8 slot, 1x full height PCIe cards with max. 168mm lenght |
| will be inserted instead of Slot 2 and Slot 3 |
| will be inserted into Slot 3 PCIe 4.0 x8 |
| max. 1x per system |

| PYBFOP10<br>PY-FOP06 |
|---|
| 1U Front Bezel |
| |
| 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 CPU cache size of Xeon E-2388G |
| 22.04.2022 | | HD_SSD | corrected the the description about "as soon as available" for SAS 16TB and SAS SED 16TB |
| 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 |
| 19.05.2022 | | base, RAID | added PRAID CP600i, PSAS CP600i/e, PRAID EP640i/EP680i/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 |
| 17.06.2022 | 1,08 | change_history | Introduce this history table with a new style |
| 27.06.2022 | 1,09 | RAID | added Cable Kit for EP6xxi/CP6xxi: PY-CBS093 and PY-CBS094 |
| 14.07.2022 | 1.10 | LAN | Added Broadcom LAN. PYBLA284L,PY-LA284 PYBLA3K2L,PY-LA3K2 PYBLA3J2L,PY-LA3J2 |
| 01.08.2022 | 1.11 | PSU | added new Titanium PSUs PYBPU503, PY-PU503, PY-PU503B8 |
| 08.08.2022 | 1.12 | LAN | Released some LAN cards. S26361-F4610-E204/S26361-F4610-L504 PYBLA344L/PY-LA344 |
| 22.08.2022 | 1.13 | others | updated Notes for TPM2.0 |
| 25.08.2022 | 1,14 | HD_SSD | removed the description "as soon as available" according T50 report |
| 30.08.2022 | 1,15 | LAN/FC | Released LAN/FC cards. PY-LA402/PYBLA402L PY-FC412/PYBFC412L PY-FC411/PYBFC411L S26361-F5580-E202/L502 S26361-F5580-E201/L501 |
| 26.09.2022 | 1.16 | HD_SSD | updated Notes on max. No for M.2 SATA SSD updated Notes for PDUAL CP100 |
| 26.09.2022 | 1.16 | RAID | added SLES15 SP4 to OS support matrix for SW-RAID updated FBU description to add EP6xx S26361-F4042-E155/E183, S26361-F4042-L110 |
| 05.10.2022 | 1.17 | base, PSU | added new titanium PSUs PYBPU901 / PY-PU901 |
| 21.10.2022 | 1,18 | 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 M.2 SSD SATA 960GB "PY*MF96YN" |
| 27.10.2022 | 1,19 | RAID, PSU | Corrected the description for S26361-F4042-E155 Updated the description for FJBU |
| 02.11.2022 | 1.20 | RAID | updated the description for S26361-F4042-E155 |
| 04.11.2022 | 1.21 | HD_SSD | added RAID PRESET option S26361-F5659-E13 |
| 04.11.2022 | 1.21 | RAID | added RHEL 9 GA to OS support matrix for SW-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 PYBFBM011, PYBFBM012, PYBFBM013, PY-FBM01 |
| 04.11.2022 | 1.21 | base | added PRAID EP 3258-16i NVMe |
| 03.02.2023 | 1.22 | RAID | added RHEL 8.7 to OS support matrix for SW-RAID updated availability schedules |
| 21.02.2023 | 1,23 | PSU | added order code of Fujitsu Battery Unit PYBBBG04 / PY-BBG04 |
| 13.03.2023 | 1.24 | RAID | updated availability schedules updated Note about PSAS CP 2100-8i mixed configurations |
| 18.04.2023 | 1.25 | RAID | updated availability schedules |
| 15.05.2023 | 1.26 | RAID | added RHEL 9.1 to OS support matrix for SW-RAID updated availability schedules |
| 19.05.2023 | 1,27 | PSU, others | removed the description "will be available in CY2023, 2Q." about Fujitsu Battery Unit updated general rules for ATD40 and ATD45 |
| 22.05.2023 | 1.28 | HD_SSD | removed the BC-SATA/SAS 20TB due to release cancel updated availability schedules |
| 13.06.2023 | 1.29 | GFX | add L4LP card and updated availability schedules |
| 15.06.2023 | 1.30 | RAID | cancelled PSAS CP600i, PSAS CP600e, PRAID CP600i, PRAID EP 3252-8i, PRAID EP 3254-8i, PRAID EP 3258-16i, PRAID EP 3258-16i NVMe |
| 31.07.2023 | 1.31 | HD_SSD | added the PCIe-SSD "Kioxia CM7 series" |
| 31.07.2023 | 1.32 | HD_SSD | revised the order codes for Kioxia CM7 15.36TB |
| 07.08.2023 | 1.33 | RAID | added RHEL 8.8, 9.2 and SLES15 SP5 to OS support matrix for SW-RAID |
| 23.08.2023 | 1,34 | GFX | delete L4LP card. |
| 07.09.2023 | 1,35 | HD_SSD | added the EOL status for HDD SAS 15K and HDD 2.5" BC-SATA/SAS |
| 19.09.2023 | 1,36 | Energy Star restrictions | added E-Star Fam1 Certification for ENERGY STAR V4.0 |
| 22.09.2023 | 1,37 | HD_SSD | updated availability schedules added the following drives as new products -Samsung PM897a/PM893a as SSD SATA |
| 02.10.2023 | 1,38 | RAM, others | Add new order code for 8GB UDIMM, and current BTO order code will be EOL Add new TPM |
| 13.10.2023 | 1,39 | HD_SSD | updated the EOL information for PCIe4-SSD |
| 24.10.2023 | 1.40 | CPU | added remark about Intel® Turbo Boost Technology |
| 30.10.2023 | 1,41 | HD_SSD | revised the information about 2.5" SSD SATA for Samsung PM893a/PM897a |
| 06.11.2023 | 1.42 | RAID | updated Note for onboard SATA SW-RAID |
| 20.11.2023 | 1.43 | Energy Star restrictions | added the guidelines for ENERGY STAR V4.0 |
| 01.12.2023 | 1.44 | Description | added embedded Lifecycle Management (eLCM) to recommended components |

| 05.12.2023 | 1.45 | LAN | Deleting unnecessary information. Deleting 10G SFP E part numbers from the table of 25G cards because they are not orderable. |
|------------|------|-----|-----|
| 19.12.2023 | 1.46 | RAM | update PYBME08UG2 which is EOLed |
| 20.12.2023 | 1.47 | RAM | update PYBME08UG2 EOL date |
| 22.12.2023 | 1.48 | RAM | change PYBME08UG2 EOL date |
| 16.02.2024 | 1.49 | others | added the iRMC MicroSD card option for eLCM |
| 01.03.2024 | 1.50 | HD_SSD | added the restriction for SSD SATA PM893a/PM897a updated availability schedule |
| 04.03.2024 | 1.51 | others | remove PY-TPM19 and PYBTPM19 add PYBNTPM and information |
| 07.03.2024 | 1.52 | RAID | resumed PSAS CP600e |
| 25.03.2024 | 1.53 | others | revised the description about iRMC MicroSD card option for eLCM |
| 08.04.2024 | 1.54 | RAID | changed PSAS CP500e to EOL |
| 25.04.2024 | 1.55 | HD_SSD | updated availability schedule |
| 03.06.2024 | 1.56 | HD_SSD | updated EOL schedule |
| 27.08.2024 | 1.57 | HD_SSD | added Kioxia PM7 as SSD SAS for L-parts |
| 26.09.2024 | 1.58 | HD_SSD | added the EOL information for 3.5" HDD 7.2K SAS/SATA drives |
| 30.09.2024 | 1.59 | others | updated the avalability status and order codes for iRMC MicroSD card |
| 08.01.2025 | 1.60 | HD_SSD | updated the EOL information for HDD 3.5" BC-SATA 1TB |