FUJITSU

PRIMERGY TX2540 M1

System configurator and order-information guide

June 2014

Contents

Instructions
Configuration diagram
Configurator

I	Basic unit
II	Processor
III	Memory
IV	Graphics
V	Accessible drives
VI	Hard disk drives
VII	External SAS or SCSI Disk Array
VIII	Internal Disk Array
IX	Fiberchannel
X	Communication/Network
XI	System Management Products (RemoteView)
XII	Miscellaneous
XIII	Country specific power cord

Change report

PRIMERGY Server

Instructions

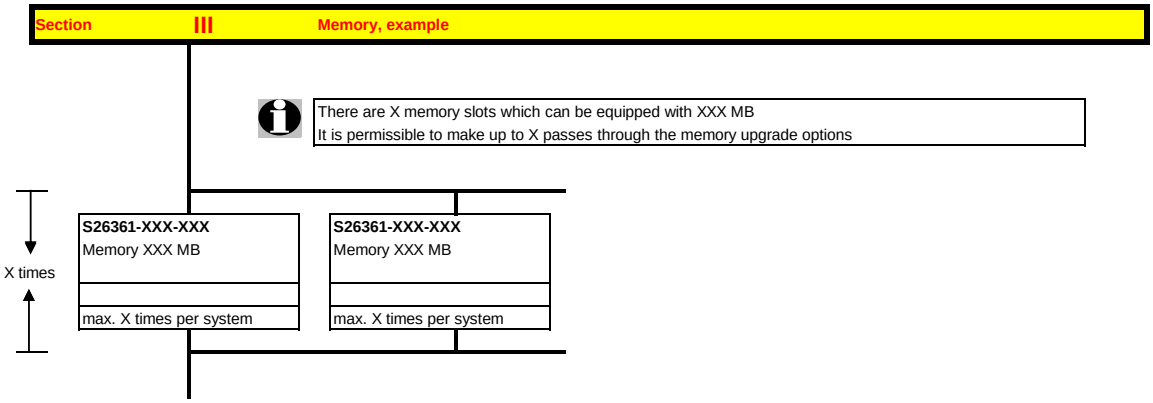
This document contains basic product and configuration information that will enable you to configure your system via PC-/System-Architect

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

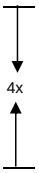
You can configure your individual PRIMERGY server in order to adjust your specific requirements.

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.

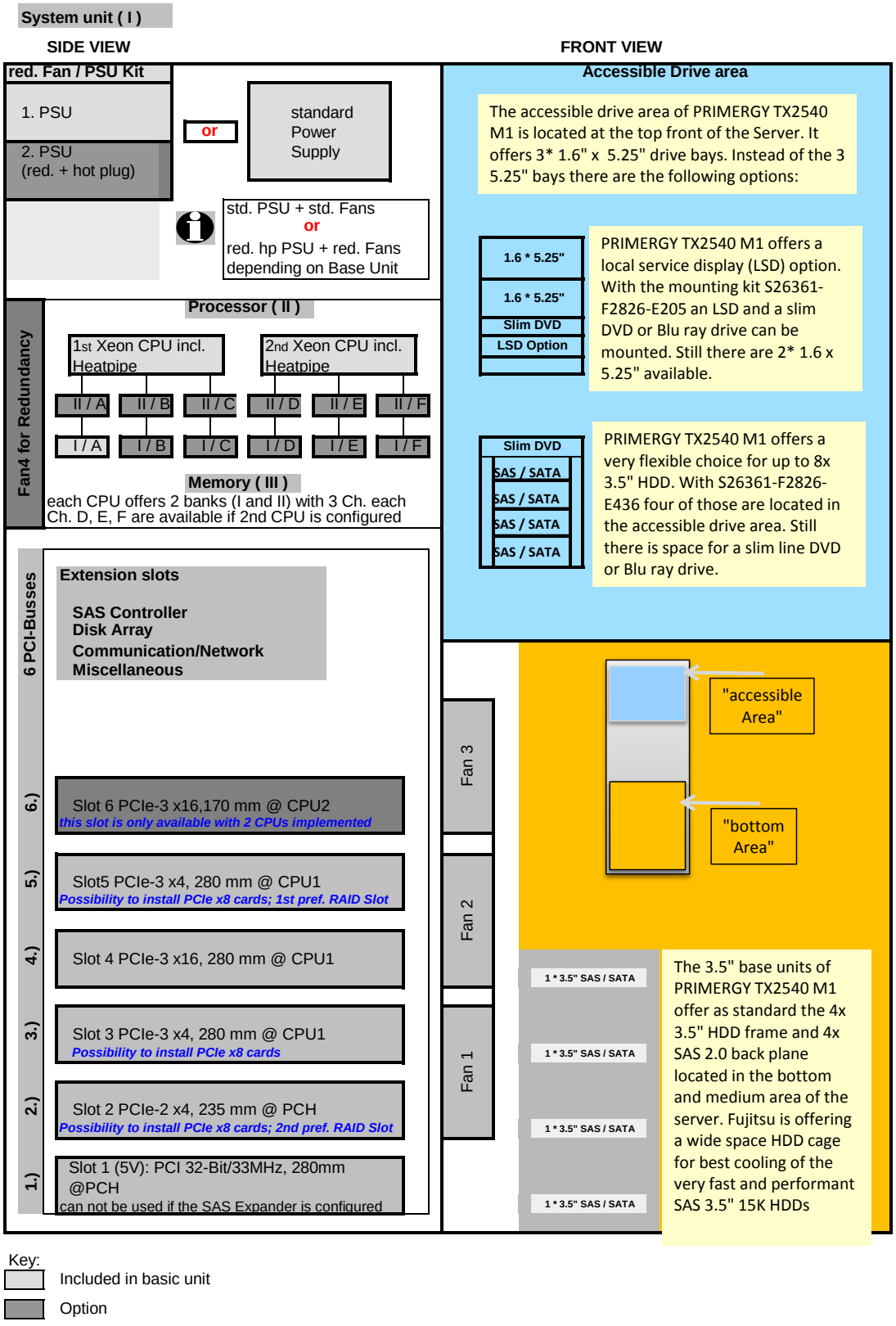
Further information in the internet see:

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.

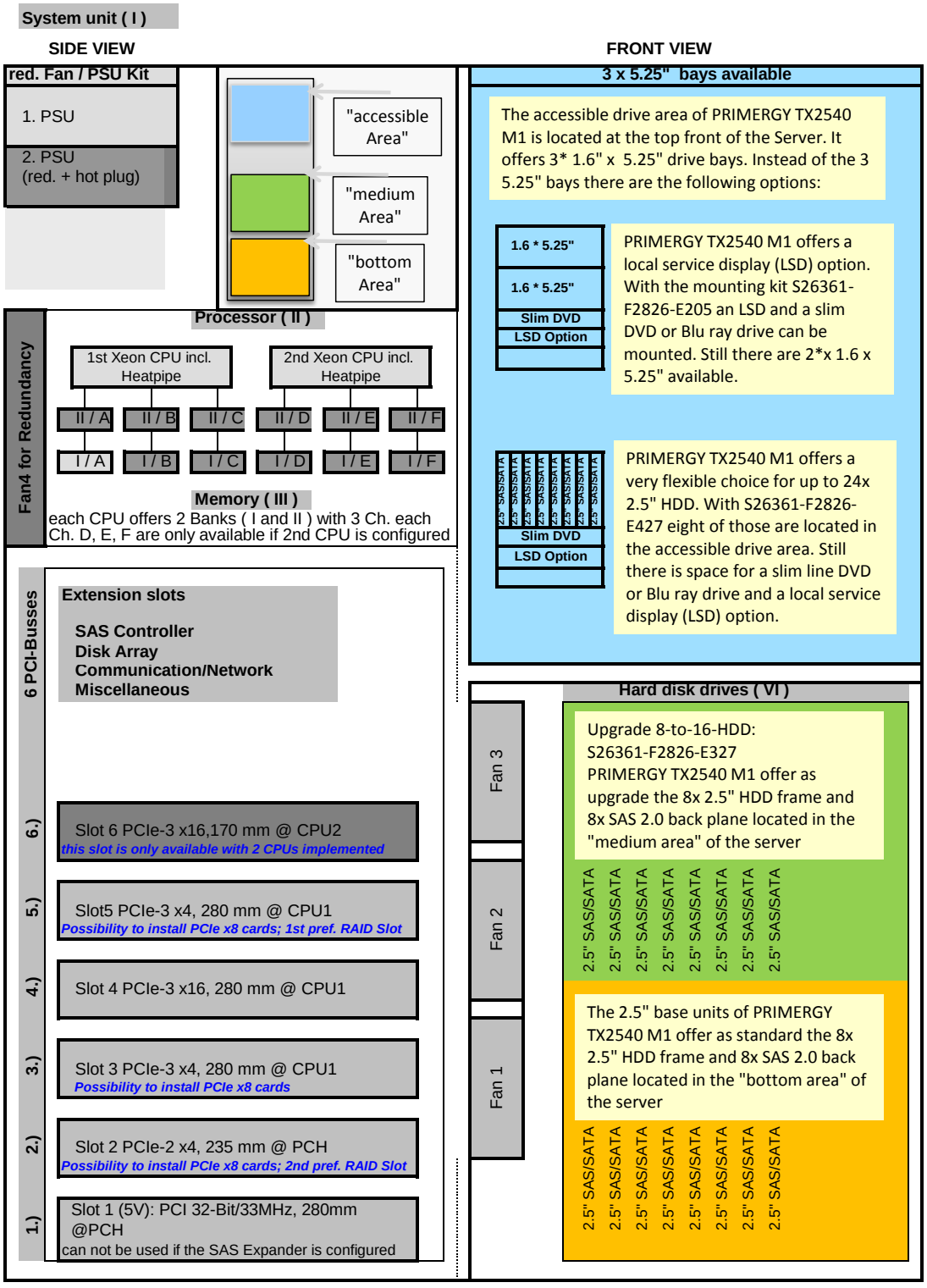
Configuration diagram PRIMERGY TX2540 M1 SATA LFF (3.5") System Unit



Key:

- Included in basic unit
- Option

Configuration diagram PRIMERGY TX2540 M1 SFF (2.5") System Unit



Key:

Included in basic unit

Option

Start PRIMERGY TX2540 M1

Section I -- Base unit

Tower or Rack Server base unit including:

Systemboard D3099-B
Intel® C600 Series Platform Controller Hub (codename Patsburg)
supports up to two Xeon E5-2400 v2 series (up to 10 cores, socket LGA1356) with 1 serial QPI link (Quick Path Interconnect)

12 DIMM sockets supporting up to 192GB DDR3 (up to 1600MHz) (Chipset can support up to 768GB, release pending)

iRMC S4 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100/1000 Service LAN-port (with Realtek Phy 8211E) and integrated graphics controller (max. Resolution: 1920 x 1080 at 16 bpp)
The Service LAN-port can be switched alternatively on standard Gbit LAN port

6 PCIe slots
- 1x PCIe-3 *16 (only with CPU2)
- 1x PCIe-3 *16
- 2x PCIe-3 *4 (mechanical *8)
- 1x PCIe-2 *4 (mechanical *8)
- 1x PCI 32Bit 33MHz (support for 3.3V and 3.3+5V; ! no support of 5V-only cards)

* 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 rear, 2x external front, 3x on Board for backup, CCR, UFM)
* 2x LAN RJ45, 1x Service-LAN RJ45

4-port SATA 2.0 controller (SW-RAID 0,1,5, 10) or optional 4 ports for SAS RAID 0/1 (Licence Key required)
2-port SATA 3.0 controller
2x1 Gbit Ethernet LAN on board (Intel i210) supporting iSCSI boot option in System BIOS

two lockable front covers (Tower only)
backplane with 4 (LFF) or 8 (SFF) bays for hot-plug HDs
3 bays 5.25" for accessible drives (half height)

Standard power supply unit (PSU) 800W, up to 90% efficiency ("80-plus")
Modular hot plug power supply unit 450W up to 94% efficiency (platinum)
Modular hot plug power supply unit 800W up to 94% efficiency (platinum)
Modular hot plug power supply unit 800W up to 96% efficiency (titanium)

3 x 120mm System fan (No hot-plug, no redundancy) - option for a 4th fan for N+1 redundancy

Software
ServerView Suite DVD Pack incl. Installation SW, Management SW and Serviceability SW

Floorstand System

LFF Base Unit standard **S26361-K1463-V101**
- 3 std fans and std PSU
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HDs incl. cables for connection to the modular or onboard controllers

LFF Base Unit redundant **S26361-K1463-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 HDs incl. cables for connection to the modular or onboard controllers

SFF Base Unit redundant **S26361-K1463-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 HDs incl. cables for connection to the modular RAID controllers

S26361-F3552-E6
TPM Module
Trusted Platform Module. Use according to import restrictions
max. 1x per system

B

Rack System

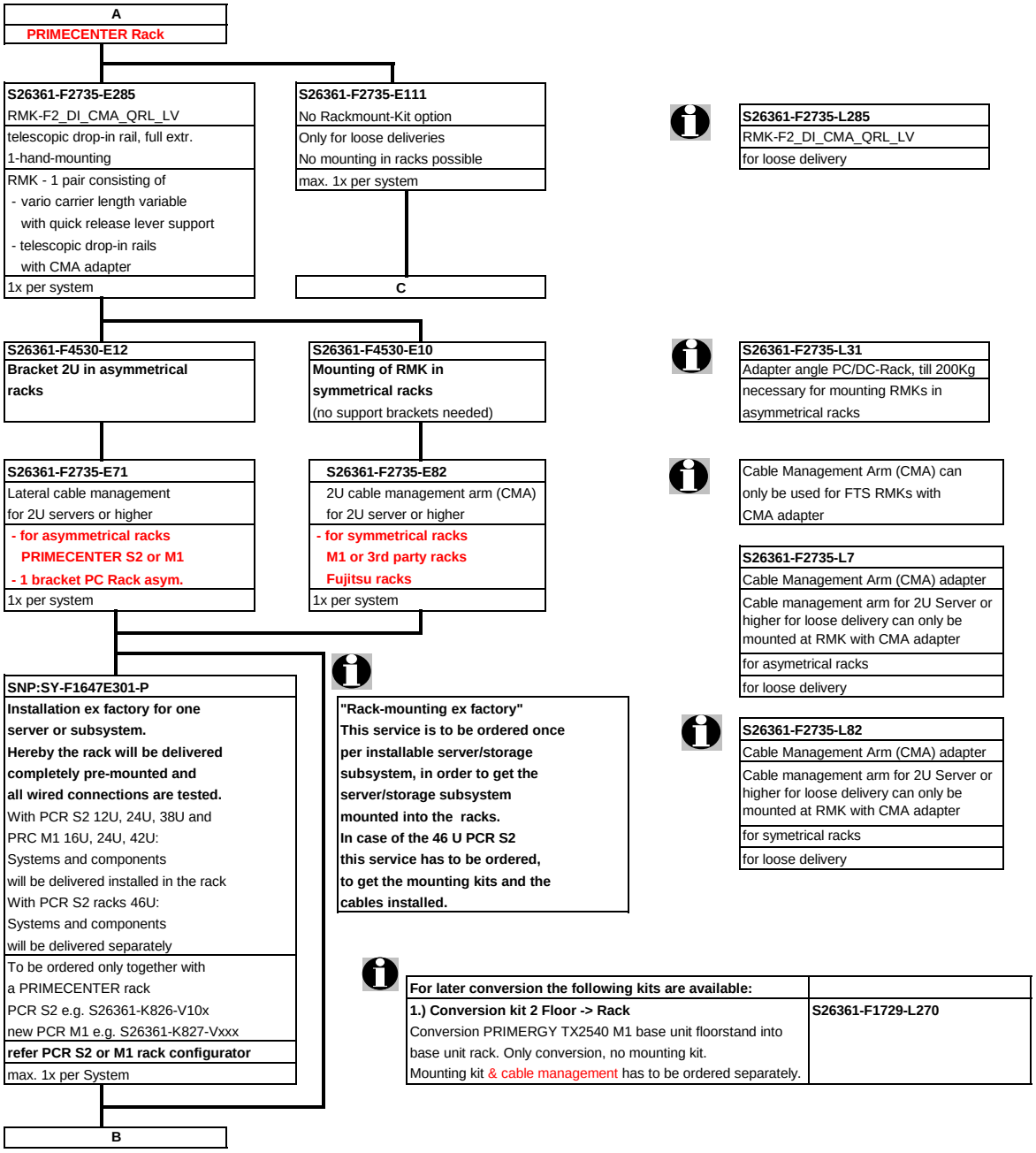
LFF Base Unit redundant **S26361-K1463-V601**
- 3 std fans plus 1 std fan for redundancy
- **1 hp PSU has to be added**
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HDs incl. cables for connection to the modular or onboard controllers

SFF Base Unit redundant **S26361-K1463-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 HDs incl. cables for connection to the modular RAID controllers

S26361-F3552-E6
TPM Module
Trusted Platform Module. Use according to import restrictions
max. 1x per system

A

S26361-F3552-L6
TPM Module
Trusted Platform Module. Use according to import restrictions
max. 1x per system


A
PRIMECENTER Rack
S26361-F2735-E285
RMK-F2_DI_CMA_QRL_LV
telescopic drop-in rail, full extr.
1-hand-mounting
RMK - 1 pair consisting of
- vario carrier length variable
with quick release lever support
- telescopic drop-in rails
with CMA adapter
1x per system
S26361-F2735-E111
No Rackmount-Kit option
Only for loose deliveries
No mounting in racks possible
max. 1x per system
C
S26361-F2735-L285
RMK-F2_DI_CMA_QRL_LV
for loose delivery
S26361-F4530-E12
Bracket 2U in asymmetrical racks
S26361-F4530-E10
Mounting of RMK in symmetrical racks
(no support brackets needed)
S26361-F2735-L31
Adapter angle PC/DC-Rack, till 200Kg
necessary for mounting RMKs in asymmetrical racks
S26361-F2735-E71
Lateral cable management
for 2U servers or higher
- for asymmetrical racks
PRIMECENTER S2 or M1
- 1 bracket PC Rack asym.
1x per system
S26361-F2735-E82
2U cable management arm (CMA)
for 2U server or higher
- for symmetrical racks
M1 or 3rd party racks
Fujitsu racks
1x per system
Cable Management Arm (CMA) can only be used for FTS RMKs with CMA adapter
S26361-F2735-L7
Cable Management Arm (CMA) adapter
Cable management arm for 2U Server or higher for loose delivery can only be mounted at RMK with CMA adapter
for asymetrical racks
for loose delivery
S26361-F2735-L82
Cable Management Arm (CMA) adapter
Cable management arm for 2U Server or higher for loose delivery can only be mounted at RMK with CMA adapter
for symetrical racks
for loose delivery
SNP:SY-F1647E301-P
Installation ex factory for one server or subsystem.
Hereby the rack will be delivered completely pre-mounted and all wired connections are tested.
With PCR S2 12U, 24U, 38U and PRC M1 16U, 24U, 42U:
Systems and components will be delivered installed in the rack
With PCR S2 racks 46U:
Systems and components will be delivered separately
To be ordered only together with a PRIMECENTER rack
PCR S2 e.g. S26361-K826-V10x
new PCR M1 e.g. S26361-K827-Vxxx
refer PCR S2 or M1 rack configurator
max. 1x per System
"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.
For later conversion the following kits are available:
1.) Conversion kit 2 Floor -> Rack
Conversion PRIMERGY TX2540 M1 base unit floorstand into base unit rack. Only conversion, no mounting kit.
Mounting kit & cable management has to be ordered separately.
S26361-F1729-L270
B

B

* 110V range not supported

2x

as soon as available

S26113-F575-E12	S26113-F574-E12	S26113-F615-E10*	S26113-F574-E99
450W PSU module platinum	**800W** PSU module platinum	**800W** PSU module titanium	Dummy PSU
1st or 2nd PSU for redundancy	1st or 2nd PSU for redundancy	1st or 2nd PSU for redundancy	If 1x PSU is configured 1x Dummy PSU is required
94% efficiency (platinum)	94% efficiency (platinum)	96% efficiency (titanium)	covers hole
uses hot plug PSU slot	uses hot plug PSU slot	uses hot plug PSU slot	max. 1x per system
min. 1 / max. 2x per system	min. 1 / max. 2x per system	min. 1 / max. 2x per system	

For later upgrades the following kits are available:	
1 power supply module 450W hot plug: Platinum, Supplementary module	**S26113-F575-L12**
1 power supply module 800W hot plug: Platinum, Supplementary module	**S26113-F574-L12**
1 power supply module 800W hot plug: Titanium, Supplementary module	**S26113-F615-L10**
Attention: There is no power cable included!	

We recommend to calculate the maximum power requirement for your specific configuration (power calculator). For most configurations the 450W PSU is sufficient.
In case of too high power load anyway Power Safeguard will throttle CPU and therefore can avoid system overload.

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	

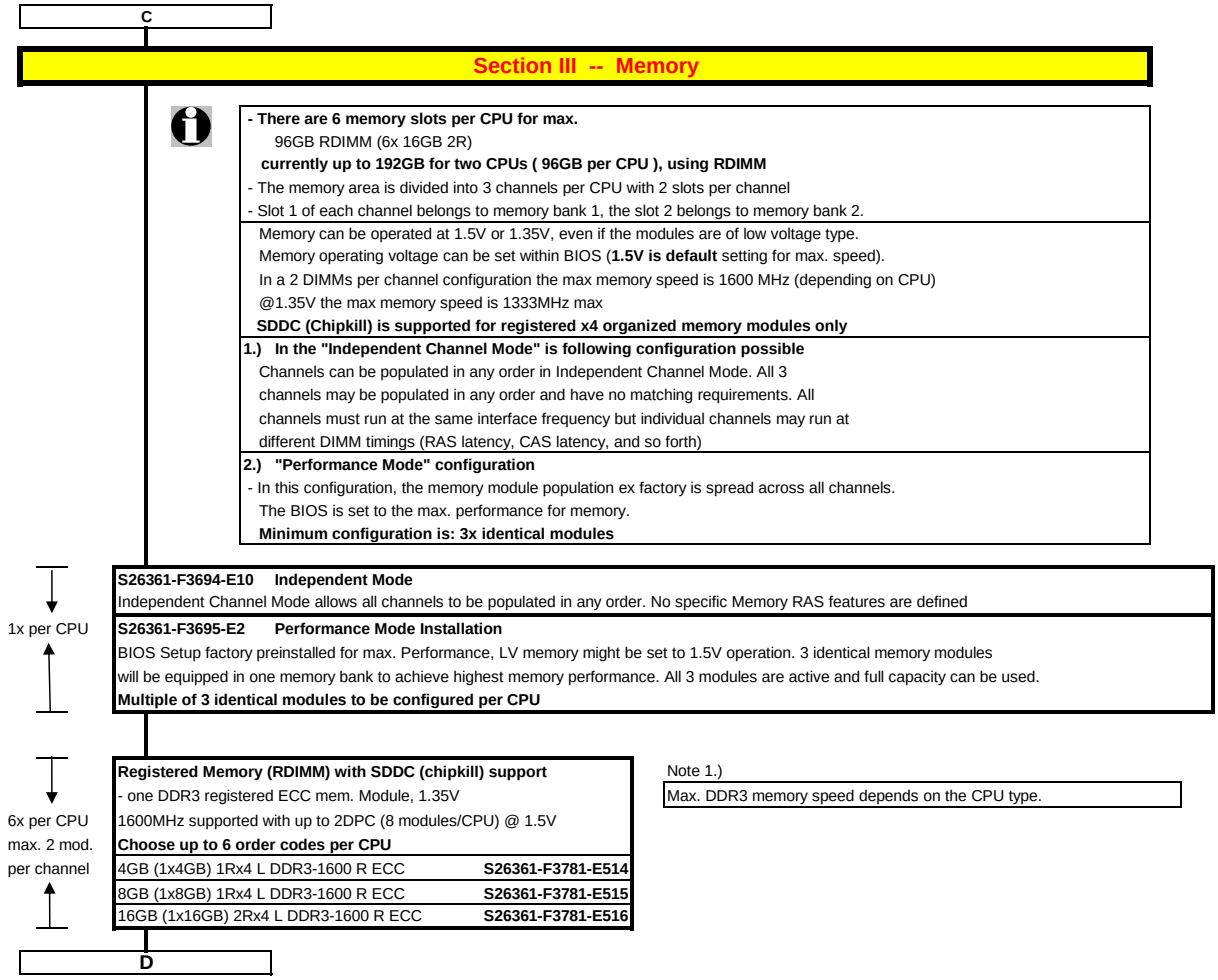
For redundant floorstand versions only (V201 and V401)
A second, redundant power supply requires an additional country specific power cord (section XIII)

Section II -- Processors

There are 2 processor sockets available.
The first socket must always be 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

Max. two CPUs can be selected per basic unit	
One of following CPUs 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 CPUs - 1x 64-bit Intel Xeon (10MB shared TLC = Third Level Cache) 1333 MHz DDR3 Bus, 6,40 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2403v2 4C/4T 1.80GHz 10MB 6.40GT/s 1333MHz 80W	**S26361-F3828-E180**
Xeon E5-2407v2 4C/4T 2.40GHz 10MB 6.40GT/s 1333MHz 80W	**S26361-F3828-E240**
Standard Turbo 6/8C CPUs - 1x 64-bit Intel Xeon (15/20MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1600 MHz DDR3 Bus, 7,20 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5-2420v2 6C/12T 2.20GHz 15MB 7.20GT/s 1600MHz 80W	**S26361-F3829-E220**
Xeon E5-2430v2 6C/12T 2.50GHz 15MB 7.20GT/s 1600MHz 80W	**S26361-F3829-E250**
Xeon E5-2440v2 8C/16T 1.90GHz 20MB 7.20GT/s 1600MHz 95W	**S26361-F3829-E190**
Advanced Turbo+ 8C/10C 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 E5-2450v2 8C/16T 2.50GHz 20MB 8.00GT/s 1600MHz 95W	**S26361-F3830-E250**
Xeon E5-2470v2 10C/20T 2.40GHz 25MB 8.00GT/s 1600MHz 95W	**S26361-F3830-E240**
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 E5-2430Lv2 6C/12T 2.40GHz 15MB 7.20GT/s 1600MHz 60W	**S26361-F3831-E240**

C


C
Section III -- Memory
- There are 6 memory slots per CPU for max.
96GB RDIMM (6x 16GB 2R)
currently up to 192GB for two CPUs (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.
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 the max memory speed is 1600 MHz (depending on CPU)
@1.35V the max memory speed is 1333MHz max
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)
2.) "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
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
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
6x per CPU
max. 2 mod.
per channel
Registered Memory (RDIMM) with SDDC (chipkill) support
- one DDR3 registered ECC mem. Module, 1.35V
1600MHz supported with up to 2DPC (8 modules/CPU) @ 1.5V
Choose up to 6 order codes per CPU
4GB (1x4GB) 1Rx4 L DDR3-1600 R ECC S26361-F3781-E514
8GB (1x8GB) 1Rx4 L DDR3-1600 R ECC S26361-F3781-E515
16GB (1x16GB) 2Rx4 L DDR3-1600 R ECC S26361-F3781-E516
D
Note 1.)
Max. DDR3 memory speed depends on the CPU type.

Memory Configuration PRIMERGY TX2540 M1

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 2 basic modes of operation (see explanation below).

Mode	Configuration	RDIMM	Application
		x4	
SDDC (chipkill) support	any	yes	detect multi-bit errors
Independant Channel Mode	1, 2 or 3 Modules per Bank	yes	offers max. flexibility, upgradeability, capacity use UDIMM modules for lowest cost
Performance Mode	3 identical Modules / Bank	yes	offers maximum performance and capacity

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

Capacity	Configuration	RDIMM	Notes
Min. Memory per CPU	1 Module / CPU	4GB	with one CPU
Max. Memory per CPU	6 Modules / CPU	96GB	with one CPU
Max. Memory per System	12 Modules / System	192GB	if second CPU is configured

Memory-Speed:
Max. DDR3 memory speed depends on the speed of the CPU
Real maximum memory-bus speed depending on CPU type and voltage setting (BIOS; default is 1.5V)

Mem. Speed provided by CPU	RDIMM 1600MHz			
Voltage setting (BIOS)	1.5V		1.35V	
DIMM per Channel (DPC)	1	2	1	2
CPU with 1600MHz DDR3 Bus	1600	1600	1333	1333
CPU with 1333MHz DDR3 Bus	1333	1333	1333	1333

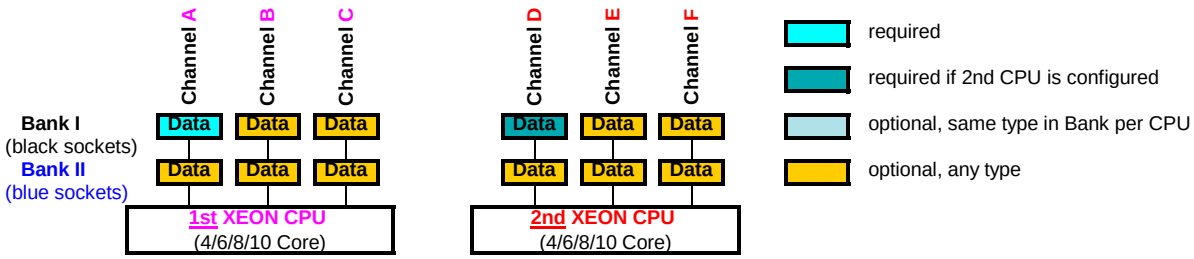
Configuration hints:

- 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

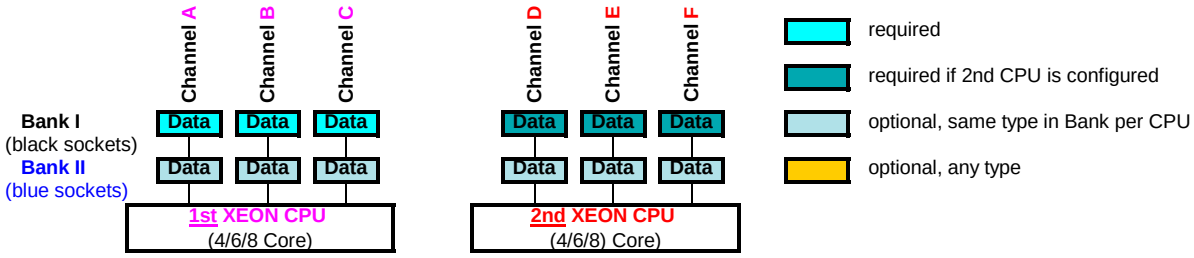
- See below and next page for a detailed descriptions of the memory configuration supported.

1. Independent Channel Mode

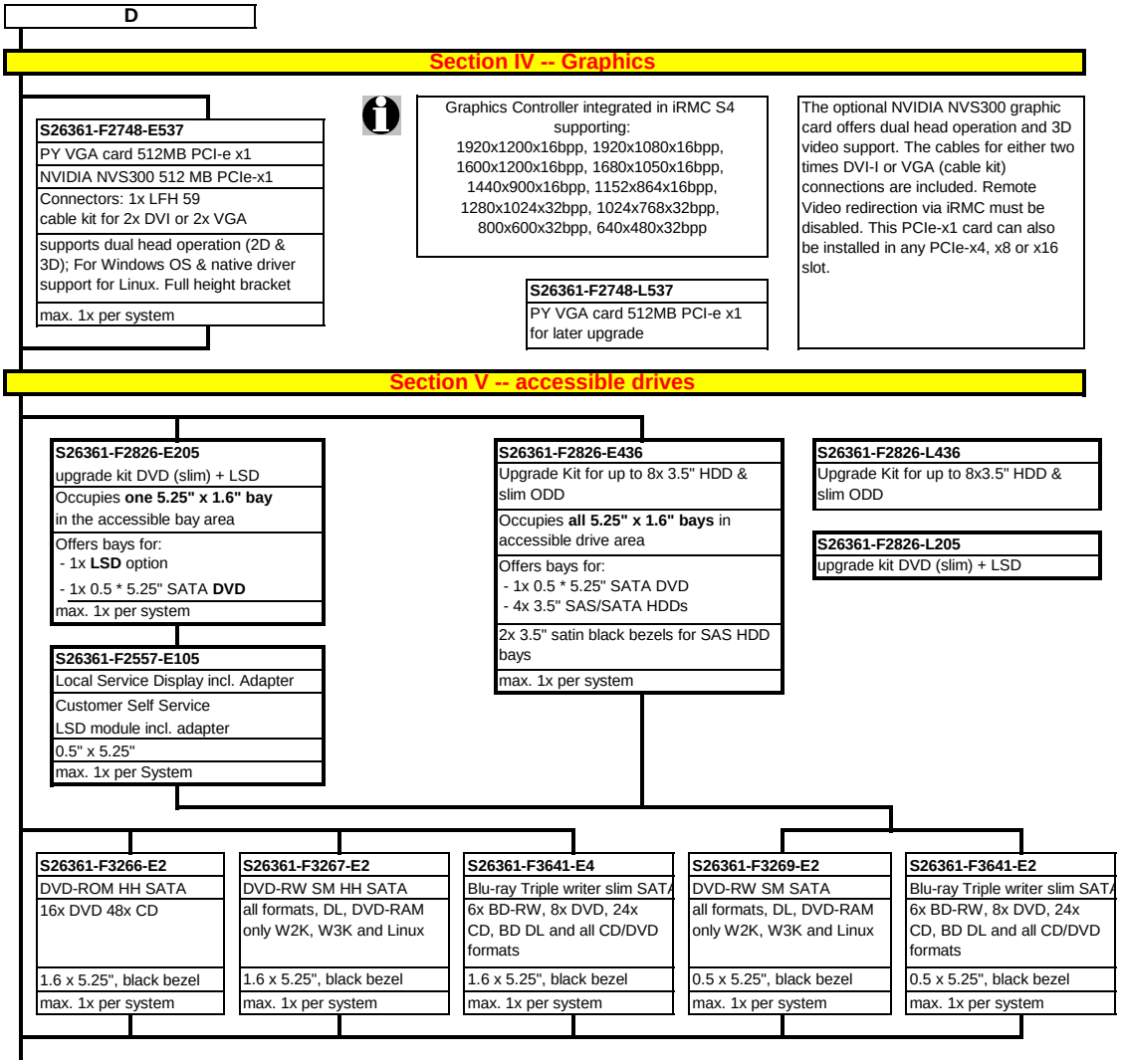


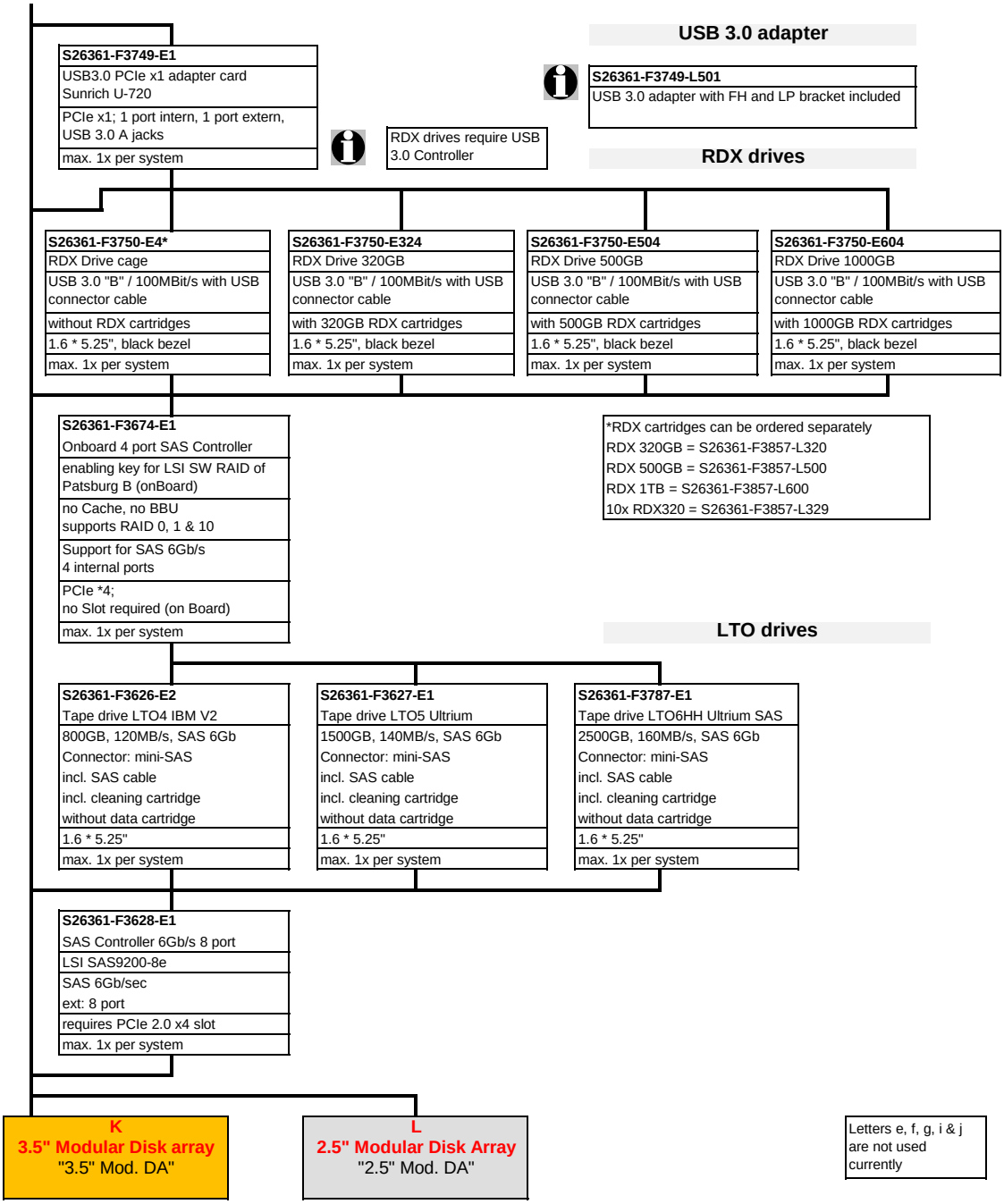
Independent Channel Mode allows all channels to be populated in any order
Can run with differently rated DIMMs and use the settings of the slowest DIMM installed in the system

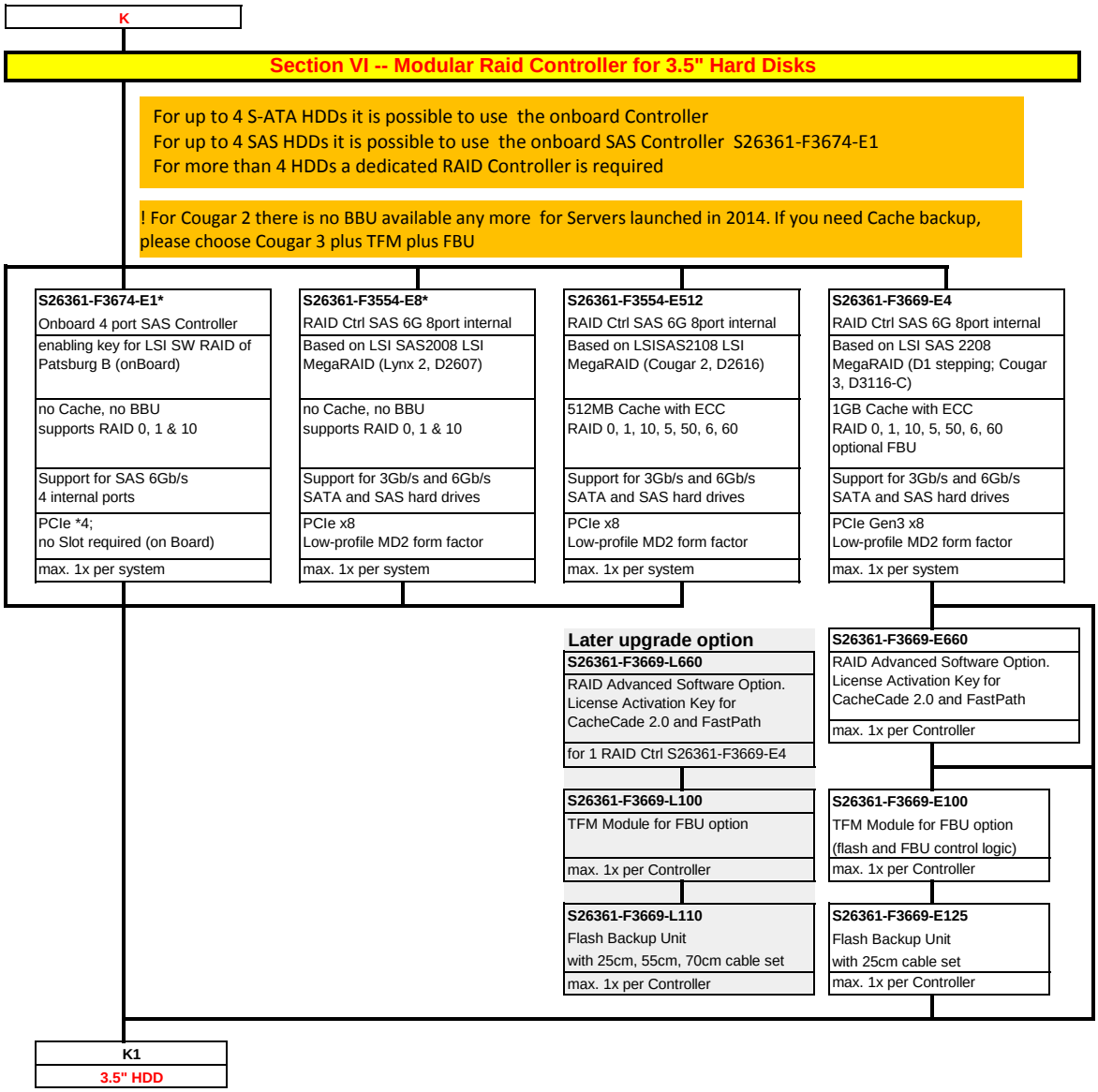
2. Performance Channel Mode



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.


D
Section IV -- Graphics
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
supports dual head operation (2D & 3D); For Windows OS & native driver support for Linux. Full height bracket
max. 1x per system
Graphics Controller integrated in iRMC S4 supporting:
1920x1200x16bpp, 1920x1080x16bpp, 1600x1200x16bpp, 1680x1050x16bpp, 1440x900x16bpp, 1152x864x16bpp, 1280x1024x32bpp, 1024x768x32bpp, 800x600x32bpp, 640x480x32bpp
S26361-F2748-L537
PY VGA card 512MB PCI-e x1
for later upgrade
The optional NVIDIA NVS300 graphic card offers dual head operation and 3D video support. The cables for either two times DVI-I or VGA (cable kit) connections are included. Remote Video redirection via iRMC must be disabled. This PCIe-x1 card can also be installed in any PCIe-x4, x8 or x16 slot.
Section V -- accessible drives
S26361-F2826-E205
upgrade kit DVD (slim) + LSD
Occupies one 5.25" x 1.6" bay
in the accessible bay area
Offers bays for:
- 1x LSD option
- 1x 0.5 * 5.25" SATA DVD
max. 1x per system
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-F2826-E436
Upgrade Kit for up to 8x 3.5" HDD & slim ODD
Occupies all 5.25" x 1.6" bays in accessible drive area
Offers bays for:
- 1x 0.5 * 5.25" SATA DVD
- 4x 3.5" SAS/SATA HDDs
2x 3.5" satin black bezels for SAS HDD bays
max. 1x per system
S26361-F2826-L436
Upgrade Kit for up to 8x3.5" HDD & slim ODD
S26361-F2826-L205
upgrade kit DVD (slim) + LSD
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 SM HH SATA
all formats, 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
6x BD-RW, 8x DVD, 24x CD, BD DL and all CD/DVD formats
1.6 x 5.25", black bezel
max. 1x per system
S26361-F3269-E2
DVD-RW SM SATA
all formats, 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", black bezel
max. 1x per system


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
RDX drives require USB 3.0 Controller
USB 3.0 adapter
S26361-F3749-L501
USB 3.0 adapter with FH and LP bracket included
RDX drives
S26361-F3750-E4*
RDX Drive cage
USB 3.0 "B" / 100MBit/s with USB connector cable
without RDX cartridges
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3750-E324
RDX Drive 320GB
USB 3.0 "B" / 100MBit/s with USB connector cable
with 320GB RDX cartridges
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3750-E504
RDX Drive 500GB
USB 3.0 "B" / 100MBit/s with USB connector cable
with 500GB RDX cartridges
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3750-E604
RDX Drive 1000GB
USB 3.0 "B" / 100MBit/s with USB connector cable
with 1000GB RDX cartridges
1.6 * 5.25", black bezel
max. 1x per system
S26361-F3674-E1
Onboard 4 port SAS Controller
enabling key for LSI SW RAID of Patsburg B (onBoard)
no Cache, no BBU
supports RAID 0, 1 & 10
Support for SAS 6Gb/s
4 internal ports
PCIe *4;
no Slot required (on Board)
max. 1x per system
*RDX cartridges can be ordered separately
RDX 320GB = S26361-F3857-L320
RDX 500GB = S26361-F3857-L500
RDX 1TB = S26361-F3857-L600
10x RDX320 = S26361-F3857-L329
LTO drives
S26361-F3626-E2
Tape drive LTO4 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 LTO5 Ultrium
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
S26361-F3628-E1
SAS Controller 6Gb/s 8 port
LSI SAS9200-8e
SAS 6Gb/sec
ext: 8 port
requires PCIe 2.0 x4 slot
max. 1x per system
K
3.5" Modular Disk array
"3.5" Mod. DA"
L
2.5" Modular Disk Array
"2.5" Mod. DA"
Letters e, f, g, i & j are not used currently


K
Section VI -- Modular Raid Controller for 3.5" Hard Disks
For up to 4 S-ATA HDDs it is possible to use the onboard Controller
For up to 4 SAS HDDs it is possible to use the onboard SAS Controller S26361-F3674-E1
For more than 4 HDDs a dedicated RAID Controller is required
! For Cougar 2 there is no BBU available any more for Servers launched in 2014. If you need Cache backup, please choose Cougar 3 plus TFM plus FBU
S26361-F3674-E1*
Onboard 4 port SAS Controller
enabling key for LSI SW RAID of Patsburg B (onBoard)
no Cache, no BBU
supports RAID 0, 1 & 10
Support for SAS 6Gb/s
4 internal ports
PCIe *4;
no Slot required (on Board)
max. 1x per system
S26361-F3554-E8*
RAID Ctrl SAS 6G 8port internal
Based on LSI SAS2008 LSI MegaRAID (Lynx 2, D2607)
no Cache, no BBU
supports RAID 0, 1 & 10
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x per system
S26361-F3554-E512
RAID Ctrl SAS 6G 8port internal
Based on LSISAS2108 LSI MegaRAID (Cougar 2, D2616)
512MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
Support for 3Gb/s and 6Gb/s
SATA and SAS hard drives
PCIe x8
Low-profile MD2 form factor
max. 1x per system
S26361-F3669-E4
RAID Ctrl SAS 6G 8port internal
Based on LSI SAS 2208 MegaRAID (D1 stepping; Cougar 3, D3116-C)
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 Gen3 x8
Low-profile MD2 form factor
max. 1x per system
Later upgrade option
S26361-F3669-L660
RAID Advanced Software Option. License Activation Key for CacheCade 2.0 and FastPath
for 1 RAID Ctrl S26361-F3669-E4
S26361-F3669-E660
RAID Advanced Software Option. License Activation Key for CacheCade 2.0 and FastPath
max. 1x per Controller
S26361-F3669-L100
TFM Module for FBU option
max. 1x per Controller
S26361-F3669-E100
TFM Module for FBU option
(flash and FBU control logic)
max. 1x per Controller
S26361-F3669-L110
Flash Backup Unit
with 25cm, 55cm, 70cm cable set
max. 1x per Controller
S26361-F3669-E125
Flash Backup Unit
with 25cm cable set
max. 1x per Controller
K1
3.5" HDD

L

Section VII -- Modular Raid Controller for 2.5" Hard Disks

! For Cougar 2 there is no BBU available any more for Servers launched in 2014. If you need Cache backup, please choose Cougar 3 plus TFM plus FBU

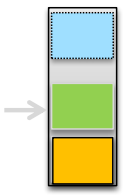
S26361-F3554-E8*	S26361-F3554-E512	S26361-F3669-E4
RAID Ctrl SAS 6G 8port internal	RAID Ctrl SAS 6G 8port internal	RAID Ctrl SAS 6G 8port internal
Based on LSI SAS2008 MegaRAID (Lynx 2, D2607)	Based on LSI SAS2108 MegaRAID (Cougar 2, D2616)	Based on LSI SAS2208 LSI MegaRAID (D1 stepping; Cougar 3, D3116-C)
no Cache, no BBU supports RAID 0, 1 & 10; no support of SAS Expander	512MB Cache with ECC RAID 0, 1, 10, 5, 50, 6, 60	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	Support for 3Gb/s and 6Gb/s SATA and SAS hard drives	Support for 3Gb/s and 6Gb/s SATA and SAS hard drives
PCIe x8 Low-profile MD2 form factor	PCIe x8 Low-profile MD2 form factor	PCIe Gen3 x8 Low-profile MD2 form factor
max. 1x per system	max. 1x per system	max. 1x per system

upgrade options

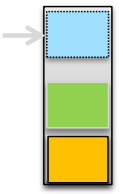
S26361-F3669-L660	S26361-F3669-E660
RAID Advanced Software Options License Activation Key for CacheCade 2.0 and FastPath	RAID Advanced SW Options License Activation Key for CacheCade 2.0 and FastPath
for 1 RAID Ctrl S26361-F3669-E4	for 1 RAID Ctrl S26361-F3669-E4

S26361-F3669-L100	S26361-F3669-E100
TFM Module for FBU option	TFM Module for FBU option (flash and FBU control logic)
max. 1x per Controller	max. 1x per Controller

S26361-F3669-L110	S26361-F3669-E125
Flash Backup Unit with 25cm, 55cm, 70cm cable set	Flash Backup Unit with 25 cm cable set
max. 1x per Controller	max. 1x per Controller

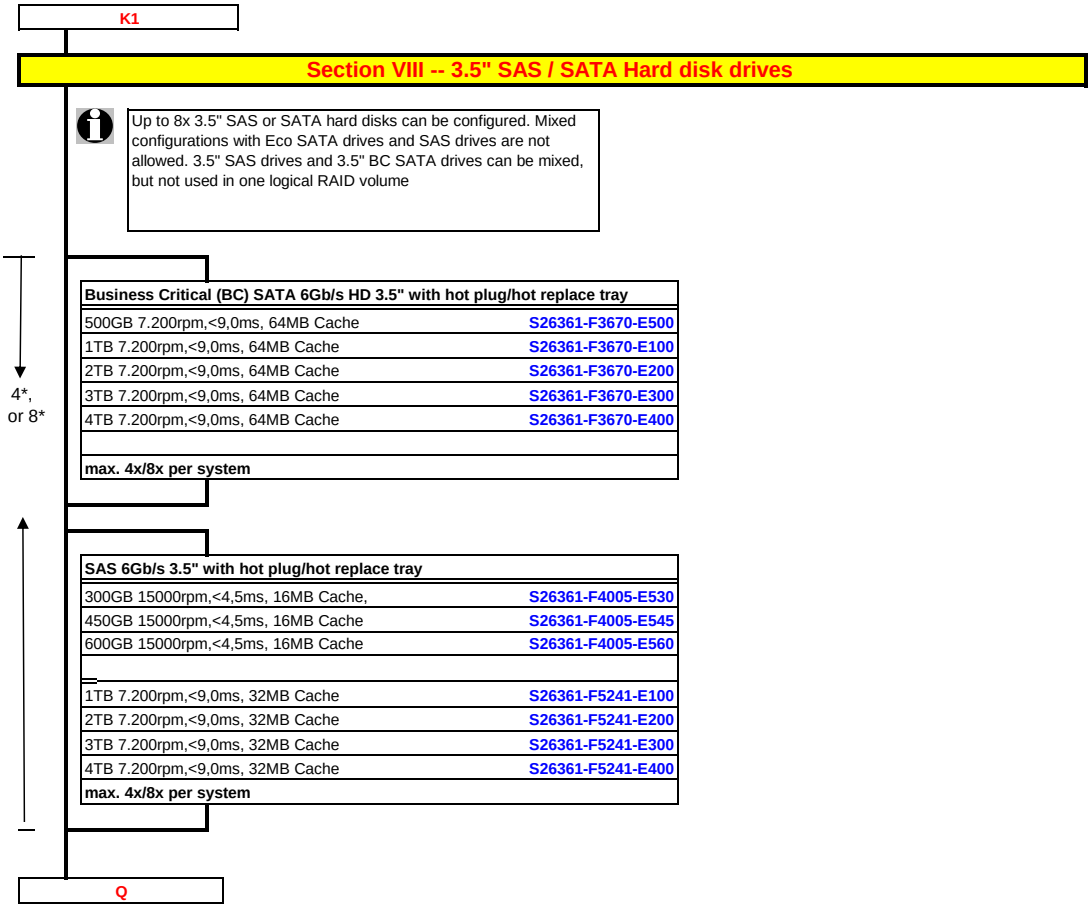


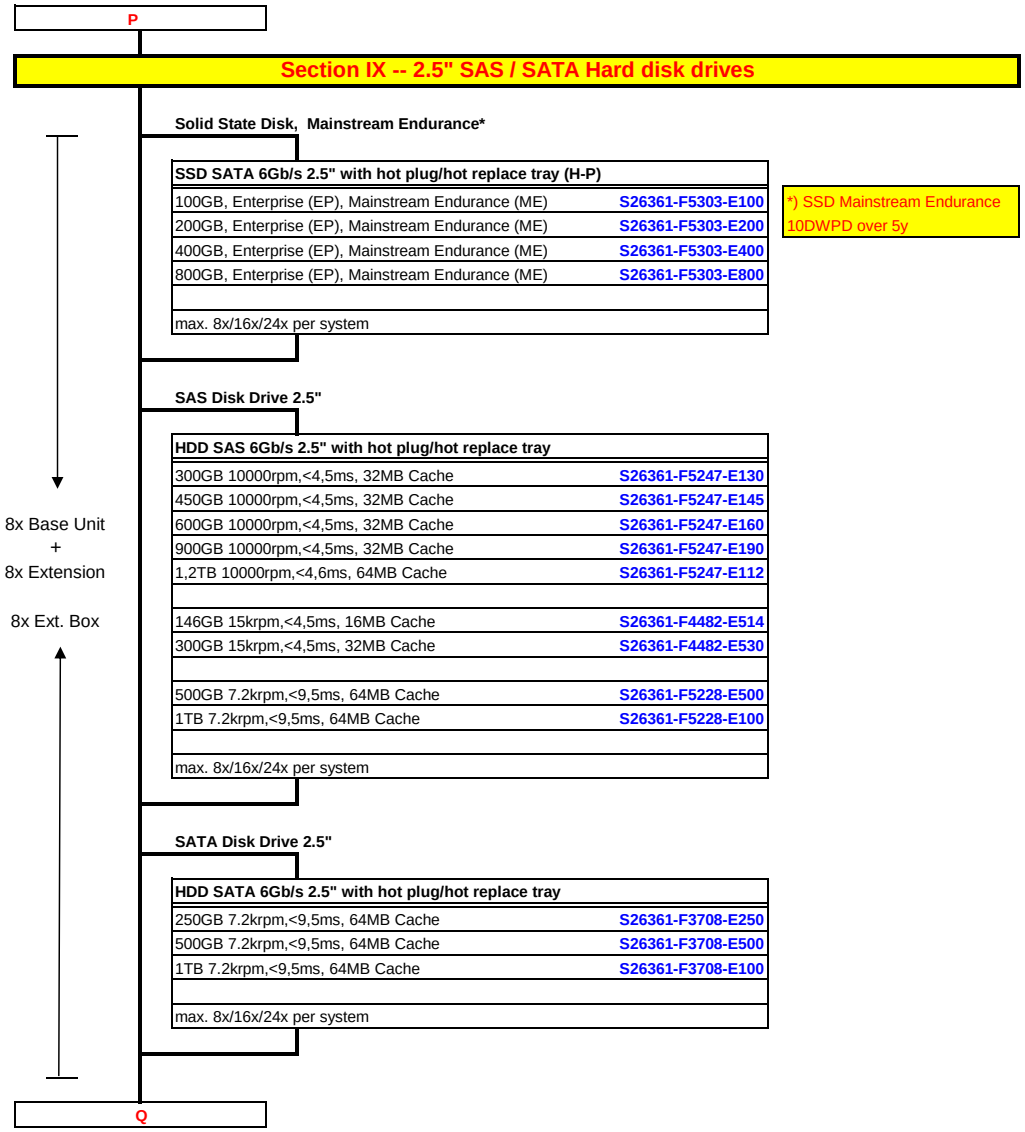
S26361-F2826-E327	Upgrade Kit for up to 16x 2.5" HDD. Including Cage for 8x HDD, Backplane for 8x SAS 2.0, Cables for 8x HDD and 24x SAS Expander and mounting material
Upgrade Kit for up to 16x 2.5" HDD. Including Cage for 8x HDD, Backplane for 8x SAS 2.0, Cables for 8x HDD and 24x SAS Expander	Occupies medium drive area and SAS Expander mounting space
Occupies medium drive area and SAS Expander mounting space	S26361-F2826-L327
max. 1x per system	

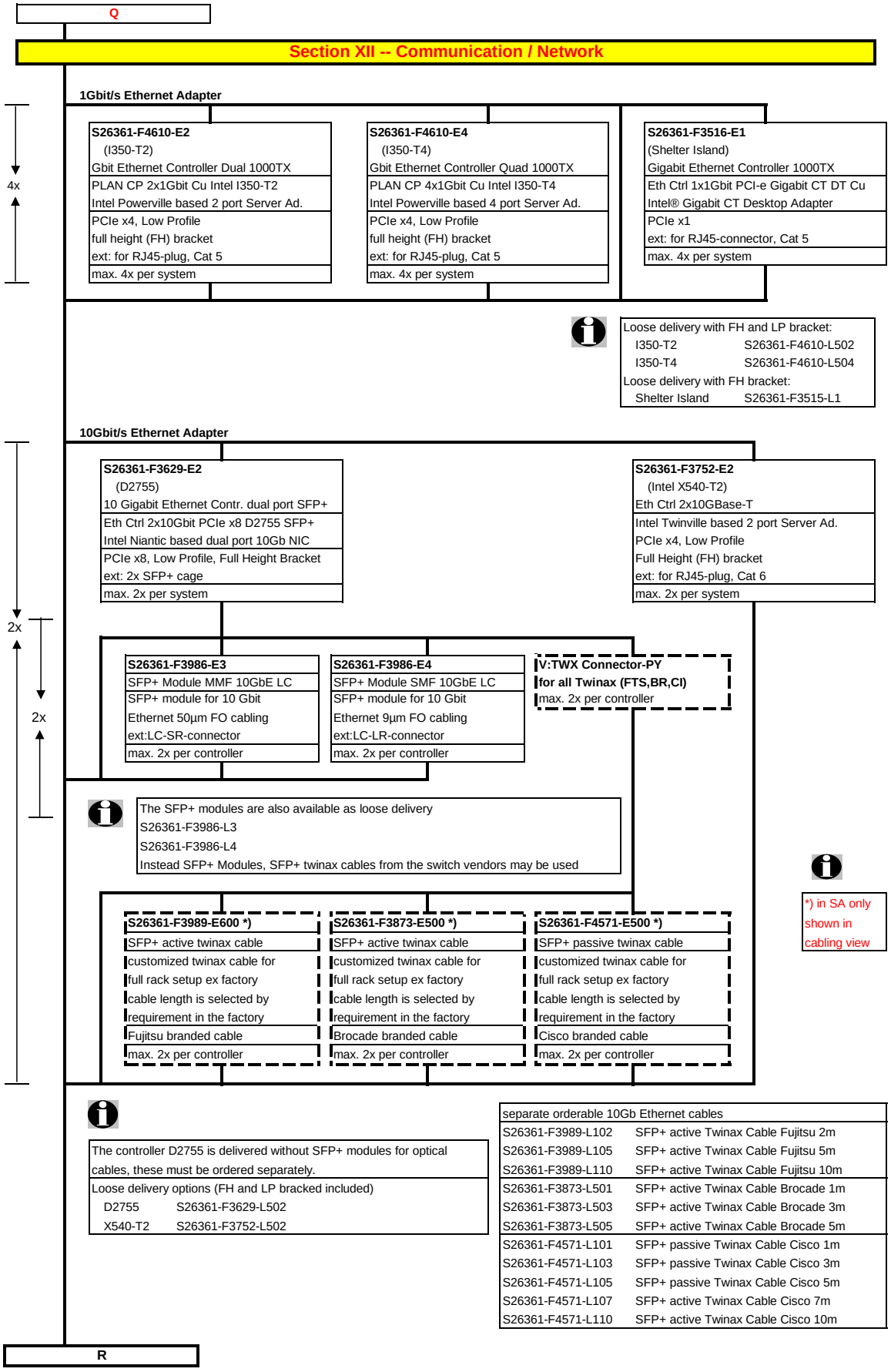


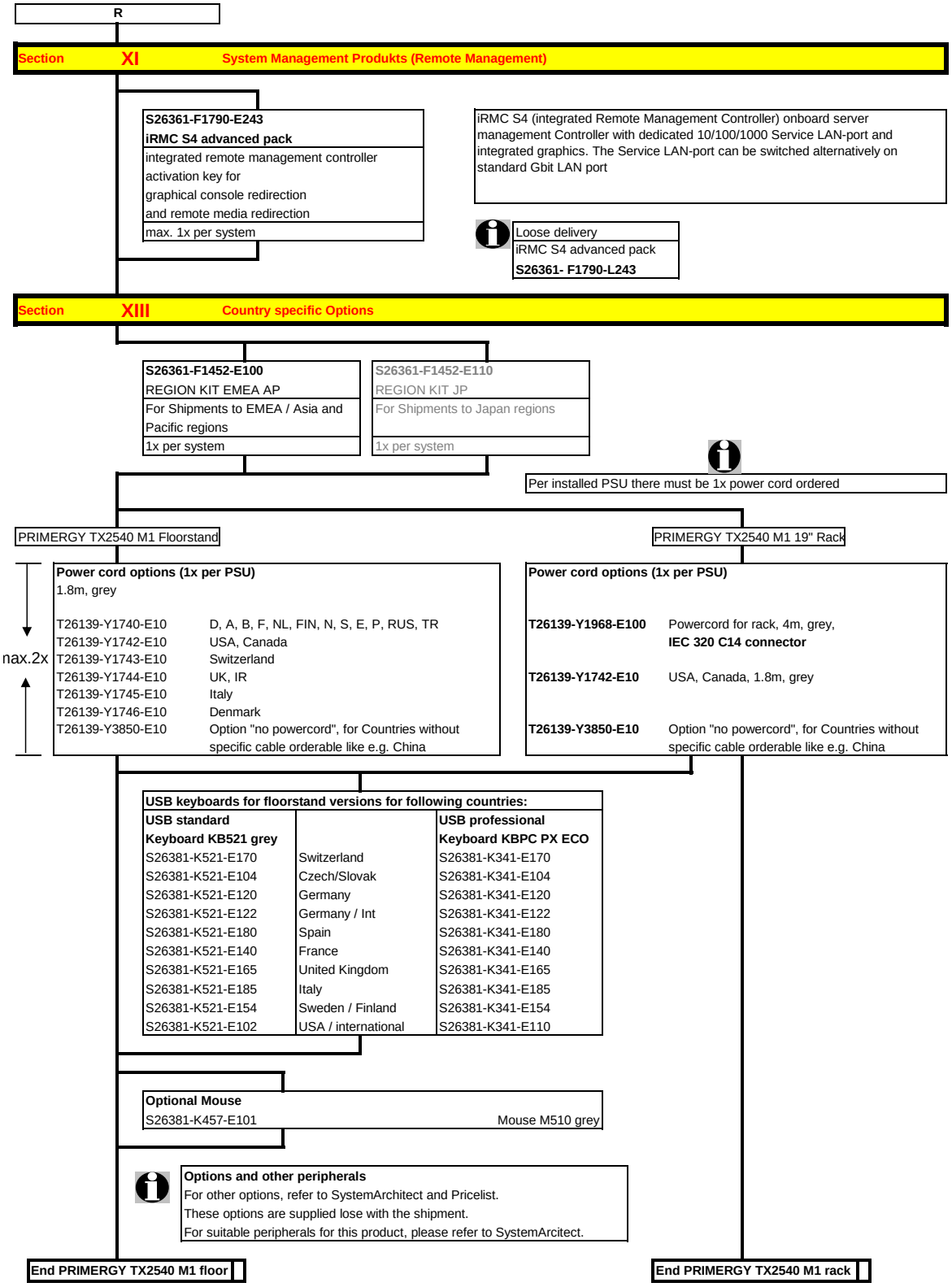
S26361-F2826-E427	Upgrade Kit for up to 24x 2.5" HDD. Including Cage for 8x 2.5" HDD, Backplane for 8x SAS 2.0 & Cables for 8x HDD and mounting material
Upgrade Kit for up to 24x 2.5" HDD. Including Cage for 8x 2.5" HDD, Backplane for 8x SAS 2.0 & Cables for	replaces 2x 5.25" Bays of DVD drives or Backup
replaces 2x 5.25" Bays of DVD drives or Backup	S26361-F2826-L427
max. 1x per system	

P


K1
Section VIII -- 3.5" SAS / SATA Hard disk drives
Up to 8x 3.5" SAS or SATA hard disks can be configured. 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
4*, or 8*
Business Critical (BC) SATA 6Gb/s HD 3.5" with hot plug/hot replace tray
500GB 7.200rpm,<9,0ms, 64MB Cache S26361-F3670-E500
1TB 7.200rpm,<9,0ms, 64MB Cache S26361-F3670-E100
2TB 7.200rpm,<9,0ms, 64MB Cache S26361-F3670-E200
3TB 7.200rpm,<9,0ms, 64MB Cache S26361-F3670-E300
4TB 7.200rpm,<9,0ms, 64MB Cache S26361-F3670-E400
max. 4x/8x per system
SAS 6Gb/s 3.5" with hot plug/hot replace tray
300GB 15000rpm,<4,5ms, 16MB Cache, S26361-F4005-E530
450GB 15000rpm,<4,5ms, 16MB Cache S26361-F4005-E545
600GB 15000rpm,<4,5ms, 16MB Cache S26361-F4005-E560
1TB 7.200rpm,<9,0ms, 32MB Cache S26361-F5241-E100
2TB 7.200rpm,<9,0ms, 32MB Cache S26361-F5241-E200
3TB 7.200rpm,<9,0ms, 32MB Cache S26361-F5241-E300
4TB 7.200rpm,<9,0ms, 32MB Cache S26361-F5241-E400
max. 4x/8x per system
Q


P
Section IX -- 2.5" SAS / SATA Hard disk drives
Solid State Disk, Mainstream Endurance*
SSD SATA 6Gb/s 2.5" with hot plug/hot replace tray (H-P)
100GB, Enterprise (EP), Mainstream Endurance (ME) S26361-F5303-E100
200GB, Enterprise (EP), Mainstream Endurance (ME) S26361-F5303-E200
400GB, Enterprise (EP), Mainstream Endurance (ME) S26361-F5303-E400
800GB, Enterprise (EP), Mainstream Endurance (ME) S26361-F5303-E800
max. 8x/16x/24x per system
*) SSD Mainstream Endurance 10DWPD over 5y
SAS Disk Drive 2.5"
HDD SAS 6Gb/s 2.5" with hot plug/hot replace tray
300GB 10000rpm,<4,5ms, 32MB Cache S26361-F5247-E130
450GB 10000rpm,<4,5ms, 32MB Cache S26361-F5247-E145
600GB 10000rpm,<4,5ms, 32MB Cache S26361-F5247-E160
900GB 10000rpm,<4,5ms, 32MB Cache S26361-F5247-E190
1,2TB 10000rpm,<4,6ms, 64MB Cache S26361-F5247-E112
146GB 15krpm,<4,5ms, 16MB Cache S26361-F4482-E514
300GB 15krpm,<4,5ms, 32MB Cache S26361-F4482-E530
500GB 7.2krpm,<9,5ms, 64MB Cache S26361-F5228-E500
1TB 7.2krpm,<9,5ms, 64MB Cache S26361-F5228-E100
max. 8x/16x/24x per system
8x Base Unit
+
8x Extension
8x Ext. Box
SATA Disk Drive 2.5"
HDD SATA 6Gb/s 2.5" with hot plug/hot replace tray
250GB 7.2krpm,<9,5ms, 64MB Cache S26361-F3708-E250
500GB 7.2krpm,<9,5ms, 64MB Cache S26361-F3708-E500
1TB 7.2krpm,<9,5ms, 64MB Cache S26361-F3708-E100
max. 8x/16x/24x per system
Q


Q
Section XII -- Communication / Network
1Gbit/s Ethernet Adapter
4x
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. 4x 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. 4x 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. 4x per system
Loose delivery with FH and LP bracket:
I350-T2 S26361-F4610-L502
I350-T4 S26361-F4610-L504
Loose delivery with FH bracket:
Shelter Island S26361-F3515-L1
10Gbit/s Ethernet Adapter
2x
2x
S26361-F3629-E2
(D2755)
10 Gigabit Ethernet Contr. dual port SFP+
Eth Ctrl 2x10Gbit PCIe x8 D2755 SFP+
Intel Niantic based dual port 10Gb NIC
PCIe x8, Low Profile, Full Height Bracket
ext: 2x SFP+ cage
max. 2x per system
S26361-F3752-E2
(Intel X540-T2)
Eth Ctrl 2x10GBase-T
Intel Twinville based 2 port Server Ad.
PCIe x4, Low Profile
Full Height (FH) bracket
ext: for RJ45-plug, Cat 6
max. 2x per system
S26361-F3986-E3
SFP+ Module MMF 10GbE LC
SFP+ module for 10 Gbit
Ethernet 50µm FO cabling
ext:LC-SR-connector
max. 2x per controller
S26361-F3986-E4
SFP+ Module SMF 10GbE LC
SFP+ module for 10 Gbit
Ethernet 9µm FO cabling
ext:LC-LR-connector
max. 2x per controller
V:TWX Connector-PY
for all Twinax (FTS,BR,CI)
max. 2x per controller
The SFP+ modules are also available as loose delivery
S26361-F3986-L3
S26361-F3986-L4
Instead SFP+ Modules, SFP+ twinax cables from the switch vendors may be used
*) in SA only shown in cabling view
S26361-F3989-E600 *)
SFP+ active twinax cable
customized twinax cable for
full rack setup ex factory
cable length is selected by
requirement in the factory
Fujitsu branded cable
max. 2x per controller
S26361-F3873-E500 *)
SFP+ active twinax cable
customized twinax cable for
full rack setup ex factory
cable length is selected by
requirement in the factory
Brocade branded cable
max. 2x per controller
S26361-F4571-E500 *)
SFP+ passive twinax cable
customized twinax cable for
full rack setup ex factory
cable length is selected by
requirement in the factory
Cisco branded cable
max. 2x per controller
The controller D2755 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
R


R
Section XI System Management Produkts (Remote Management)
S26361-F1790-E243
iRMC S4 advanced pack
integrated remote management controller
activation key for
graphical console redirection
and remote media redirection
max. 1x per system
iRMC S4 (integrated Remote Management Controller) onboard server management Controller with dedicated 10/100/1000 Service LAN-port and integrated graphics. The Service LAN-port can be switched alternatively on standard Gbit LAN port
Loose delivery
iRMC S4 advanced pack
S26361- F1790-L243
Section XIII Country specific Options
S26361-F1452-E100
REGION KIT EMEA AP
For Shipments to EMEA / Asia and Pacific regions
1x per system
S26361-F1452-E110
REGION KIT JP
For Shipments to Japan regions
1x per system
Per installed PSU there must be 1x power cord ordered
PRIMERGY TX2540 M1 Floorstand
PRIMERGY TX2540 M1 19" Rack
nax.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
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
USB keyboards for floorstand versions for following countries:
USB standard Keyboard KB521 grey
USB professional Keyboard KBPC PX ECO
S26381-K521-E170 Switzerland S26381-K341-E170
S26381-K521-E104 Czech/Slovak S26381-K341-E104
S26381-K521-E120 Germany S26381-K341-E120
S26381-K521-E122 Germany / Int S26381-K341-E122
S26381-K521-E180 Spain S26381-K341-E180
S26381-K521-E140 France S26381-K341-E140
S26381-K521-E165 United Kingdom S26381-K341-E165
S26381-K521-E185 Italy S26381-K341-E185
S26381-K521-E154 Sweden / Finland S26381-K341-E154
S26381-K521-E102 USA / international S26381-K341-E110
Optional Mouse
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 TX2540 M1 floor
End PRIMERGY TX2540 M1 rack

Change Report

Date	Order number/Chapter	Changes
03.06.2014	PSAS 9200e	added
12.05.2014	SW 32 bit / SW 64 bit	pages deleted
10.04.2014		corrected Order number S26361-F4530-E10 and S26361-F4530-E12
17.02.2014		Sheet Comm. Network updated
13.02.2014	S26361-F2735-L7	CMA for unsymetrical Racks added
11.02.2014	Dummy PSU	added
04.02.2014	S26361-F1729-L260 --> new: L270	new order code for Rack conversion kit (due to Nexperience light)
31.01.2014	HDD area for 3.5"	3.5" can be equipped with up to 8x HDD only, deleted medium HDD cage (E337) exclude SAS expander for 3.5", use E436/L436 (out of TX200 S7)
21.01.2014	SAS Expander	SAS Expander for 3.5" now included in "upgrade kit for up to 12x HDD" and for 2.5" in the "upgrade kit for up 16x HDD"
15.01.2014	SM, others, pwr cord	deleted M480 mouse and inserted M510 mouse
13.01.2014	Mounting kit E107	ereased
13.01.2014	Blu Ray drive S26361-F3641-E4	added
13.01.2014	Conf. Diagram LFF & SFF	corrected and adopted
13.12.2013	TPM module	New order code associated S26361-F3552-E6/-L6
09.12.2013	3.5" Mod. DA & 2.5" Mod. DA	description of RAID controllers / L-parts added / corrected; BBU deleted
04.12.2013	Conf. Diagram 2.5" & 3.5"	added description " Slot 1 can not be used if SAS Expander is configured"
04.12.2013	Base_PSU_CPU	deleted 2 base units: TX2540 M1 rack - standard PSU (both 2.5" and 3.5")
03.12.2013	S26361-F3669-L660	correct order number for RAID Controller -E4 (before wrong: E3)
03.12.2013	3.5 Mod. DA	ereased connection between o.B. SAS and the extension box (between line 39/40), added line between Lynx2 and exension box
15.11.2013	remove Front LAN	
12.11.2013	SAS Expander	order code updated on page 2.5" Mod. DA "S26361-F3668-E2"
12.11.2013	HDD cage	upgrade order code added for 8*2.5" HDD cage accessible area
17.10.2013	Intel i350 T2/T4	updated
09.10.2013	S26113-F615-E10	add comment "voltage range 180-264V supported", (no low Voltage 110V)
20.09.2013	SW 32/64	Update the latest SW part
13.09.2013	external SAS DA	JBOD Controller deleted
13.09.2013	LAN	deleted all old LAN cards
03.09.2013	FC	All FC Controller deleted
30.08.2013	RAID Controllers	Update RAID
30.08.2013	Base_PSU_CPU	Memory & CPU section updated
21.08.2013	FC	no 16Gbit controllers
20.08.2013	Raidcontroller Cougar 3	Ordernummer von E3 in E4 geändert (Cougar3 v3 zu Cougar3 v4)
12.08.2013	SW 32/64	aus SW-PM Vorlage kopiert
06.08.2013	P/Ns corrected	
06.08.2013	Memory Configuratin	deleted rank sparing / mirror mode
06.08.2013	Keyboard K520	Keyboard -K520 Family is EoL (end 2013), successor is -K521 Keyboard
06.08.2013	S26361-K1463-V201	Base unit (Floor - standard 2.5") canceled
05.08.2013	many corrections	
01.08.2013	many Changes	adopted to TX300 S8 structure
14.03.2013	S26361-F3750-E324/504/E604	RDX & Cartridge bundles added
14.03.2013	S26113-F615-E10 / L10	added Titanium 800W PSU
	Initial Configurator	