FUJITSU

PRIMERGY TX200 S7

System configurator and order-information guide

April 2014

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Change report

PRIMERGY Server

Instructions

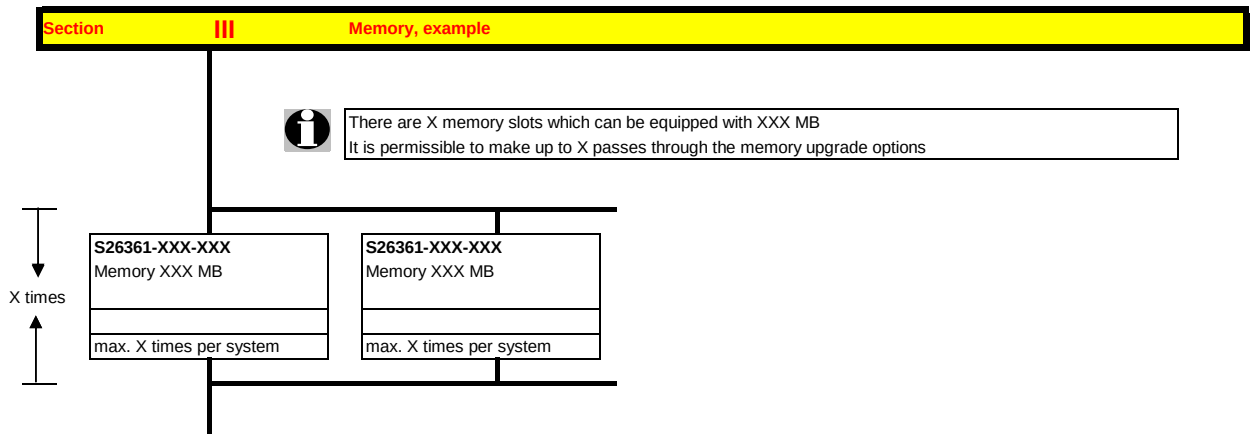
This document contains basic product and configuration information that will enable you to configure your system via PC-/System-Architect

Only these tools will ensure a fast and proper configuration of your PRIMERGY server or your complete PRIMERGY Rack system.

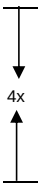
You can configure your individual PRIMERGY server in order to adjust your specific requirements.

The System configurator is divided into several chapters that are identical to the current price list and PC-/System-Architect.

Please follow the lines. If there is a junction, you can choose which way or component you would like to take. Go through the configurator by following the lines from the top to the bottom.



In one chapter you can only select as many components (here 4x) as the arrow indicates.



Please note that there are information symbols which indicate necessary information.

Further information in the internet see:

http://ts.fujitsu.com/products/standard_servers/index.html (internet)

https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx (extranet)

Prices and availability see price list and PC-/System-Architect.
Subject to change and errors excepted.

Configuration diagram PRIMERGY TX200 S7 SATA LFF (3.5") System Unit

System unit (I)

SIDE VIEW

red. Fan / PSU Kit

1. PSU

2. PSU
(red. + hot plug)

or

standard
Power
Supply

std. PSU + std. Fans
or
red. hp PSU + red. Fans
Depending on Base Unit

Fan4 for Redundancy

Processor (II)

1st Xeon 4C, 6C or 8C CPU incl. Heatpipe

2nd Xeon 4C, 6C or 8C CPU incl. Heatpipe

II / A | II / B | II / C | II / D | II / E | II / F

I / A | I / B | I / C | I / D | I / E | I / F

Memory (III)

each CPU offers 2 Banks (I and II) with 3 Channels each
Channels D, E, F are only available if 2nd CPU is configured

6 PCI-Busses

Extension slots

SAS Controller (VII)
Disk Array (VIII)
Communication/Network (IX)
Miscellaneous (X)

6.) Slot 6 PCIe-3 x16,170 mm @ CPU2
this slot is only available with 2 CPUs implemented

5.) Slot5 PCIe-3 x4, 280 mm @ CPU1
Possibility to install PCIe x8 cards; 1st pref. RAID Slot

4.) Slot 4 PCIe-3 x16, 280 mm @ CPU1

3.) Slot 3 PCIe-3 x4, 280 mm @ CPU1
Possibility to install PCIe x8 cards

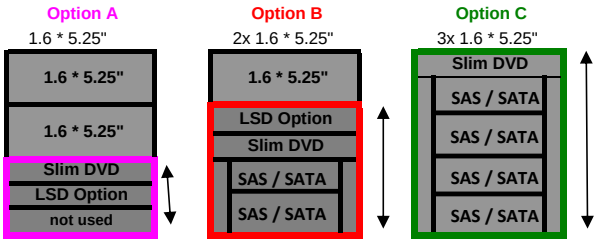
2.) Slot 2 PCIe-2 x4, 235 mm @ PCH
Possibility to install PCIe x8 cards; 2nd pref. RAID Slot

1.) Slot 1 (5V): PCI 32-Bit/33MHz, 280mm @ PCH

FRONT VIEW

3 x 5.25" bays available

3 x HH 5.25" free or **2 x HH 5,25" free + Option A** or
1 x HH 5,25" free + Option B or
0 x HH 5.25" free + Option C



Accessible drives (V)

Mounting Kit DVD(sl) + LSP/LSD: (Option A)
- support for SL (0.5") DVD Drive + LSD (Local Service Display)
- occupies one 5.25" bay

MtK DVD(sl) + LSP/LSD + 2x SAS/SATA LFF HDD: (Option B)
- support for 2x 3.5" SAS/SATA HDD hot plug
  + support for SL (0.5") DVD Drive + LSD (Local Service Display)

MtK DVD(sl) + 4x SAS/SATA LFF HDD: (Option C)
- support for 4x 3.5" SAS/SATA HDD hot plug
  + support for SL (0.5") DVD Drive

Hard disk drives (VI)

3x 120 mm Fans (no redundancy)

Fan 3
Fan 2
Fan 1

4 port SAS Backplane

4x 3.5" HDD Frame

3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA
3.5"x1" SAS or SATA

Key:

Included in basic unit

Option

Configuration diagram PRIMERGY TX200 S7 SFF (2.5") System Unit

System unit (I)

SIDE VIEW

red. Fan / PSU Kit

1. PSU

2. PSU
(red. + hot plug)

or

standard
Power
Supply

std. PSU + std. Fans
or
red. hp PSU + red. Fans
Depending on Base Unit

Fan4 for Redundancy

Processor (II)

1st Xeon 4C, 6C or 8C CPU incl. Heatpipe

2nd Xeon 4C, 6C or 8C CPU incl. Heatpipe

II / A | II / B | II / C | II / D | II / E | II / F

I / A | I / B | I / C | I / D | I / E | I / F

Memory (III)

each CPU offers 2 Banks (I and II) with 3 Channels each
Channels D, E, F are only available if 2nd CPU is configured

6 PCI-Busses

Extension slots

SAS Controller (VII)
Disk Array (VIII)
Communication/Network (IX)
Miscellaneous (X)

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this slot is only available with 2 CPUs implemented

5.) Slot5 PCIe-3 x4, 280 mm @ CPU1
Possibility to install PCIe x8 cards; 1st pref. RAID Slot

4.) Slot 4 PCIe-3 x16, 280 mm @ CPU1

3.) Slot 3 PCIe-3 x4, 280 mm @ CPU1
Possibility to install PCIe x8 cards

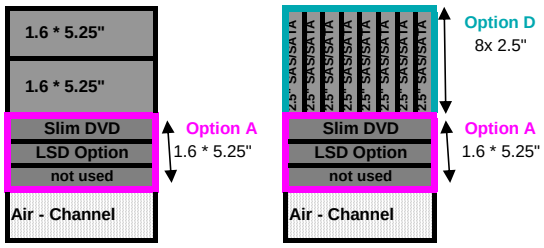
2.) Slot 2 PCIe-2 x4, 235 mm @ PCH
Possibility to install PCIe x8 cards; 2nd pref. RAID Slot

1.) Slot 1 (5V): PCI 32-Bit/33MHz, 280mm @ PCH

FRONT VIEW

3 x 5.25" bays available

3 x HH 5.25" free or
2 x HH 5.25" free + Option A or
1 x HH 5.25" free + Option D or
0 x HH 5.25" free + Option A + Option D



Accessible drives (V)

Mounting Kit DVD(sl) + LSD: (Option A)
- support for SL (0.5") DVD Drive + LSD
- occupies one 5.25" bay

optional SFF SAS/SATA HDD extension Box: (Option D)
- support for 8x 2.5" (SFF) SAS/SATA HDD hot plug
- occupies two 5.25" bays

Hard disk drives (VI)

3x 120 mm Fans (no redundancy)

Fan 3

Fan 2

Fan 1

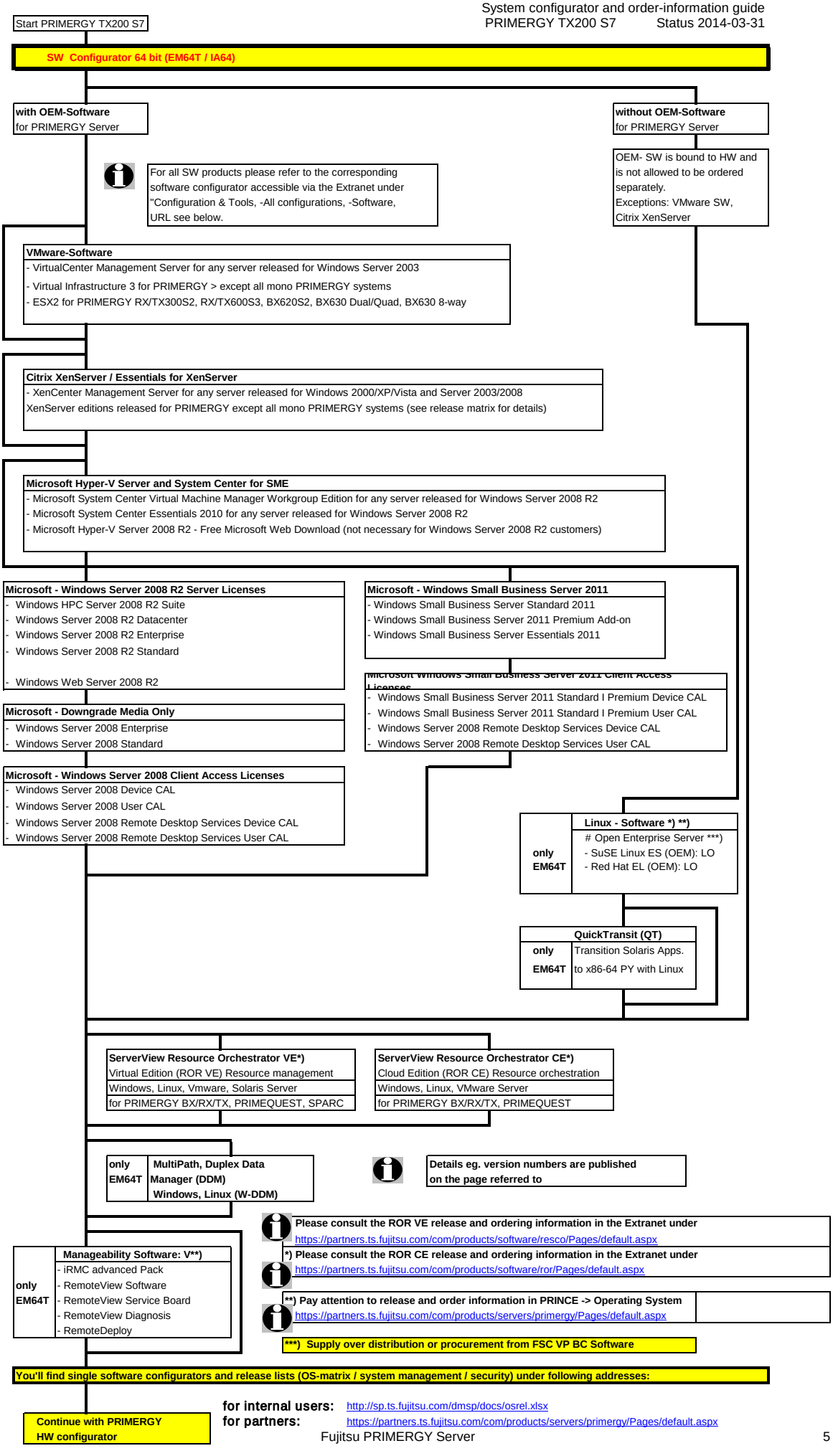
8 port SAS Backplane

8x SFF HDD Frame
2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA | 2.5" (SFF) SAS/SATA

Key:

Included in basic unit

Option


Start PRIMERGY TX200 S7
SW Configurator 64 bit (EM64T / IA64)
with OEM-Software
for PRIMERGY Server
without OEM-Software
for PRIMERGY Server
For all SW products please refer to the corresponding software configurator accessible via the Extranet under "Configuration & Tools, -All configurations, -Software, URL see below.
OEM- SW is bound to HW and is not allowed to be ordered separately.
Exceptions: VMware SW, Citrix XenServer
VMware-Software
- VirtualCenter Management Server for any server released for Windows Server 2003
- Virtual Infrastructure 3 for PRIMERGY > except all mono PRIMERGY systems
- ESX2 for PRIMERGY RX/TX300S2, RX/TX600S3, BX620S2, BX630 Dual/Quad, BX630 8-way
Citrix XenServer / Essentials for XenServer
- XenCenter Management Server for any server released for Windows 2000/XP/Vista and Server 2003/2008
XenServer editions released for PRIMERGY except all mono PRIMERGY systems (see release matrix for details)
Microsoft Hyper-V Server and System Center for SME
- Microsoft System Center Virtual Machine Manager Workgroup Edition for any server released for Windows Server 2008 R2
- Microsoft System Center Essentials 2010 for any server released for Windows Server 2008 R2
- Microsoft Hyper-V Server 2008 R2 - Free Microsoft Web Download (not necessary for Windows Server 2008 R2 customers)
Microsoft - Windows Server 2008 R2 Server Licenses
- Windows HPC Server 2008 R2 Suite
- Windows Server 2008 R2 Datacenter
- Windows Server 2008 R2 Enterprise
- Windows Server 2008 R2 Standard
- Windows Web Server 2008 R2
Microsoft - Windows Small Business Server 2011
- Windows Small Business Server Standard 2011
- Windows Small Business Server 2011 Premium Add-on
- Windows Small Business Server Essentials 2011
Microsoft - Downgrade Media Only
- Windows Server 2008 Enterprise
- Windows Server 2008 Standard
Microsoft Windows Small Business Server 2011 Client Access Licenses
- Windows Small Business Server 2011 Standard I Premium Device CAL
- Windows Small Business Server 2011 Standard I Premium User CAL
- Windows Server 2008 Remote Desktop Services Device CAL
- Windows Server 2008 Remote Desktop Services User CAL
Microsoft - Windows Server 2008 Client Access Licenses
- Windows Server 2008 Device CAL
- Windows Server 2008 User CAL
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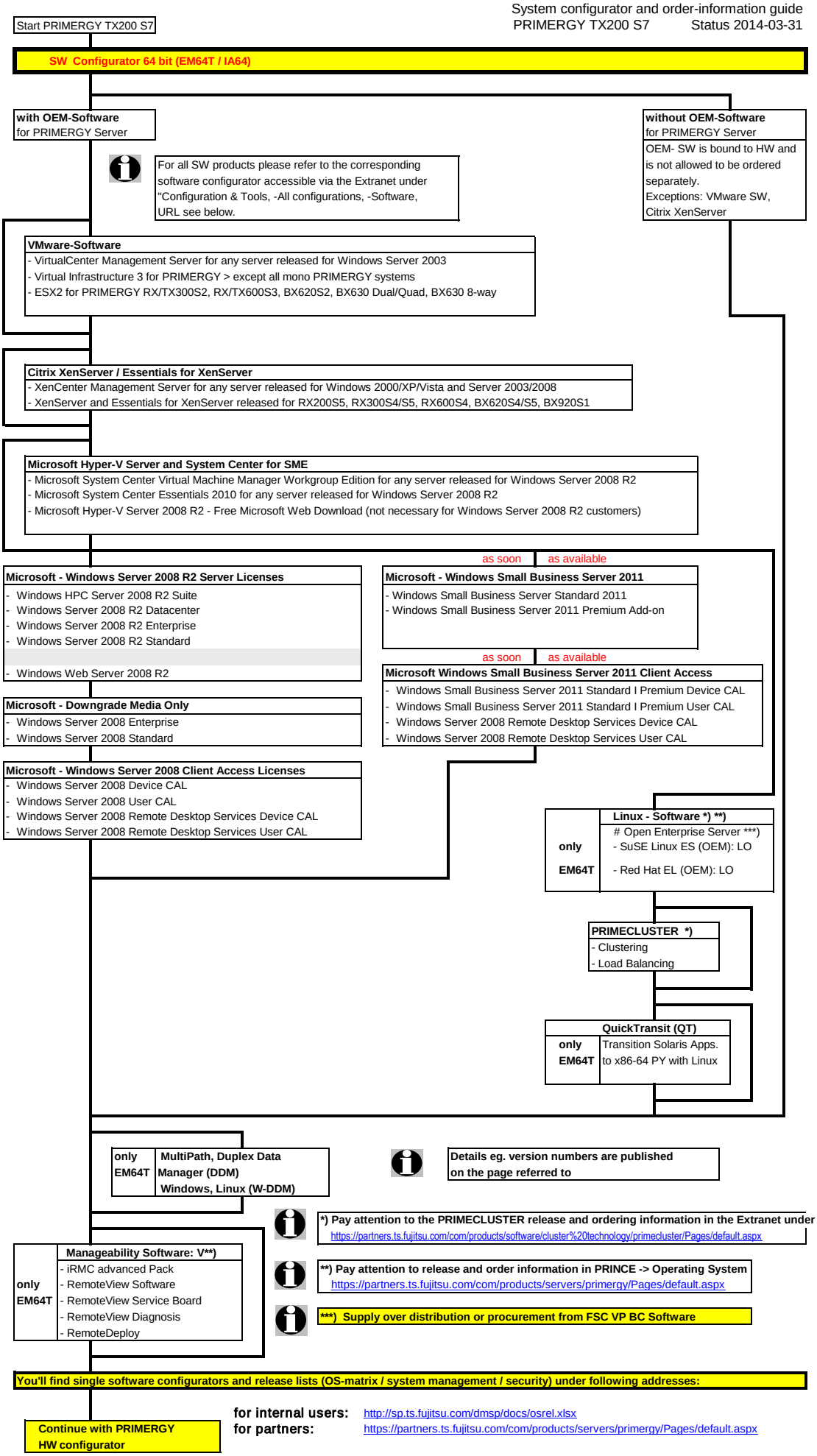
- Windows Server 2008 Remote Desktop Services User CAL
only EM64T
Linux - Software *) **)
Open Enterprise Server ***)
- SuSE Linux ES (OEM): LO
- Red Hat EL (OEM): LO
QuickTransit (QT)
only EM64T
Transition Solaris Apps. to x86-64 PY with Linux
ServerView Resource Orchestrator VE*)
Virtual Edition (ROR VE) Resource management
Windows, Linux, Vmware, Solaris Server
for PRIMERGY BX/RX/TX, PRIMEQUEST, SPARC
ServerView Resource Orchestrator CE*)
Cloud Edition (ROR CE) Resource orchestration
Windows, Linux, VMware Server
for PRIMERGY BX/RX/TX, PRIMEQUEST
only EM64T
MultiPath, Duplex Data Manager (DDM)
Windows, Linux (W-DDM)
Details eg. version numbers are published on the page referred to
Please consult the ROR VE release and ordering information in the Extranet under
https://partners.ts.fujitsu.com/com/products/software/resco/Pages/default.aspx
*) Please consult the ROR CE release and ordering information in the Extranet under
https://partners.ts.fujitsu.com/com/products/software/ror/Pages/default.aspx
**) Pay attention to release and order information in PRINCE -> Operating System
https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx
only EM64T
Manageability Software: V**)
- iRMC advanced Pack
- RemoteView Software
- RemoteView Service Board
- RemoteView Diagnosis
- RemoteDeploy
***) Supply over distribution or procurement from FSC VP BC Software
You'll find single software configurators and release lists (OS-matrix / system management / security) under following addresses:
for internal users: http://sp.ts.fujitsu.com/dmsp/docs/osrel.xlsx
for partners: https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx
Continue with PRIMERGY HW configurator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- XenServer and Essentials for XenServer released for RX200S5, RX300S4/S5, RX600S4, BX620S4/S5, BX920S1
Microsoft Hyper-V Server and System Center for SME
- Microsoft System Center Virtual Machine Manager Workgroup Edition for any server released for Windows Server 2008 R2
- Microsoft System Center Essentials 2010 for any server released for Windows Server 2008 R2
- Microsoft Hyper-V Server 2008 R2 - Free Microsoft Web Download (not necessary for Windows Server 2008 R2 customers)
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Microsoft - Windows Small Business Server 2011
- Windows Small Business Server Standard 2011
- Windows Small Business Server 2011 Premium Add-on
as soon
as available
Microsoft Windows Small Business Server 2011 Client Access
- Windows Small Business Server 2011 Standard I Premium Device CAL
- Windows Small Business Server 2011 Standard I Premium User CAL
- Windows Server 2008 Remote Desktop Services Device CAL
- Windows Server 2008 Remote Desktop Services User CAL
Microsoft - Downgrade Media Only
- Windows Server 2008 Enterprise
- Windows Server 2008 Standard
Microsoft - Windows Server 2008 Client Access Licenses
- Windows Server 2008 Device CAL
- Windows Server 2008 User CAL
- Windows Server 2008 Remote Desktop Services Device CAL
- Windows Server 2008 Remote Desktop Services User CAL
Linux - Software *) **)
only EM64T
Open Enterprise Server ***)
- SuSE Linux ES (OEM): LO
- Red Hat EL (OEM): LO
PRIMECLUSTER *)
- Clustering
- Load Balancing
QuickTransit (QT)
only EM64T
Transition Solaris Apps. to x86-64 PY with Linux
only EM64T
MultiPath, Duplex Data Manager (DDM) Windows, Linux (W-DDM)
Details eg. version numbers are published on the page referred to
*) Pay attention to the PRIMECLUSTER release and ordering information in the Extranet under
https://partners.ts.fujitsu.com/com/products/software/cluster%20technology/primecluster/Pages/default.aspx
**) Pay attention to release and order information in PRINCE -> Operating System
https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx
***) Supply over distribution or procurement from FSC VP BC Software
only EM64T
Manageability Software: V**)
- iRMC advanced Pack
- RemoteView Software
- RemoteView Service Board
- RemoteView Diagnosis
- RemoteDeploy
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for internal users: http://sp.ts.fujitsu.com/dmsp/docs/osrel.xlsx
for partners: https://partners.ts.fujitsu.com/com/products/servers/primergy/Pages/default.aspx
Continue with PRIMERGY HW configurator

Start PRIMERGY TX200 S7

Section | Basic unit

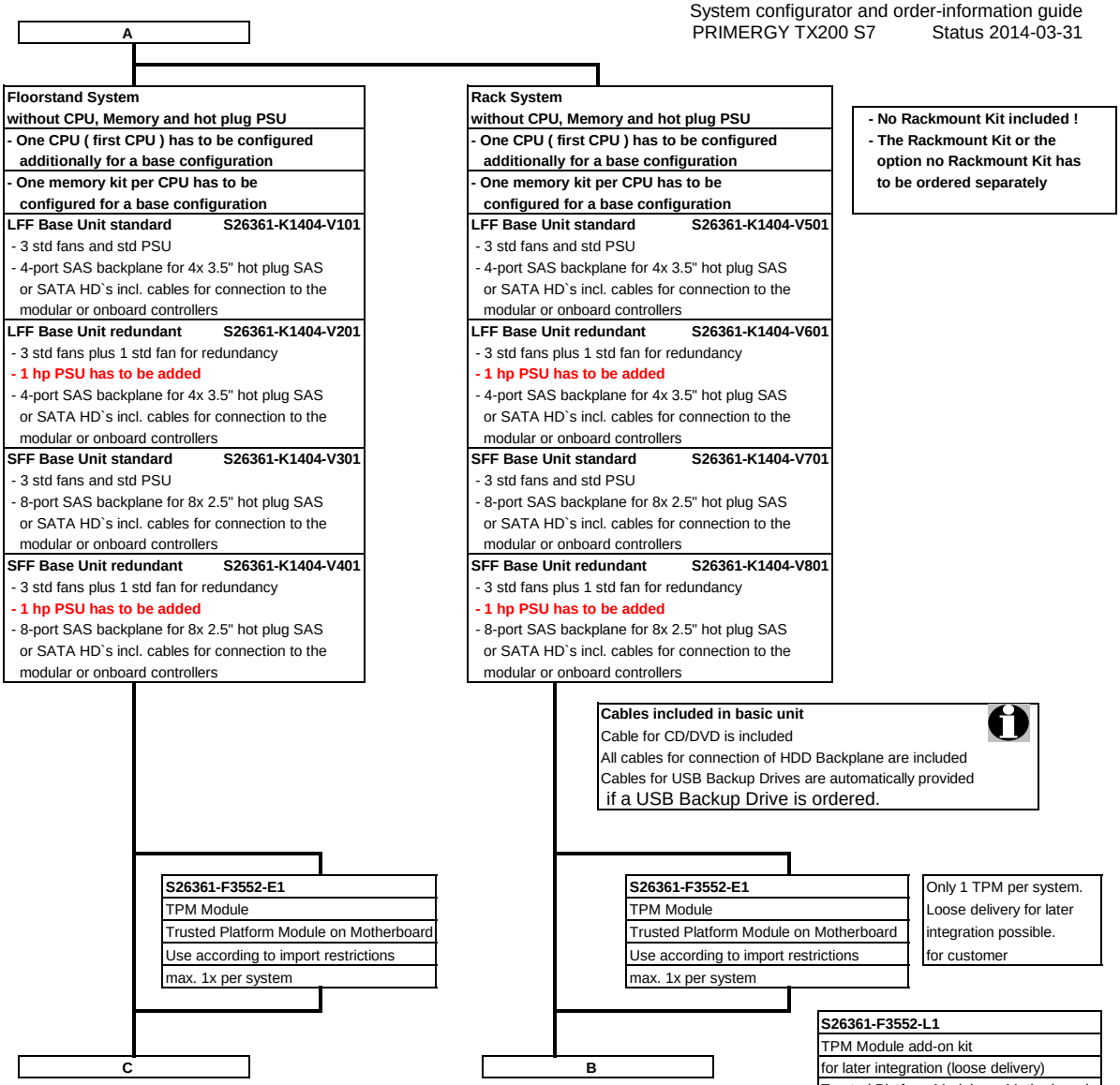
System unit, Rack and Floorstand, including:

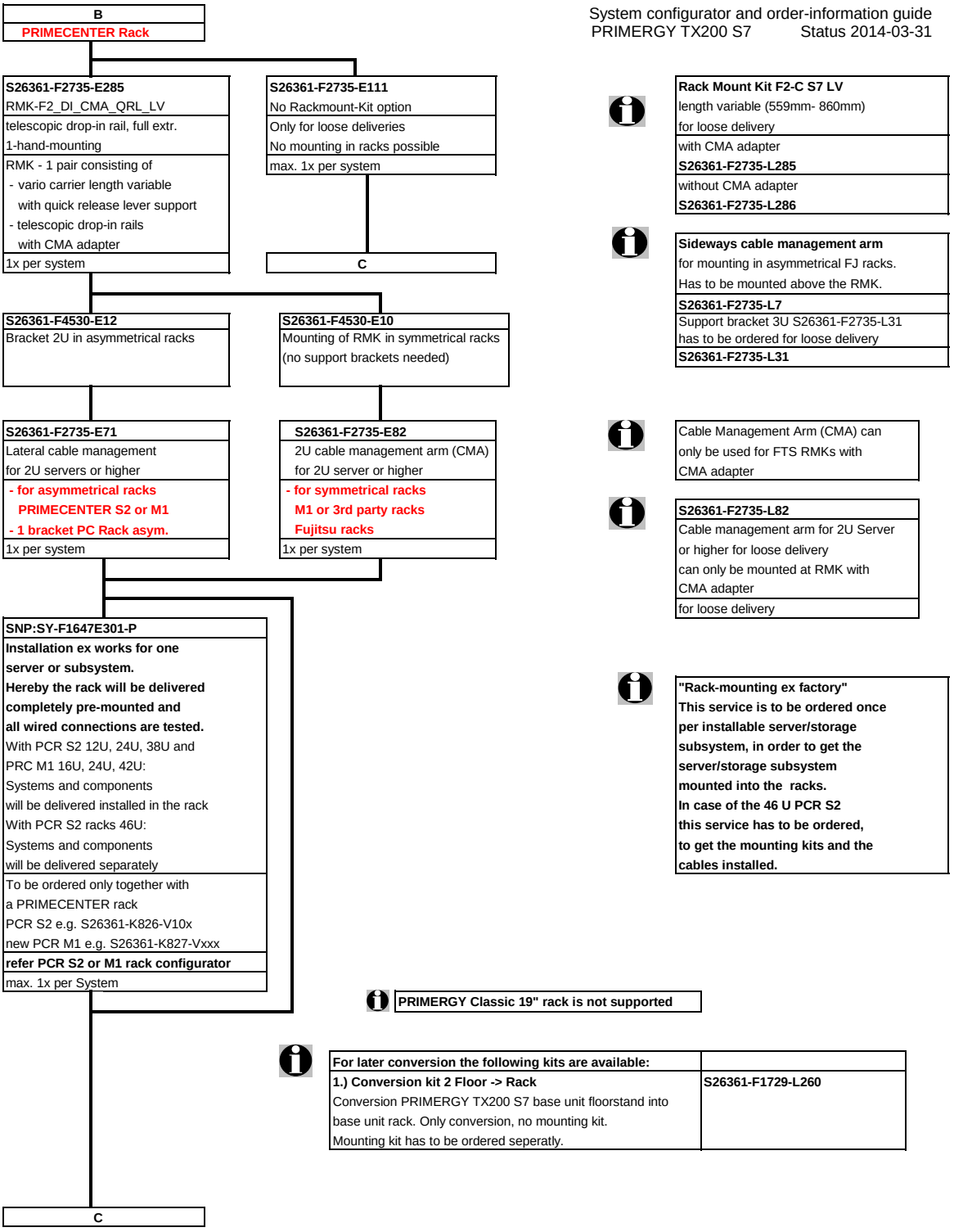
*** Two lockable front covers in floorstand version**
Door #1 for accessible drive bays
Door #2 for hot plug HDD bays
Both doors may be locked or door #1 may be left open while door #2 is still locked
*** backplane with 4 (LFF) or 8 (SFF) bays for hot-plug HD's. Type depending on base unit:**
Type 1: 4x hot plug LFF (3.5") SAS/SATA HDD (SAS/SATA LFF base units only)
Type 2: 8x (2x4) hot plug SFF (2.5") SAS HDD (SAS SFF base units only)
*** PSU and Fan Type depending on base unit:**
Type 1: standard PSU and standard Fans (3 System Fans)
(V101and V301, V501 and V701 base units)
Type 2: without PSU (450W or 800W must be added), but 1 additional fan for redundancy
(V201, V401, V601 and V801 base units)
for Type 1 base units there is an upgrade to
hot plug redundant PSU and redundant Fans available
*** 3 bays 5.25" for accessible drives (half Hight)**
Systemboard D3099 with:
*** Up to two Xeon 4C, 6C & 8C CPU`s (Socket-B2)**
with 1 serial QPI link (Quick Path Interconnect) and 3 memory channels per CPU
First CPU has to be selected for an orderable basic unit,
*** Chipset Intel® C600 Series (codenamed Patsburg)**

*** 6 PCI slots:**
- 2x PCIe-3 x16
- 2x PCIe-3 x4 (mechanically x8)
- 1x PCIe-2 x4 (mechanically x8)
- 1x PCI 32/33

- No mix of registered and unbuffered modules is allowed
- First Memory (one module) has to be selected for an orderable basic unit per CPU
- Memory upgrade is possible module wise for the Independent Channel Mode or for the Performance Mode,
- Memory mirrroring is supported with 2 identical modules in channel B+C CPU 1 or E+F CPU 2
- Hot Spare Memory is supported with 3 identical modules in channel A+B+C CPU 1 or D+E+F CPU 2
- SDDC (Chipkill) is supported only for registered memory modules,
*** 6-port SATA controller on-board included in Intel Southbridge Patsburg A for SATA Raid0/1,**
optional Southbridge Patsburg B with 4 ports for SAS RAID 0/1
Max. 4 SATA / SAS HD`s are supported
Max. 2 SATA accessible drives are supported (DVD, Backup)
*** 2x1 Gbit Ethernet LAN on board (Intel Hartwell);**
iSCSI boot integrated in System BIOS as selectable option
*** iRMC S3 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100 Service LAN-port and integrated graphics controller (max. Resolution: 1600 x 1200 at 16 bpp)**
The Service LAN-port can be switched alternatively on standard Gbit LAN port
Interfaces:
* 1x RS-232-C (serial, 9pin) (usable for BMC or OS or shared)
* 1x VGA (15 pin)
* 9x USB **2.0** (UHCI) with **480MBit/s** (4x external at the rear, 2x external at the frontside, 3x internal for backup or UFM)
* 2x LAN RJ45, 1x Service-LAN RJ45
***internal Cables:**
1. SATA cable for CD/DVD.
2. Cable for HDD Backplane
3. USB cable (if USB Backup is used)
*** ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates**
*** Documentation engl. (multilingual on CD)**

A


A
Floorstand System
without CPU, Memory and hot plug PSU
- One CPU (first CPU) has to be configured additionally for a base configuration
- One memory kit per CPU has to be configured for a base configuration
LFF Base Unit standard S26361-K1404-V101
- 3 std fans and std PSU
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
LFF Base Unit redundant S26361-K1404-V201
- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
SFF Base Unit standard S26361-K1404-V301
- 3 std fans and std PSU
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
SFF Base Unit redundant S26361-K1404-V401
- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
Rack System
without CPU, Memory and hot plug PSU
- One CPU (first CPU) has to be configured additionally for a base configuration
- One memory kit per CPU has to be configured for a base configuration
LFF Base Unit standard S26361-K1404-V501
- 3 std fans and std PSU
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
LFF Base Unit redundant S26361-K1404-V601
- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
SFF Base Unit standard S26361-K1404-V701
- 3 std fans and std PSU
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
SFF Base Unit redundant S26361-K1404-V801
- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HD`s incl. cables for connection to the modular or onboard controllers
- No Rackmount Kit included !
- The Rackmount Kit or the option no Rackmount Kit has to be ordered separately
Cables included in basic unit
Cable for CD/DVD is included
All cables for connection of HDD Backplane are included
Cables for USB Backup Drives are automatically provided
if a USB Backup Drive is ordered.
S26361-F3552-E1
TPM Module
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system
S26361-F3552-E1
TPM Module
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system
Only 1 TPM per system.
Loose delivery for later integration possible.
for customer
S26361-F3552-L1
TPM Module add-on kit
for later integration (loose delivery)
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system
C
B



Rack Mount Kit F2-C S7 LV
length variable (559mm- 860mm)
for loose delivery
with CMA adapter
S26361-F2735-L285
without CMA adapter
S26361-F2735-L286

Sideways cable management arm
for mounting in asymmetrical FJ racks.
Has to be mounted above the RMK.
S26361-F2735-L7
Support bracket 3U S26361-F2735-L31
has to be ordered for loose delivery
S26361-F2735-L31

Cable Management Arm (CMA) can
only be used for FTS RMKs with
CMA adapter

S26361-F2735-L82
Cable management arm for 2U Server
or higher for loose delivery
can only be mounted at RMK with
CMA adapter
for loose delivery

"Rack-mounting ex factory"
This 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 the 46 U PCR S2
this service has to be ordered,
to get the mounting kits and the
cables installed.

PRIMERGY Classic 19" rack is not supported

For later conversion the following kits are available:	
1.) Conversion kit 2 Floor -> Rack Conversion PRIMERGY TX200 S7 base unit floorstand into base unit rack. Only conversion, no mounting kit. Mounting kit has to be ordered seperatly.	**S26361-F1729-L260**

C

1x mandatory for redundant base units
there is only 1 PSU type allowed (450W or 800W)

2x

S26113-F575-E10	S26113-F574-E10
Power supply 450W (hot plug)	**Power supply 800W (hot plug)**
occupies one bay for hot plug power supply	occupies one bay for hot plug power supply
max. 2x per system	max. 2x per system

***For order completeness only**
Will be added automaticly with
System Architect Version ≥ V9.3

For redundant Base Units only
(V201, V401, V601 and V801)

For redundant floorstand versions only
(V201 and V401)
A second, redundant power supply requires an additional country specific power cord (section XIII)

For later upgrades the following kits are available:	
1 power supply module 450W hot plug: Supplementary module	**S26113-F575-L10**
1 power supply module 800W hot plug: Supplementary module	**S26113-F574-L10**
Attention: There is no power cable included!	

Std to Redundant Upgrade Kit consisting of a redundant PSU cage and backplane AND a 4th fan for fan redundancy	**S26361-F3699-L1**
Does not contain any PSU module	

Section Processor

There are 2 processor sockets available.
The first socket is always equipped with the **first CPU** which can be selected via configurator
It is also possible to upgrade a dual-processor system later on with a **second CPU**
Two processors with different clock frequencies are not possible
A multi-processor operating system is required for a dual-processor system.

Max. two CPU`s can be selected per basic unit	
One of following CPU´s has to be selected as first CPU for an orderable basic unit	
Optional second CPU has to be the same type like the first CPU	
Basic 4C CPU's - 1x 64-bit Intel Xeon (10MB shared TLC = Third Level Cache) 1066 MHz DDR3 Bus, 6,40 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2403 4C/4T 1.80GHz 10MB 6.40GT/s 1066MHz 80W	**S26361-F3684-E180**
Xeon E5-2407 4C/4T 2.20GHz 10MB 6.40GT/s 1066MHz 80W	**S26361-F3684-E220**
Standard Turbo 6C CPU's - 1x 64-bit Intel Xeon (15MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 7,20 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2420 6C/12T 1.90GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3723-E190**
Xeon E5-2430 6C/12T 2.20GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3723-E220**
Xeon E5-2440 6C/12T 2.40GHz 15MB 7.20GT/s 1333MHz 95W	**S26361-F3723-E240**
Advanced Turbo+ 8C CPU - 1x 64-bit Intel Xeon (20MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1600 MHz DDR3 Bus, 8,00 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2450 8C/16T 2.10GHz 20MB 8.00GT/s 1600MHz 95W	**S26361-F3724-E210**
Xeon E5-2470 8C/16T 2.30GHz 20MB 8.00GT/s 1600MHz 95W	**S26361-F3724-E230**
Low Power 6C CPU - 1x 64-bit Intel Xeon (15MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 7,20 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2430L 6C/12T 2.00GHz 15MB 7.20GT/s 1333MHz 60W	**S26361-F3725-E200**

Note: Max. DDR3 Bus Speed depends on:
- **max. DDR3 Bus Speed from the CPU and**
- **max. DDR3 Memory Speed and**
- **max. memory modules on one memory channel**

D

D

Section III Memory

- There are 6 memory slots per CPU for max.
96GB RDIMM (6x 16GB 2R)
24GB UDIMM (6x 4GB)
=> max. 192GB for two CPU`s (96GB per CPU), using RDIMM
- The memory area is divided into 3 channels per CPU with 2 slots per channel
- Slot 1 of each channel belongs to memory bank 1, the slot 2 belongs to memory bank 2.

Registered and unbuffered memory modules can be selected
No mix of registered and unbuffered modules allowed.
Memory can be operated at 1.5V or 1.35V, even if the modules are of low voltage type.
Memory operating voltage can be set within BIOS (**1.5V is default** setting for max. speed).
In a 2 DIMMs per channel configuration, following frequencies are supported:
- 1.5V - 1600MHz max (depending on CPU, special memory modules)
- 1.35V - 1333MHz max (depending on CPU)
SDDC (Chipkill) is supported for registered x4 organized memory modules only

1.) In the "Independent Channel Mode" is following configuration possible
Channels can be populated in any order in Independent Channel Mode. All 3 channels may be populated in any order and have no matching requirements. All channels must run at the same interface frequency but individual channels may run at different DIMM timings (RAS latency, CAS latency, and so forth)
No mix of registered and unbuffered modules allowed.

2.) "Rank Sparing Mode" configuration
- Within a memory channel, one rank is a spare of the other ranks.
The Spare Rank is held in reserve and is not available as system memory
For the effective memory capacity, please refer to the spreadsheet below.
The BIOS is set to the rank sparing setting.
Minimum configuration is: 2x 1R, 2x 2R or 1x4R DDR3 module per channel
This mode is not supported by x8 organized memory modules

3.) "Performance Mode" configuration
- In this configuration, the memory module population ex factory is spread across all channels.
The BIOS is set to the max. performance for memory.
Minimum configuration is: 3x identical modules

4.) In the "Mirrored Channel Mode" is following configuration possible
- Each memory bank can optionally be equipped with 2x registered memory modules
In each memory bank channel B and C of CPU 1 or channel E and F of CPU 2 have to be equipped with identical modules for mirrored channel mode.
In channel C is always the mirrored memory of channel B of CPU 1
In channel F is always the mirrored memory of channel E of CPU 2
Minimum configuration is: 2x identical modules
This mode is not supported by x8 organized memory modules

D1

D1

1x per CPU

S26361-F3694-E10 Independent Mode
Independent Channel Mode allows all channels to be populated in any order. No specific Memory RAS features are defined
Requires min 1 memory Module per CPU

S26361-F3695-E1 Rank Sparing Mode Installation
BIOS Setup factory preinstalled to this mode. One Rank is spare of other ranks on the same channel. Spare Rank is not shown in System Memory.
For effective capacity within a channel, please have a look below.
Supported for RDIMM only.
Requires min 2x 1R/2R or 1x 4R modules per CPU

S26361-F3695-E2 Performance Mode Installation
BIOS Setup factory preinstalled for max. Performance, LV memory might be set to 1.5V operation. 3 identical memory modules
will be equipped in one memory bank to achieve highest memory performance. All 3 modules are active and full capacity can be used.
Multiple of 3 identical modules to be configured per CPU

S26361-F3695-E3 Mirrored Channel Mode Installation
BIOS Setup factory preinstalled to this mode. 2 identical memory modules are always equipped in one memory bank to use the
Mirrored channel Mode. Only two modules contain active data, the remain two modules contain mirrored data
Supported for RDIMM only.
Multiple of 2 identical modules to be configured per CPU

Effective Memory capacity / Rank Sparing Mode, 1 Channel populated

	UDIMM		RDIMM				
	2GB 1R	2GB 2R	4GB 1R	8GB 2R	16GB 2R		
1DPC	na	na	na	na	na		
2DPC	na	na	4GB	12GB	24GB		

Minimum one memory module or order code per CPU = first memory

6x per CPU, max. 2 modules per channel

Unbuffered Memory (UDIMM) no SDDC (chipkill) support
- one DDR3 unbuffered ECC mem. Module, 1.35V
Choose up to 6 order codes per CPU

2GB (1x2GB) 1Rx8 L DDR3-1600 U ECC	S26361-F3694-E513
4GB (1x4GB) 2Rx8 L DDR3-1600 U ECC	S26361-F3694-E514

Registered Memory (RDIMM) with SDDC (chipkill) support
- one DDR3 registered ECC mem. Module, 1.35V
1600MHz supported with up to 2DPC (8 modules/CPU)
at 1.5V
Choose up to 6 order codes per CPU

4GB (1x4GB) 1Rx4 L DDR3-1600 R ECC	S26361-F3697-E514
8GB (1x8GB) 2Rx4 L DDR3-1600 R ECC	S26361-F3697-E515
16GB (1x16GB) 2Rx4 L DDR3-1600 R ECC	S26361-F3697-E516

Note 1.)
Max. DDR3 memory speed depends on the memory configuration
(No of mem modules per channe) as well as on the CPU type.
The memory channel with the lowest speed defines the speed
of all CPU channels in the system, also for the channels of the
second CPU if configured.
For real memory speed (depending on memory type / population),

Mix of memory modules is only possible within the same group

H

Memory Configuration PRIMERGY TX200 S7

Each CPU offers 6 **Slots** for DDR3 Memory Modules organised in **2 Banks and 3 Channels.**
If you need more than 6 Slots you have to configure the 2nd CPU.
Depending on the amount of memory configured you can decide between 4 basic modes of operation (see explanation below).

There are 2 different kinds of DDR3 Memory Modules available: UDIMM and RDIMM
UDIMM / RDIMM offer different functionality. Mix of UDIMM / RDIMM is not alloved.

If 1.5V and 1.35V DIMMs are mixed, the DIMMs will run at 1.5V

Mode	Configuration	UDIMM	RDIMM	RDIMM	Application
		x8	x8	x4	
SDDC (chipkill) support	any	no	no	yes	detect multi-bit errors
Independant Channel Mode	1, 2 or 3 Modules per Bank	yes	yes	yes	offers max. flexibility, upgradeability, capacity use UDIMM modules for lowest cost
Mirrored Channel Mode *)	2 identical Modules / Bank	no	no	yes	offers maximum security
Performance Mode	3 identical Modules / Bank	yes	yes	yes	offers maximum performance and capacity
Rank Sparing Mode *)	min. 2 Ranks / Channel	no	no	yes	balances security and capacity

*) For the delivery ex works the system will be prepared with dedicated BIOS setting.

Capacity	Configuration	UDIMM	RDIMM		Notes
Min. Memory per CPU	1 Module / CPU	1x2GB	1x4GB		with one CPU
Max. Memory per CPU	4/6 Modules / CPU	6x4GB	6x16GB		with one CPU
Max. Memory per System	8/12 Modules / System	48GB	96GB		if second CPU is configured

Memory-Speed:
Max. DDR3 memory speed depends on the memory configuration on one memory channel and the speed of the CPU
The memory channel with the lowest speed defines the speed of all CPU channels in the system

Mem. Speed provided by CPU	Real maximum memory-bus speed depending on CPU type, memory configuration (DPC) and voltage setting (BIOS)											
	UDIMM 1600MHz						RDIMM 1600MHz					
Voltage setting (BIOS)	1.5V [default]			1.35V			1.5V [default]			1.35V		
	1 DPC	2 DPC		1 DPC	2 DPC		1 DPC	2 DPC	3 DPC	1 DPC	2 DPC	
CPU with 1600MHz DDR3 Bus	1333	1066		1333	1066		1600	1600	-	1333	1333	
CPU with 1333MHz DDR3 Bus	1333	1333		1066	1066		1333	1333	-	1333	1333	
CPU with 1066MHz DDR3 Bus	1066	1066		1066	1066		1066	1066	-	1066	1066	

1R - Single Rank
2R - Dual Rank

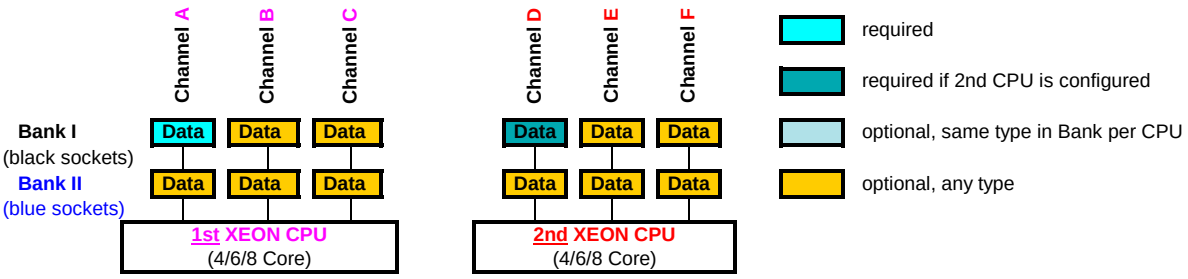
1DPC = 1 DIMM per Channel
2DPC = 2 DIMM per Channel

Configuration hints:

- The memory sockets on the systemboard offer a color coding:
  Bank I black sockets
  Bank II blue sockets

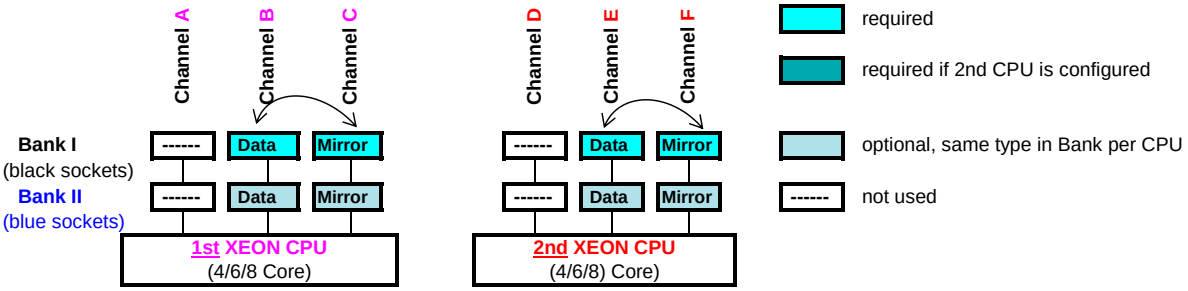
- A so called Bank consits of 1 memory module on every Channel available on one CPU (examples see below)
  Bank I on CPU 1/2 up to 3 memory modules connected to Channel A - F on the 1st/2nd CPU
  Bank II on CPU 1/2 up to 3 memory modules connected to Channel A - F on the 1st/2nd CPU
- See below and next page for a detailed descriptions of the memory configuration supported.

1. Independent Channel Mode



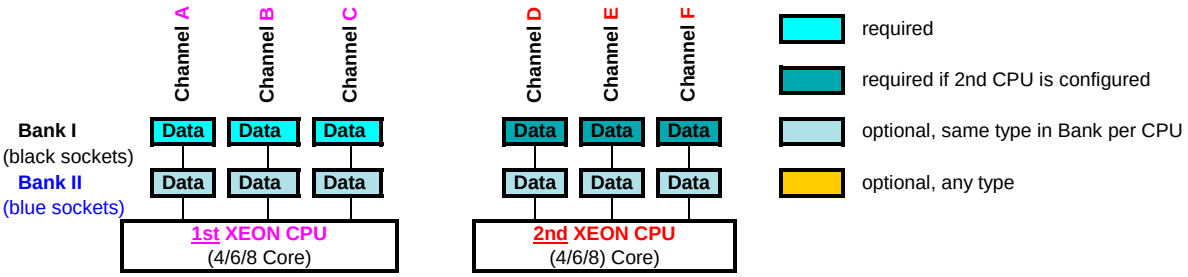
Independent Channel Mode allows all channels to be populated in any order
Can run with differently rated DIMMs and use the settings of the slowest DIMM installed in the system

2. Mirrored Channel Mode



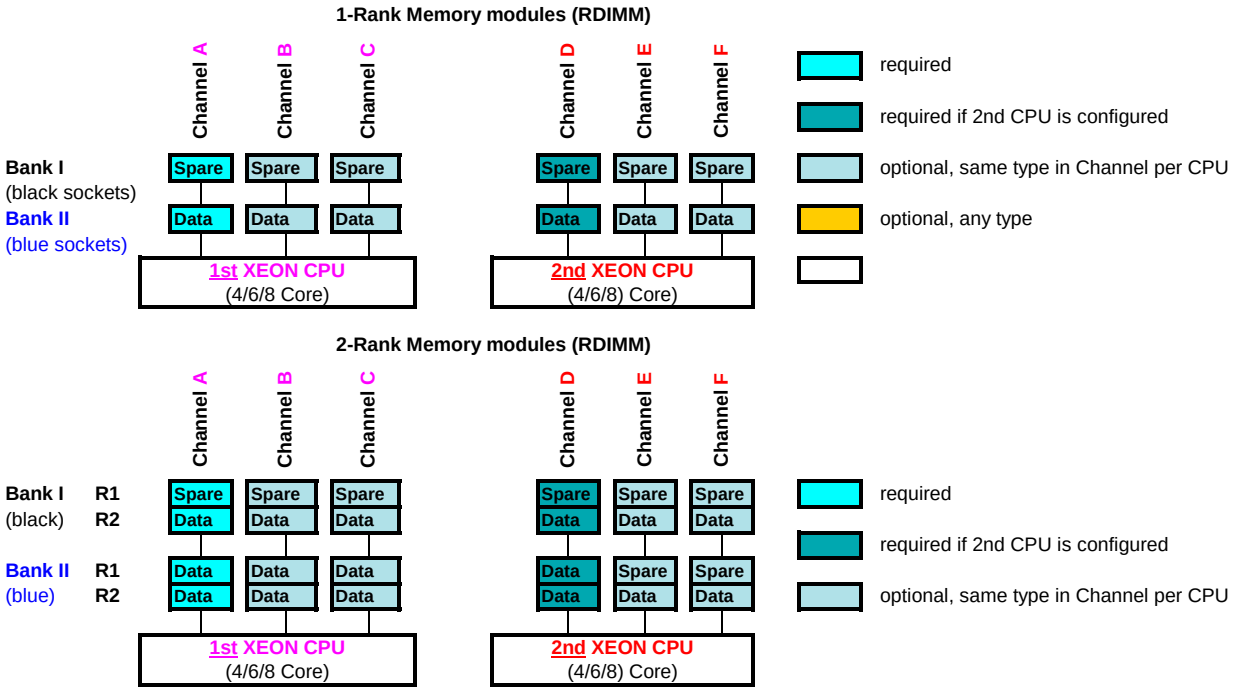
Mirrored Channel Mode requires identical modules on channel B / C (1st CPU) or channel E / F (2nd CPU)
50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory
If this mode is used, a multiple of 2 identical modules has to be ordered.

3. Performance Channel Mode



Performance Channel Mode requires identical modules on all channels of each Bank per CPU.
If this mode is used, a multiple of 3 identical modules has to be ordered.

4. Rank Sparing Mode



Rank Sparing Mode requires identical modules (same capacity and technology) within the same channel.
The available memory for applications will vary depending on configuration. Please refer to the spreadsheet above "Effective Memory capacity with active Rank Sparing Mode". Population rule for Rank sparing mode is to achieve max. available memory.

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Section IV Grafik

S26361-F2748-E537
PY VGA card 512MB PCI-e x1
NVIDIA NVS300
512 MB PCIe-x1
Connectors: 1x LFH 59
cable kit for 2x DVI or 2x VGA
cable kits included
Dual head + professional 2-D + 3-D
supported for Windows OS
native driver support for Linux OS
full height bracket
max. 1x per system

The hight end optional NVIDIA NVS300 graphic card offers dual head operation and fully 3D video support. The cables for either two times DVI-I or VGA (cable kit) connections are part of the delievery.
Remote Video direction via iRMC must be disabled.
This PCIe-x1 card can also be installed in any PCIe-x4, x8 or x16 slot.
Only one card per server is allowed.

S26361-F2748-L537
PY VGA card 512MB PCI-e x1
for loose delivery

Section V Accessible drives

There are 3 bays (1.6" x 5.25") for accessible drives usable for all or for LFF related base units.
For all SFF base units there is an additional bay; please refer to section VI hard disk drives SFF HDDs

see Conf. Diagram Option A
occupies 1 accessible bay
for all base units

see Conf. Diagram Option B
occupies 2 accessible bays
only 3.5" HDD base units

see Conf. Diagram Option C
occupies all 3 bays
only 3.5" HDD base units

S26361-F2826-E205
Mounting Kit DVD(sl) + LSP/LSD
Occupies **one 5.25" x 1.6" bay**
in the accessible bay area
Offers bays for:
- 1x **Local Sv. Display** option
- 1x 0.5 * 5.25" SATA **DVD**

max. 1x per system

S26361-F2826-E106
Mounting Kit DVD(sl) +
LSP/LSD + SAS LFF HDD
Occ. **two 5.25" x 1.6" bays**
in the accessible bay area
Offers bays for:
- 1x **Local Sv. Display** option
- 1x 0.5 * 5.25" SATA **DVD**
- 2x 3.5" SAS/SATA **HDD`s**

One 0.5 * 3.5" satin black bezel
for Local Sv. Display bay
One 0.5 * 5.25" satin black bezel
for 0.5 * 5.25" DVD bay
Two 1 * 3,25" satin black bezels
for SAS HDD bays
max. 1 per system

S26361-F2826-E436
Mounting Kit DVD(sl) +
SAS LFF HDD
Occupies **all 5.25" x 1.6" bays**
in the accessible bay area
Offers bays for:
- 1x 0.5 * 5.25" SATA **DVD**
- 4x 3.5" SAS/SATA **HDD's**

Two 1 * 3,25" satin black bezels
for SAS HDD bays
max. 1x per system

For the mounting kits **Option B** or **C**
S26361-F2826-E106 or -E436
a PCI based modular RAID
controller is necessary!
see Section VIII!

S26361-F2557-E105
Local Service Display incl. Adapter
Customer Self Service
LSD module incl. adapter
0.5" x 5.25"
max. 1x per System

S26361-F2557-E106
Local Service Display incl. Install. kit
Customer Self Service
LSD module incl. mounting kit
0.5" x 5.25"
max. 1x per system

S26361-F3269-E2
DVD-RW supermulti slim SATA
all formats, DUAL/DL, DVD-RAM
only W2K, W3K and Linux
0.5 x 5.25", black bezel
max. 1x per system

S26361-F3641-E2
Blu-ray Triple Writer slim SATA
6x BD-RW, 8x DVD, 24x CD
BD DL and all CD/DVD formats
0.5 x 5.25"
max. 1x per system

S26361-F3266-E2
DVD-ROM HH SATA
16x DVD 48x CD
1.6 x 5.25", black bezel
max. 1x per system

S26361-F3267-E2
DVD-RW supermulti HH SATA
all formats, DUAL/DL, DVD-RAM
only W2K, W3K and Linux
1.6 x 5.25", black bezel
max. 1x per system

S26361-F3641-E4
Blu-ray Triple Writer slim SATA
4x BD-RW, 16x DVD, 40x CD
BD DL and all CD/DVD formats
1.6 x 5.25", black bezel
0.5" drive with mounting frame
max. 1x per system

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S26361-F3325-E4
Tape drive DDS Gen6 USB 5.25"
80GB, 6MB/s, USB 2.0
Connector: USB "B"
with USB cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25", black bezel
max. 1x per system

data cartridges must be ordered separately

USB 3.0 adapter and RDX USB3.0 drive

S26361-F3749-E1
USB3.0 PCIe x1 adapter card
Sunrich U-720
PCIe x1
1 port intern, 1 port extern
USB 3.0 A jacks
max. 1x per system

The adapter is also available as optional (loose) delivery
with FH and LP bracket included
S26361-F3749-L501

S26361-F3750-E4
RDX Drive USB3.0 5.25" internal
100MB/s, USB 3.0
Connector: USB 3.0 "B"
with USB cable
without RDX cartridges
1.6 * 5.25", black bezel
max. 1x per system

RDX cartridges must be ordered separately
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600
10x RDX320 = S26361-F3857-L329

S26361-F3750-E324
RDX 320 5.25"
100MB/s, USB 3.0
Connector: USB 3.0 "B"
with USB3.0 cable
with 320GB RDX cartridge
1.6 * 5.25", black bezel
max. 1x per system

additional RDX cartridges can be ordered
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600
10x RDX320 = S26361-F3857-L329

The bundle is also available as optional (loose) delivery
S26361-F3750-L324 with USB3.0 cable for adapter card.
The USB3.0 Adapter card or the USB2.0 cable set
S26361-F3750-L20 must be ordered with the drive!

S26361-F3750-E504
RDX 500 5.25"
100MB/s, USB 3.0
Connector: USB 3.0 "B"
with USB3.0 cable
with 500GB RDX cartridge
1.6 * 5.25", black bezel
max. 1x per system

additional RDX cartridges can be ordered
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600
10x RDX320 = S26361-F3857-L329

The bundle is also available as optional (loose) delivery
S26361-F3750-L504 with USB3.0 cable for adapter card.
The USB3.0 Adapter card or the USB2.0 cable set
S26361-F3750-L20 must be ordered with the drive!

S26361-F3750-E604
RDX 1000 5.25"
100MB/s, USB 3.0
Connector: USB 3.0 "B"
with USB3.0 cable
with 1TB RDX cartridge
1.6 * 5.25", black bezel
max. 1x per system

additional RDX cartridges can be ordered
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600
10x RDX320 = S26361-F3857-L329

The bundle is also available as optional (loose) delivery
S26361-F3750-L604 with USB3.0 cable for adapter card.
The USB3.0 Adapter card or the USB2.0 cable set
S26361-F3750-L20 must be ordered with the drive!

For internal SAS Backup drives
the onboard 4-port SAS controller "Patsburg B" has to be configured
Patsburg B is not available for SLES10!

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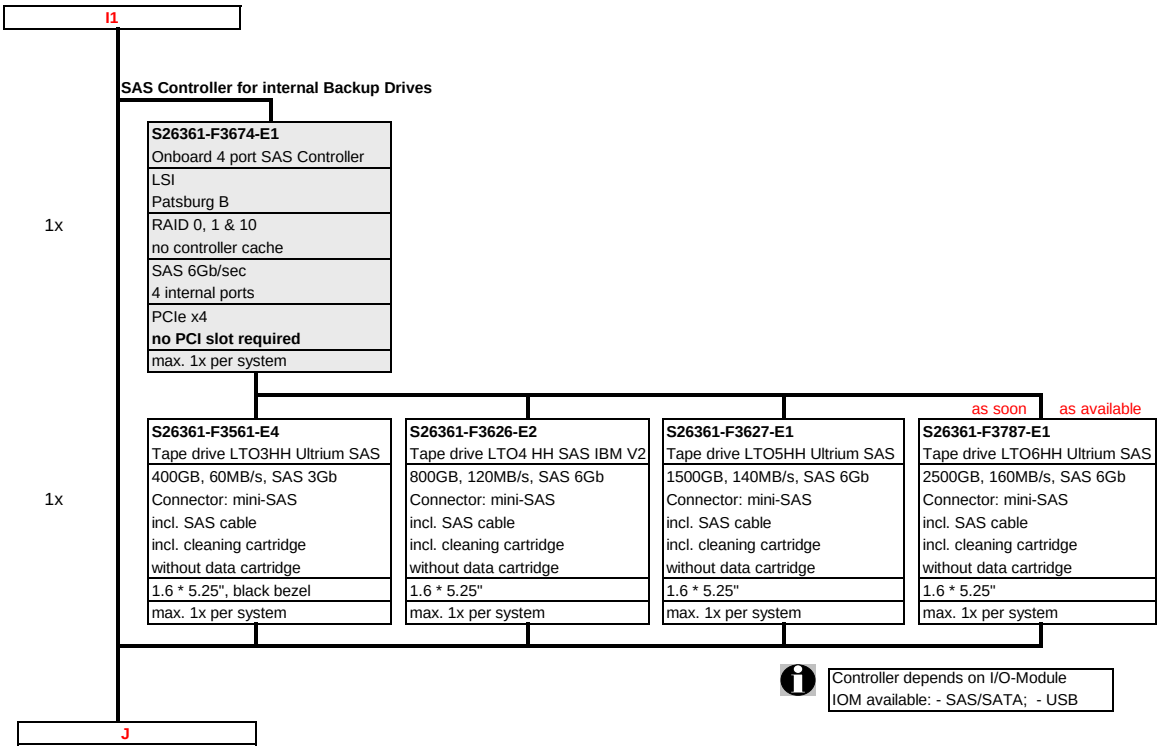
I1
SAS Controller for internal Backup Drives
S26361-F3674-E1
Onboard 4 port SAS Controller
LSI
Patsburg B
RAID 0, 1 & 10
no controller cache
SAS 6Gb/sec
4 internal ports
PCIe x4
no PCI slot required
max. 1x per system
1x
as soon
as available
S26361-F3561-E4
Tape drive LTO3HH Ultrium SAS
400GB, 60MB/s, SAS 3Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3626-E2
Tape drive LTO4 HH SAS IBM V2
800GB, 120MB/s, SAS 6Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25"
max. 1x per system
S26361-F3627-E1
Tape drive LTO5HH Ultrium SAS
1500GB, 140MB/s, SAS 6Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25"
max. 1x per system
S26361-F3787-E1
Tape drive LTO6HH Ultrium SAS
2500GB, 160MB/s, SAS 6Gb
Connector: mini-SAS
incl. SAS cable
incl. cleaning cartridge
without data cartridge
1.6 * 5.25"
max. 1x per system
1x
Controller depends on I/O-Module
IOM available: - SAS/SATA; - USB
J

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Section VI Hard disks drives

SAS RAID Controller for up to 4 SAS HDDs

S26361-F3674-E1
Onboard 4 port SAS Controller
LSI
Patsburg B replaces 4 onb. SATA ports
RAID 0, 1 & 10
no controller cache
SAS 6Gb/sec
4 internal ports
PCIe x4
no PCI slot required
max. 1x per system

If the onboard 4 port SATA or SAS Controller is used for HDD, it is not possible to implement a LTO drive later

3.5" HDDs for LFF base units; SAS or more than 4 SATA HDDs require a RAID Controller! See section VIII internal Disk Array

Up to 4 LFF (3.5") hard disks can be configured into the base unit
With the HDD Extension Box Option B up to 6 LFF (3.5") hard disks can be configured, with Option C up to 8 HDDs.

The on board SATA Controller can be used with up to 4x 3.5" SATA HDDs (no additional controller required), BUT:
If a LTO backup drive is configured, then the 4 onboard SATA ports for HDDs are not available!
In this case for any HDD solution a PCI based 8port RAID controller is necessary!

For up to 4x 3.5" SAS HDDs without SAS Tape a Patsburg SAS RAID controller is available
For up to 4x 3,5" SAS HDDs in combination with a SAS tape or fr all other HDD configurations a 8port PCIcontroller is required

Mixed configurations with Eco SATA drives and SAS drives are not allowed
3.5" SAS drives and 3.5" BC SATA drives can be mixed, but not used in one logical RAID volume
Hot replace is only possible running RAID.

4 / 6 / 8x

S26361-F4005-E530
HD 300GB 15krpm 3.5"
15.000rpm,<4ms, 16MB Cache
SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F4005-E545
HD 450GB 15krpm 3.5"
15.000rpm,<4ms, 16MB Cache
SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F4005-E560
HD 600GB 15krpm 3.5"
15.000rpm,<4ms, 16MB Cache
SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F5241-E100
HD 1TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 32MB Cache
BC SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F5241-E200
HD 1TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 32MB Cache
BC SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F5241-E300
HD 1TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 32MB Cache
BC SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F5241-E400
HD 1TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 32MB Cache
BC SAS 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F3670-E500
HD 500GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 64MB Cache
BC SATA 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F3670-E100
HD 1000GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 64MB Cache
BC SATA 6Gb/s
hot plug/hot replace tray
max. 8x per system

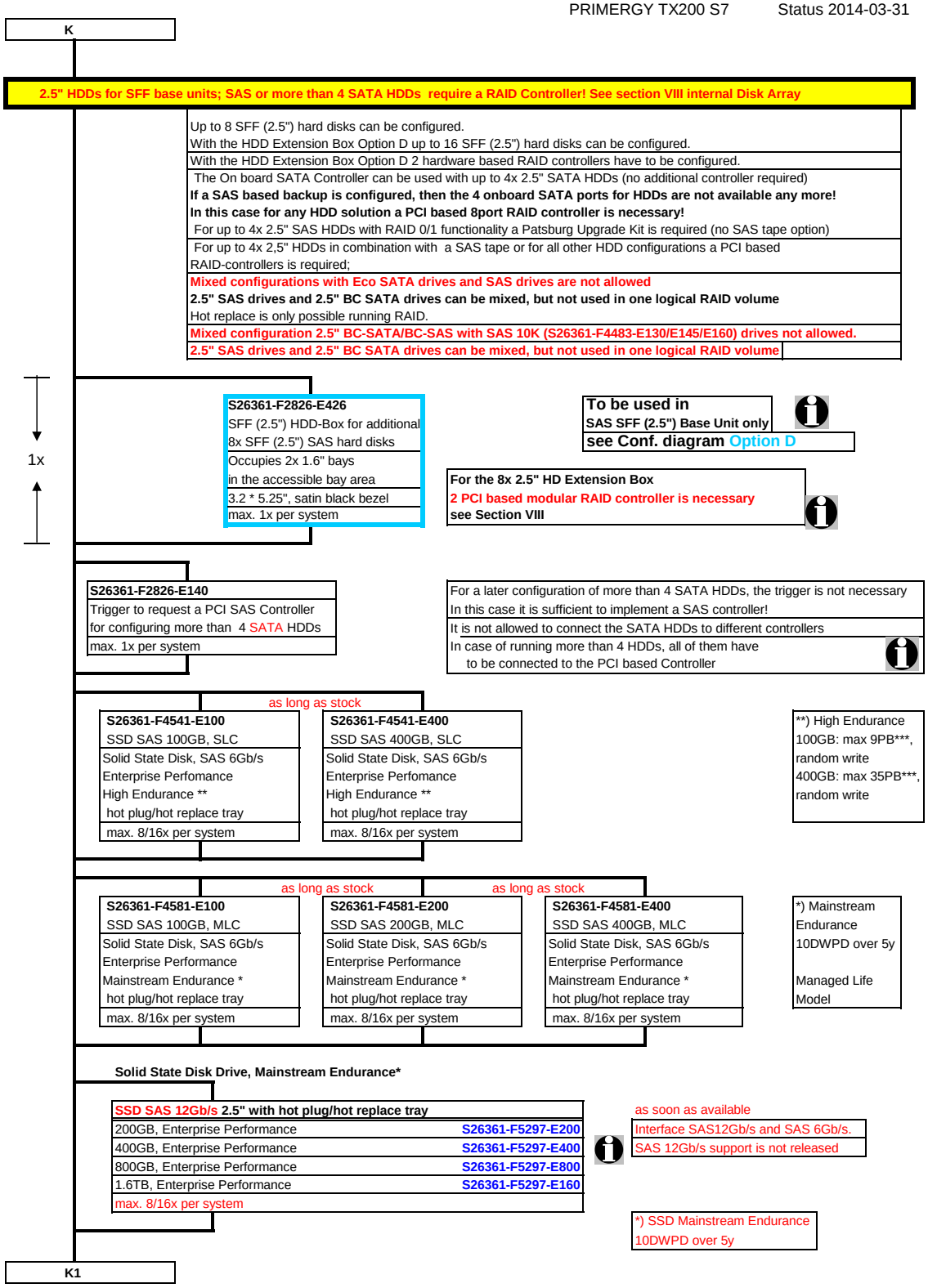
S26361-F3670-E200
HD 2000GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 64MB Cache
BC SATA 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F3670-E300
HD 3000GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 64MB Cache
BC SATA 6Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F3670-E400
HD 4TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 64MB Cache
BC SATA 6Gb/s
hot plug/hot replace tray
max. 8x per system

3.5" BC SAS - as soon as available
3.5" BC-SATA 4TB - as soon as available

K


K
2.5" HDDs for SFF base units; SAS or more than 4 SATA HDDs require a RAID Controller! See section VIII internal Disk Array
Up to 8 SFF (2.5") hard disks can be configured.
With the HDD Extension Box Option D up to 16 SFF (2.5") hard disks can be configured.
With the HDD Extension Box Option D 2 hardware based RAID controllers have to be configured.
The On board SATA Controller can be used with up to 4x 2.5" SATA HDDs (no additional controller required)
If a SAS based backup is configured, then the 4 onboard SATA ports for HDDs are not available any more!
In this case for any HDD solution a PCI based 8port RAID controller is necessary!
For up to 4x 2.5" SAS HDDs with RAID 0/1 functionality a Patsburg Upgrade Kit is required (no SAS tape option)
For up to 4x 2,5" HDDs in combination with a SAS tape or for all other HDD configurations a PCI based RAID-controllers is required;
Mixed configurations with Eco SATA drives and SAS drives are not allowed
2.5" SAS drives and 2.5" BC SATA drives can be mixed, but not used in one logical RAID volume
Hot replace is only possible running RAID.
Mixed configuration 2.5" BC-SATA/BC-SAS with SAS 10K (S26361-F4483-E130/E145/E160) drives not allowed.
2.5" SAS drives and 2.5" BC SATA drives can be mixed, but not used in one logical RAID volume
1x
S26361-F2826-E426
SFF (2.5") HDD-Box for additional 8x SFF (2.5") SAS hard disks
Occupies 2x 1.6" bays in the accessible bay area
3.2 * 5.25", satin black bezel
max. 1x per system
To be used in
SAS SFF (2.5") Base Unit only
see Conf. diagram Option D
For the 8x 2.5" HD Extension Box
2 PCI based modular RAID controller is necessary
see Section VIII
S26361-F2826-E140
Trigger to request a PCI SAS Controller for configuring more than 4 SATA HDDs
max. 1x per system
For a later configuration of more than 4 SATA HDDs, the trigger is not necessary
In this case it is sufficient to implement a SAS controller!
It is not allowed to connect the SATA HDDs to different controllers
In case of running more than 4 HDDs, all of them have to be connected to the PCI based Controller
as long as stock
S26361-F4541-E100
SSD SAS 100GB, SLC
Solid State Disk, SAS 6Gb/s Enterprise Perfomance High Endurance **
hot plug/hot replace tray
max. 8/16x per system
S26361-F4541-E400
SSD SAS 400GB, SLC
Solid State Disk, SAS 6Gb/s Enterprise Perfomance High Endurance **
hot plug/hot replace tray
max. 8/16x per system
**) High Endurance
100GB: max 9PB***, random write
400GB: max 35PB***, random write
as long as stock
as long as stock
S26361-F4581-E100
SSD SAS 100GB, MLC
Solid State Disk, SAS 6Gb/s Enterprise Performance Mainstream Endurance *
hot plug/hot replace tray
max. 8/16x per system
S26361-F4581-E200
SSD SAS 200GB, MLC
Solid State Disk, SAS 6Gb/s Enterprise Performance Mainstream Endurance *
hot plug/hot replace tray
max. 8/16x per system
S26361-F4581-E400
SSD SAS 400GB, MLC
Solid State Disk, SAS 6Gb/s Enterprise Performance Mainstream Endurance *
hot plug/hot replace tray
max. 8/16x per system
*) Mainstream Endurance 10DWPD over 5y
Managed Life Model
Solid State Disk Drive, Mainstream Endurance*
SSD SAS 12Gb/s 2.5" with hot plug/hot replace tray
200GB, Enterprise Performance S26361-F5297-E200
400GB, Enterprise Performance S26361-F5297-E400
800GB, Enterprise Performance S26361-F5297-E800
1.6TB, Enterprise Performance S26361-F5297-E160
max. 8/16x per system
as soon as available
Interface SAS12Gb/s and SAS 6Gb/s.
SAS 12Gb/s support is not released
*) SSD Mainstream Endurance 10DWPD over 5y
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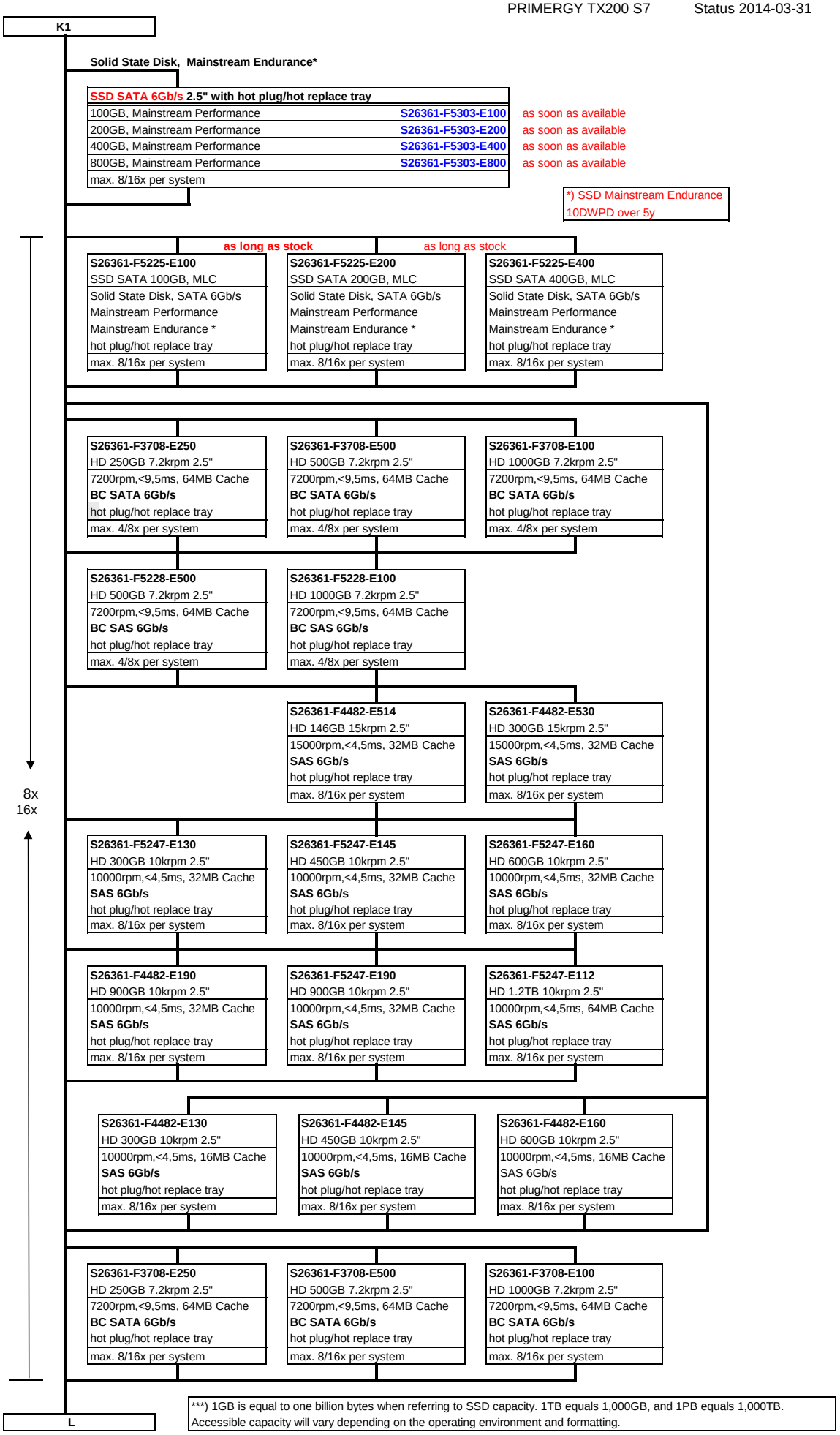
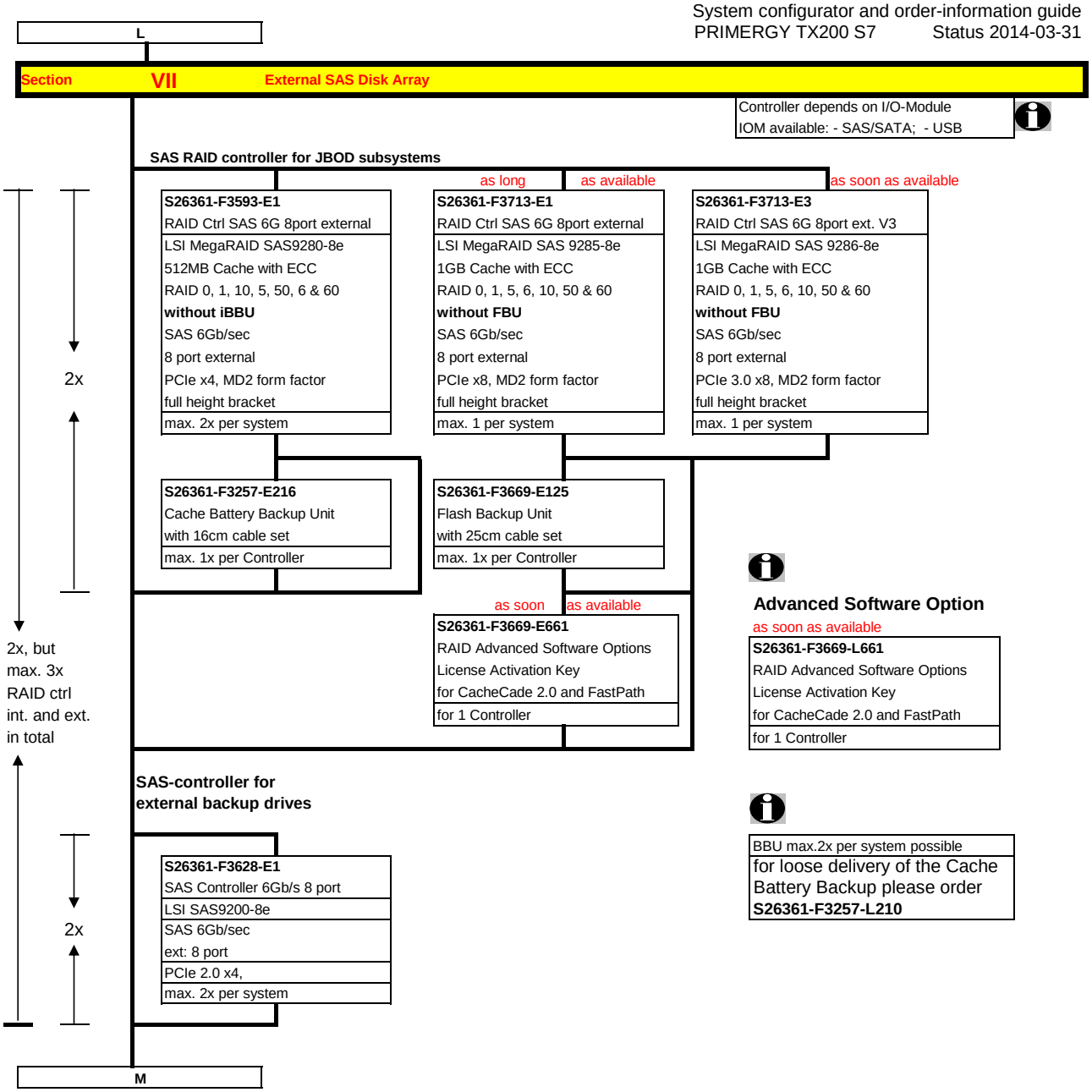


***) 1GB is equal to one billion bytes when referring to SSD capacity. 1TB equals 1,000GB, and 1PB equals 1,000TB.
Accessible capacity will vary depending on the operating environment and formatting.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Section VII External SAS Disk Array
Controller depends on I/O-Module
IOM available: - SAS/SATA; - USB
SAS RAID controller for JBOD subsystems
as long
as available
as soon as available
S26361-F3593-E1
RAID Ctrl SAS 6G 8port external
LSI MegaRAID SAS9280-8e
512MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6 & 60
without iBBU
SAS 6Gb/sec
8 port external
PCIe x4, MD2 form factor
full height bracket
max. 2x per system
S26361-F3713-E1
RAID Ctrl SAS 6G 8port external
LSI MegaRAID SAS 9285-8e
1GB Cache with ECC
RAID 0, 1, 5, 6, 10, 50 & 60
without FBU
SAS 6Gb/sec
8 port external
PCIe x8, MD2 form factor
full height bracket
max. 1 per system
S26361-F3713-E3
RAID Ctrl SAS 6G 8port ext. V3
LSI MegaRAID SAS 9286-8e
1GB Cache with ECC
RAID 0, 1, 5, 6, 10, 50 & 60
without FBU
SAS 6Gb/sec
8 port external
PCIe 3.0 x8, MD2 form factor
full height bracket
max. 1 per system
2x
S26361-F3257-E216
Cache Battery Backup Unit
with 16cm cable set
max. 1x per Controller
S26361-F3669-E125
Flash Backup Unit
with 25cm cable set
max. 1x per Controller
2x, but
max. 3x
RAID ctrl
int. and ext.
in total
as soon
as available
S26361-F3669-E661
RAID Advanced Software Options
License Activation Key
for CacheCade 2.0 and FastPath
for 1 Controller
Advanced Software Option
as soon as available
S26361-F3669-L661
RAID Advanced Software Options
License Activation Key
for CacheCade 2.0 and FastPath
for 1 Controller
SAS-controller for
external backup drives
S26361-F3628-E1
SAS Controller 6Gb/s 8 port
LSI SAS9200-8e
SAS 6Gb/sec
ext: 8 port
PCIe 2.0 x4,
max. 2x per system
2x
BBU max.2x per system possible
for loose delivery of the Cache
Battery Backup please order
S26361-F3257-L210
M

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Section VIII internal Disk Array

All Base Units contain a 6-port on-board SATA controller supporting RAID Levels 0, 1, 10
If a SAS Backup drive is configured, then the 4 SATA HDD boards are not available any more
If no SAS Backup drive is configured, then there is an optional SAS onboard controller available for up to 4 SAS HDDs
For more than 4 HDDs or for any HDD in combination with a SAS tape
it is necessary to select an 8 port PCI based RAID0/1 or RAID5 controller!

SAS RAID Controller for up to 4 SAS HDDs

S26361-F3674-E1
Onboard 4 port SAS Controller
LSI
Patsburg B replaces 4 onb. SATA ports
RAID 0, 1 & 10
no controller cache
SAS 6Gb/sec
4 internal ports
PCIe x4
no PCI slot required
max. 1x per system

A mix of onboard RAID and HW RAID is not allowed!

Controller for 1 to 8 LFF (3.5") or SFF (2.5") HDD

1x for LFF base
2x for SFF, but
max. 3x
RAID ctrl
int. and ext.
in total

S26361-F3554-E8
RAID Ctrl SAS 6G 8port int.
Based on chip LSISAS2008
LSI MegaRAID
no Cache, no BBU
RAID 0, 1 & 1E
Sup. for 3Gb/s and 6Gb/s
SATA and SAS HDs
PCIe x8
Low-prof. MD2 form factor
max. 1x / 2x per system

S26361-F3554-E512
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2108
LSI MegaRAID
512MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional BBU
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x / 2x per system

as long as available

S26361-F3669-E1
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2208
LSI MegaRAID
1GB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional FBU
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x / 2x per system

as soon as available

S26361-F3669-E3
RAID Ctrl SAS 6G 8port internal
Based on chip LSISAS2208
LSI MegaRAID
1GB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional FBU
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe 3.0 x8
Low-profile MD2 form factor
max. 1x per system

S26361-F3257-E216
Cache Battery Backup Unit
max. 1x per Controller

S26361-F3669-E100
TFM Module for FBU option
max. 1x per Controller

S26361-F3669-E125
Flash Backup Unit
with 25cm cable set
max. 1x per Controller

L-Order-Number is:
S26361-F3257-L210

Advanced Software Option

as soon as available

S26361-F3669-L660
RAID Advanced Software Options
License Activation Key
for CacheCade 2.0 and FastPath
for 1 Controller

as soon as available

S26361-F3669-E660
RAID Advanced Software Options
License Activation Key
for CacheCade 2.0 and FastPath
for 1 Controller

The FBU is an option for the controller which can be used once per controller.
If the FBU option has been choosen, the TFM Module is needed once per FBU.

for loose delivery of TFM & FBU please order:

S26361-F3669-L100
TFM Module for FBU option
max. 1x per Controller

S26361-F3669-L110
Flash Backup Unit
with 25cm, 55cm, 70cm cable set
max. 1x per Controller

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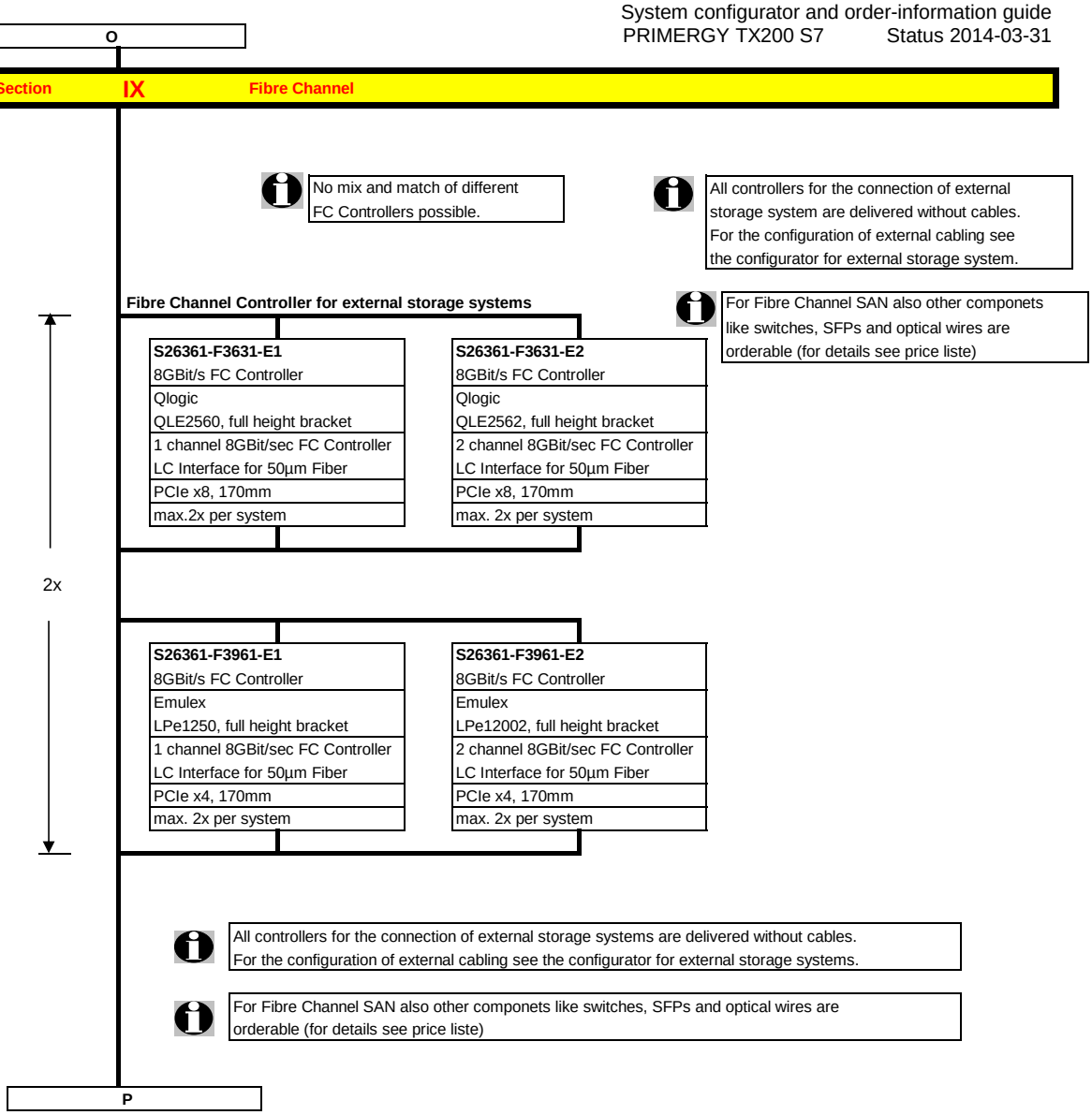
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Section IX Fibre Channel
No mix and match of different FC Controllers possible.
All controllers for the connection of external storage system are delivered without cables. For the configuration of external cabling see the configurator for external storage system.
Fibre Channel Controller for external storage systems
For Fibre Channel SAN also other componets like switches, SFPs and optical wires are orderable (for details see price liste)
S26361-F3631-E1
8GBit/s FC Controller
Qlogic
QLE2560, full height bracket
1 channel 8GBit/sec FC Controller
LC Interface for 50µm Fiber
PCIe x8, 170mm
max.2x per system
S26361-F3631-E2
8GBit/s FC Controller
Qlogic
QLE2562, full height bracket
2 channel 8GBit/sec FC Controller
LC Interface for 50µm Fiber
PCIe x8, 170mm
max. 2x per system
2x
S26361-F3961-E1
8GBit/s FC Controller
Emulex
LPe1250, full height bracket
1 channel 8GBit/sec FC Controller
LC Interface for 50µm Fiber
PCIe x4, 170mm
max. 2x per system
S26361-F3961-E2
8GBit/s FC Controller
Emulex
LPe12002, full height bracket
2 channel 8GBit/sec FC Controller
LC Interface for 50µm Fiber
PCIe x4, 170mm
max. 2x per system
All controllers for the connection of external storage systems are delivered without cables.
For the configuration of external cabling see the configurator for external storage systems.
For Fibre Channel SAN also other componets like switches, SFPs and optical wires are orderable (for details see price liste)
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Section X Communication / Network

2x1Gb on-board LAN Controller

Fast Ethernet Controller on-board
2x 1 Gbit Intel Hartwell
Server Adapter
ext: for RJ 45-connector
SW: AFT, VLAN, Fast Channel

Teaming: Failover, Load Balancing
The Intel LAN Controllers 1000TX and 1000SX
can be used with the on-board controller in Teaming Mode.
Two onboard LAN ports can likewise educate a team.

1Gbit/s Ethernet Adapter

2x

S26361-F4610-E2 (I350-T2)
Gbit Ethernet Controller Dual 1000TX
PLAN CP 2x1Gbit Cu Intel I350-T2
Intel Powerville based 2 port Server Ad.
PCIe x4, Low Profile
full height (FH) bracket
ext: for RJ45-plug, Cat 5
max. 2x per system

S26361-F4610-E4 (I350-T4)
Gbit Ethernet Controller Quad 1000TX
PLAN CP 4x1Gbit Cu Intel I350-T4
Intel Powerville based 4 port Server Ad.
PCIe x4, Low Profile
full height (FH) bracket
ext: for RJ45-plug, Cat 5
max. 2x per system

S26361-F3516-E1 (Shelter Island)
Gigabit Ethernet Controller 1000TX
Eth Ctrl 1x1Gbit PCI-e Gigabit CT DT Cu
Intel® Gigabit CT Desktop Adapter
PCIe x1
ext: for RJ45-connector, Cat 5
max. 2x per system

while stocks last

S26361-F3740-E1 (D3035)
Gbit Ethernet Controller Dual 1000TX
Eth Ctrl 2x1Gbit Cu PCIe x4 D3035
Intel Powerville based 2 port Server Ad.
PCIe x4, Low Profile
full height (FH) bracket
ext: for RJ45-plug, Cat 5
max. 2x per system

while stocks last

S26361-F3739-E1 (D3045)
Gbit Ethernet Controller Dual 1000TX
Eth Ctrl 4x1Gbit Cu PCIe x4 D3045
Intel Powerville based 4 port Server Ad.
PCIe x4, Low Profile
full height (FH) bracket
ext: for RJ45-plug, Cat 5
max. 2x per system

Loose delivery with FH and LP bracket:

I350-T2	S26361-F4610-L502
I350-T4	S26361-F4610-L504
D3035	S26361-F3740-L501
D3045	S26361-F3739-L501

Loose delivery with FH bracket:

Shelter Island	S26361-F3516-L1

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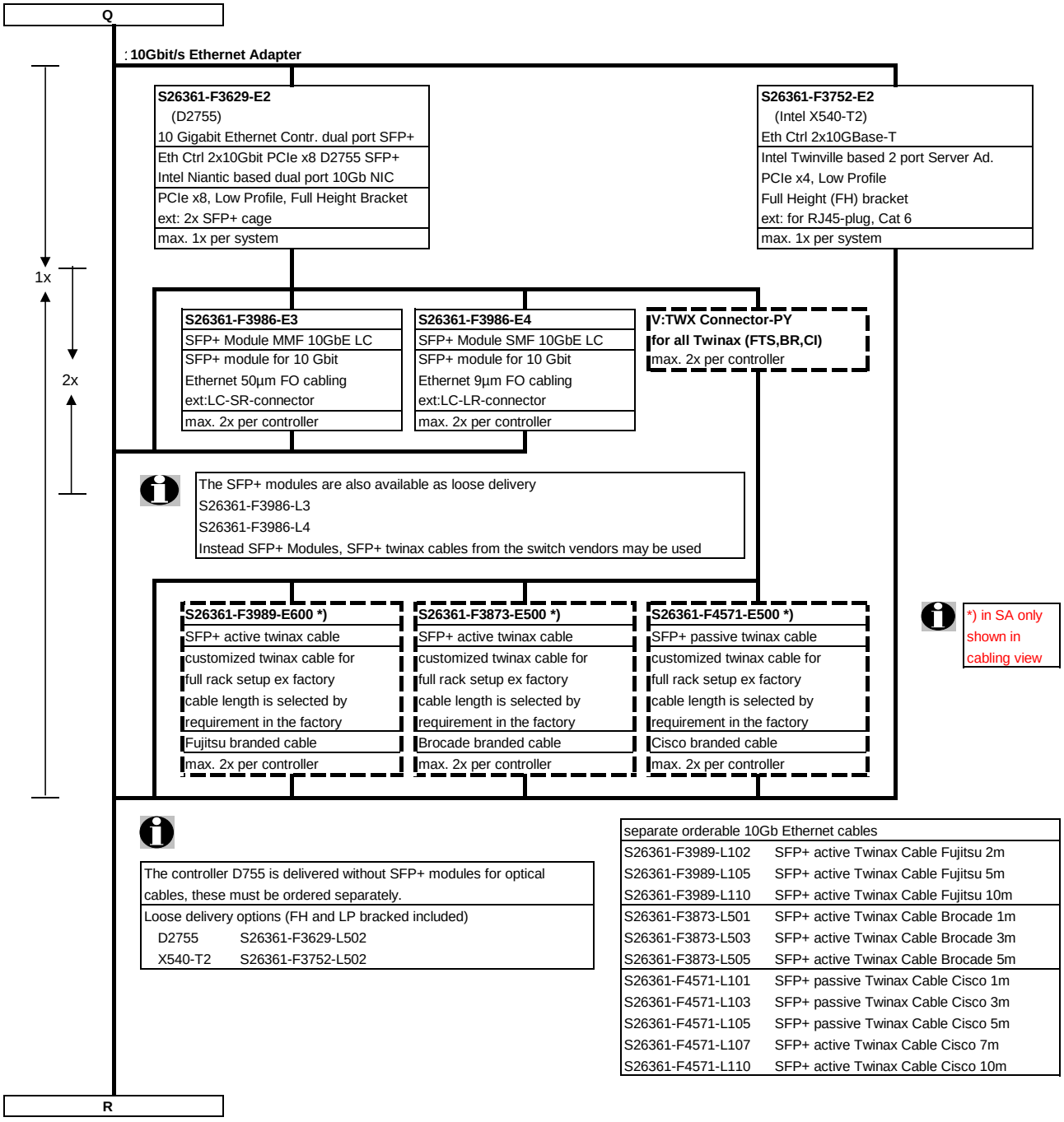

The controller D755 is delivered without SFP+ modules for optical cables, these must be ordered separately.	
Loose delivery options (FH and LP bracked included)	
D2755	S26361-F3629-L502
X540-T2	S26361-F3752-L502

separate orderable 10Gb Ethernet cables	
S26361-F3989-L102	SFP+ active Twinax Cable Fujitsu 2m
S26361-F3989-L105	SFP+ active Twinax Cable Fujitsu 5m
S26361-F3989-L110	SFP+ active Twinax Cable Fujitsu 10m
S26361-F3873-L501	SFP+ active Twinax Cable Brocade 1m
S26361-F3873-L503	SFP+ active Twinax Cable Brocade 3m
S26361-F3873-L505	SFP+ active Twinax Cable Brocade 5m
S26361-F4571-L101	SFP+ passive Twinax Cable Cisco 1m
S26361-F4571-L103	SFP+ passive Twinax Cable Cisco 3m
S26361-F4571-L105	SFP+ passive Twinax Cable Cisco 5m
S26361-F4571-L107	SFP+ active Twinax Cable Cisco 7m
S26361-F4571-L110	SFP+ active Twinax Cable Cisco 10m

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Section XI System Management Produkts (RemoteView)

iRMC S3 (integrated Remote Management Controller) onboard server management
Controller with dedicated 10/100/1000 Service LAN-port and integrated graphics.
Optional 10/100 Service LAN-port on front panel.
The Service LAN-port can be switched alternatively on standard Gbit LAN port

S26361-F1790-E242
iRMC S3 advanced pack
integrated remote management controller activation key for graphical console redirection and remote media redirection
max. 1x per system

S26361-F2571-E27
Maintenance LAN
Front management LAN Port In combination with iRMC adv. pack For local maintenance / console redirection, Integrated in front (operating panel)
max. 1x per system

Section XII Miscellaneous

Options and other peripherals
For other options, refer to SystemArchitect and Pricelist
These options are supplied lose with the shipment
For suitable peripherals for this product, please refer to SystemArcitect

S26361-F3776-E2
ENABLING LOW NOISE MODE TX200
Restricts configuration to make LNM possible
LNM is enabled ex factory
max. 1x per system

Configuration restrictions in LNM for TX200:
Max 4x 3.5" SATA HDDs are allowed! No SAS or 2.5" HDDs!
Max 1x PSUs is allowed! No redundant PSU!
No redundant fans are allowed!
No PCIe cards are allowed!
LNM can be enabled later, as long as the configuration restrictions are fulfilled
When adding not compatible components later, LNM will be switched off automatically

Section XIII Country specific Options

S26361-F1452-E100	**S26361-F1452-E110**	**S26361-F1452-E130**
REGION KIT APAC/EMEA/India	REGION KIT JP	REGION KIT America
For Shipments to Asia pacific, EMEA or India regions	For Shipments to Japan regions	For Shipments to America
1x per system	1x per system	1x per system

A power cord has to be ordered:
- once per basic unit and additional a second power cord
- if an additional hot plug, redundant power supply modul is ordered

PRIMERGY TX200 S7 Floorstand

max.2x

Power cord options (1x per PSU)
1.8m, grey

T26139-Y1740-E10	D, A, B, F, NL, FIN, N, S, E, P, RUS, TR
T26139-Y1742-E10	USA, Canada
T26139-Y1743-E10	Switzerland
T26139-Y1744-E10	UK, IR
T26139-Y1745-E10	Italy
T26139-Y1746-E10	Denmark
T26139-Y3850-E10	Option "no powercord", for Countries without specific cable orderable like e.g. China

PRIMERGY TX200 S7 19" Rack

Power cord options (1x per PSU)

T26139-Y1968-E100	Powercord for rack, 4m, grey, **IEC 320 C14 connector**
T26139-Y1742-E10	USA, Canada, 1.8m, grey
T26139-Y3850-E10	Option "no powercord", for Countries without specific cable orderable like e.g. China

Option for Floorstand

USB keyboards for floorstand versions for following countries:

USB standard Keyboard KB520		**USB professional Keyboard KBPC PX ECO**
S26381-K520-E170	Switzerland	S26381-K341-E170
S26381-K520-E104	Czech/Slovak	S26381-K341-E104
S26381-K520-E120	Germany	S26381-K341-E120
S26381-K520-E180	Spain	S26381-K341-E180
S26381-K520-E140	France	S26381-K341-E140
S26381-K520-E165	United Kingdom	S26381-K341-E165
S26381-K520-E185	Italy	S26381-K341-E185
S26381-K520-E154	Sweden / Finland	S26381-K341-E154
S26381-K520-E102	USA / international	S26381-K341-E110

option for floorstand

Optional Mouse

S26381-K457-E100	Mouse M510 black
S26381-K457-E101	Mouse M510 grey

Options and other peripherals
For other options, refer to SystemArchitect and Pricelist.
These options are supplied lose with the shipment.
For suitable peripherals for this product, please refer to SystemArcitect.

End PRIMERGY TX200 S7 floor

Change Report

Date	Order number	Changes
2014-03-17	S26361-F3739-E201	phase out
2014-03-17	S26361-F3740-E201	phase out
2014-03-17	S26361-F3610-E202	EOL
2014-01-30	S26361-F5247-E112	New 1.2TB 2.5" SAS 6G HDD added.
2014-01-30	S26361-F5303-*	New SATA SSDs added.
2014-01-30	S26361-F5297-*	New SAS SSDs added.
2013-10-18	Optional USB Comps	no longer available
2013-10-16	DDS3	removed from Configurator due to EoL
2013-07-16	HH DVDs	cut connection between HH ODD & slim frame
2013-07-15	F2735-L7 & L286	Tab: Basi Unit, RMK update
2013-05-28	S26361-F3738-E1	LTO6 added
2013-05-23	S26361-F3713-E3	RAID Ctrl SAS 6G 8Port ex 1GB LSI V3
2013-05-16	S26361-F3670-E400	New 3.5" BC-SATA 7.2K HDD 4TB
2013-05-16	S26361-F5241-E*	New 3.5" BC-SAS 7.2K HDD 1/2/3/4TB
2013-05-13		HDD & SSD description text updated
2013-03-25	S26361-F3669-E660/L660	RAID advanced SW option added - for RAID Ctrl SAS 6G 1GB (D3116C) added
2013-03-25	S26361-F3669-E3	RAID Ctrl SAS 6G 1GB (D3116C) added
2013-03-25	S26361-F3669-E661/L661	RAID advanced SW options added - for RAID Ctrl SAS 6G 8port external
2013-03-18	S26361-F3750-E324/504/E604	RDX & Cartridge bundles added
2012-12-13	S26361-F3641-E4	BD slim with frame included again
2013-01-08	S26361-F5228-E100	New 2.5" BC SAS 7.2K HDD
2013-01-08	S26361-F5247-E130	New 2.5" SAS 10K HDD (mix with BC-SATA supported, sucessor for *F5227*)
2012-12-13	S26361-F3641-E4	BD slim with frame removed
2012-12-07	S26361-F2826-E106	HDD box w/o LSD possible
2012-12-07	S26381-K520-E170	new keyboard numbers introduced
2012-12-07	S26381-K457-E100	new mouse numbers introduced
2012-12-07	S26361-F3776-E2	ENABLING LOW NOISE MODE TX200 added
2012-11-22	F3749-E4 and F3750-E4	"as soon as available" removed
2012-11-22	S26361-F3857-E4	"as long as available" added
2012-10-08	S26361-F3749-Ex	Added USB3.0 Adapter
2012-10-08	S26361-F3750-Ex	Added RDX Drive
2012-09-28	S26361-F4541-E200	EOL SSD SAS 200GB SLC
2012-09-05		SFF(2,5") HDD Extensionbox needs 2 modular Raid Controller
2012-08-16		BBU/FBU cable length in text corrected (UJ)
2012-08-01		first release