

PRIMERGY TX150 S6

System configurator and order-information guide

December 2008

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PRIMERGY Server

Instructions

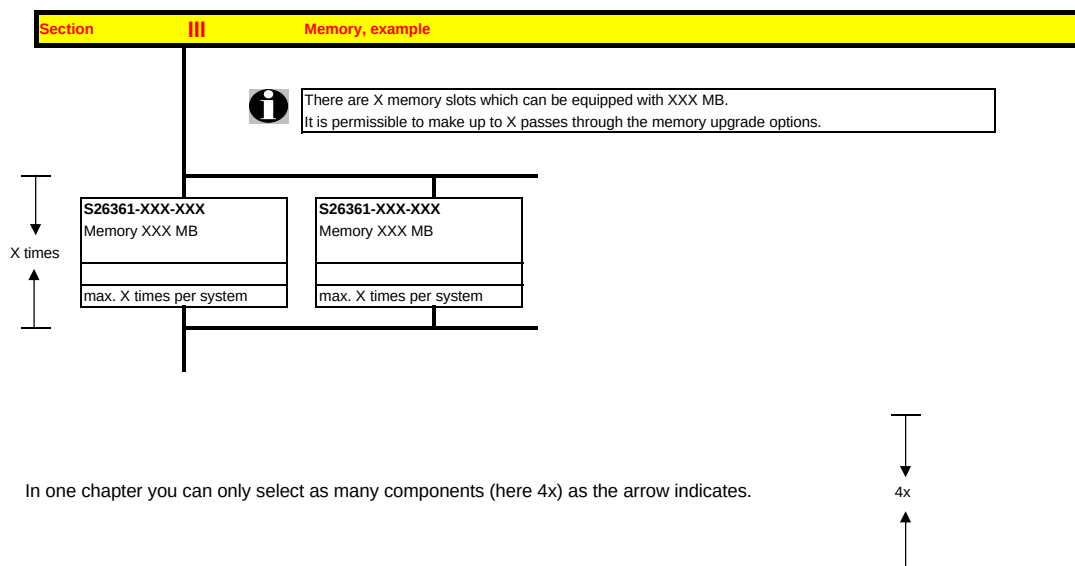
This document contains basic product and configuration information that will enable you to configure your system via PC-/ System-Architect.

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:

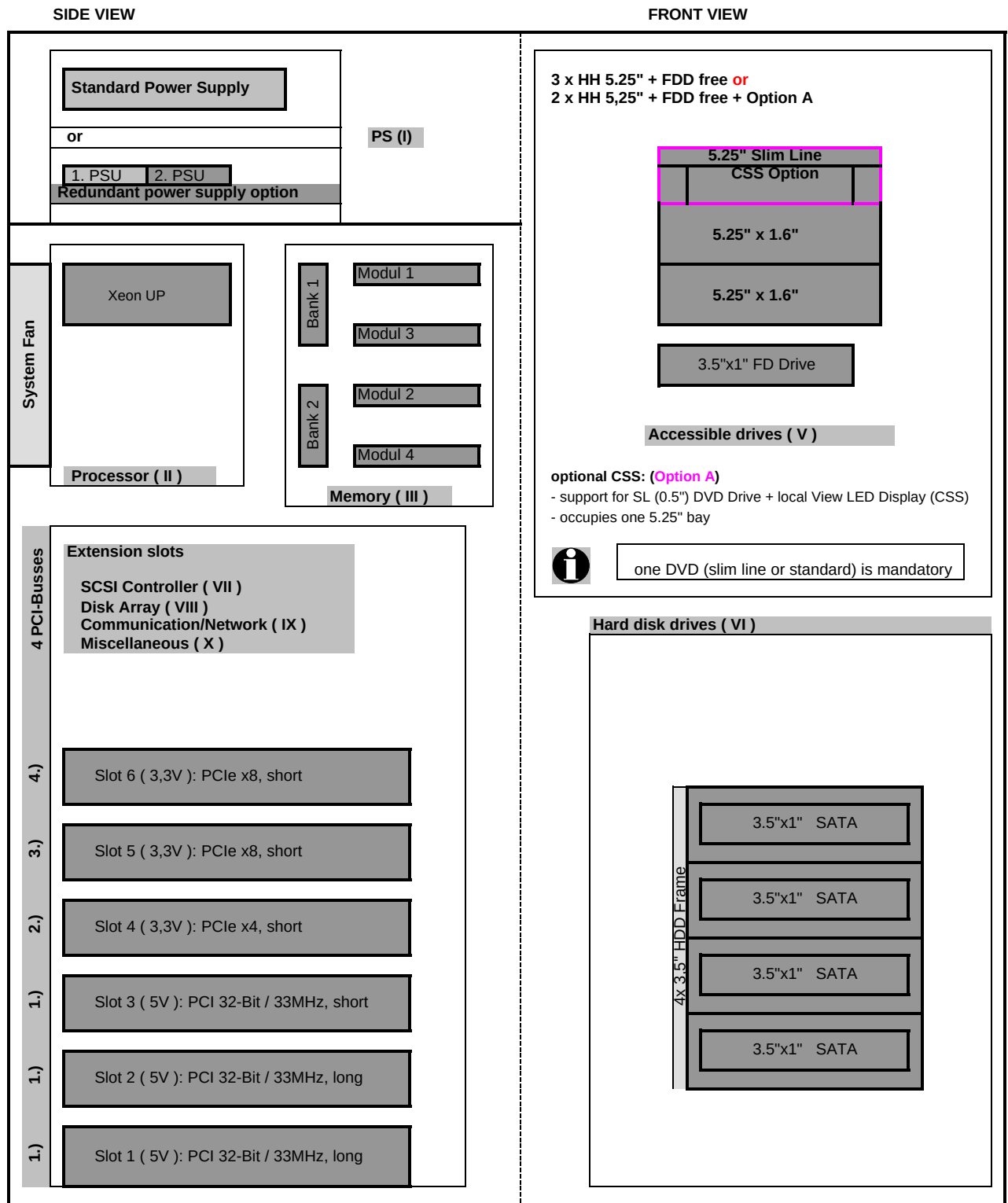
<http://www.primergy.com> (internet)

<http://extranet.fujitsu-siemens.com/primergy> (extranet)

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

Configuration diagram PRIMERGY TX150 S6 SATA LFF (3.5") System Unit

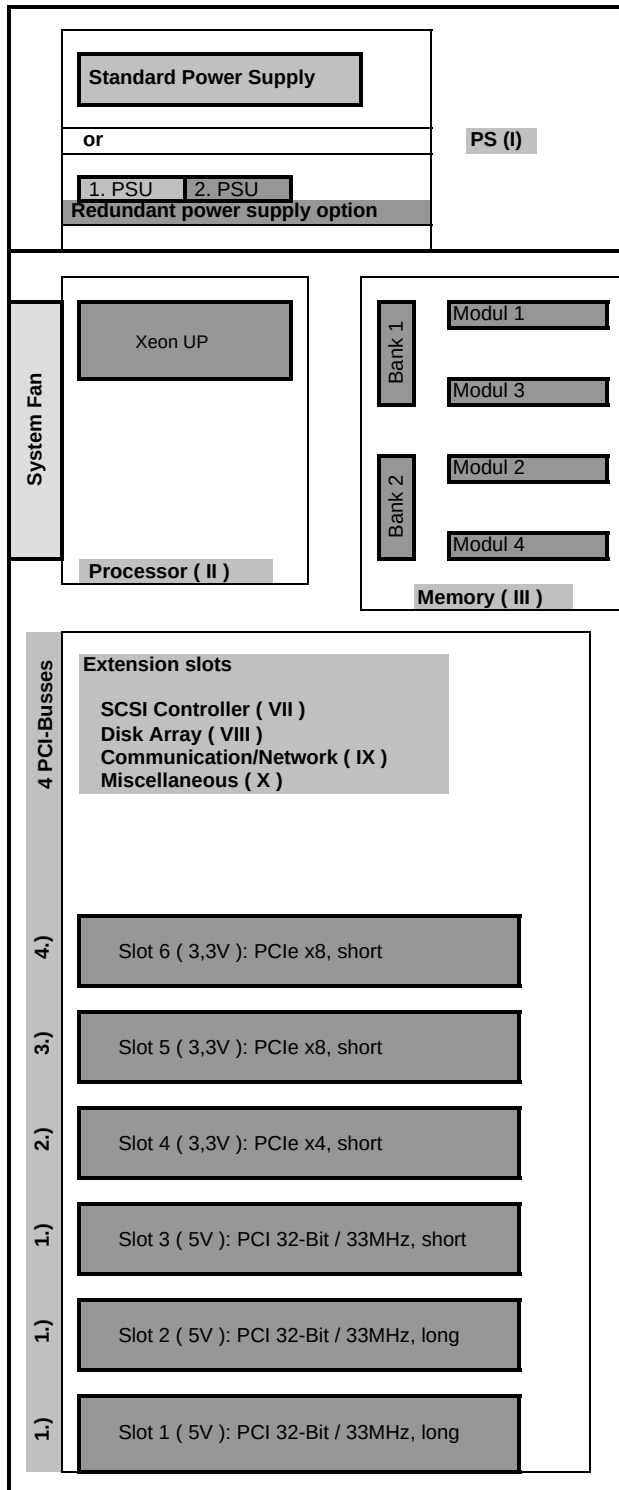
System unit (I)



Configuration diagram PRIMERGY TX150 S6 SAS SFF (2.5") System Unit

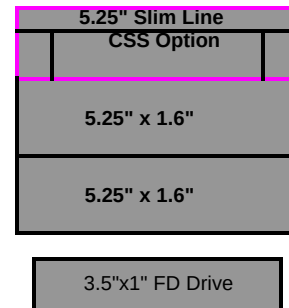
System unit (I)

SIDE VIEW



FRONT VIEW

3 x HH 5.25" + FDD free **or**
2 x HH 5,25" + FDD free + Option A



Accessible drives (V)

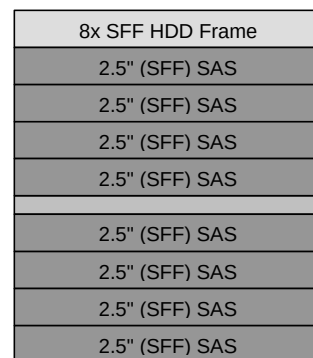
optional CSS: (Option A)

- support for SL (0.5") DVD Drive + local View LED Display (CSS)
- occupies one 5.25" bay



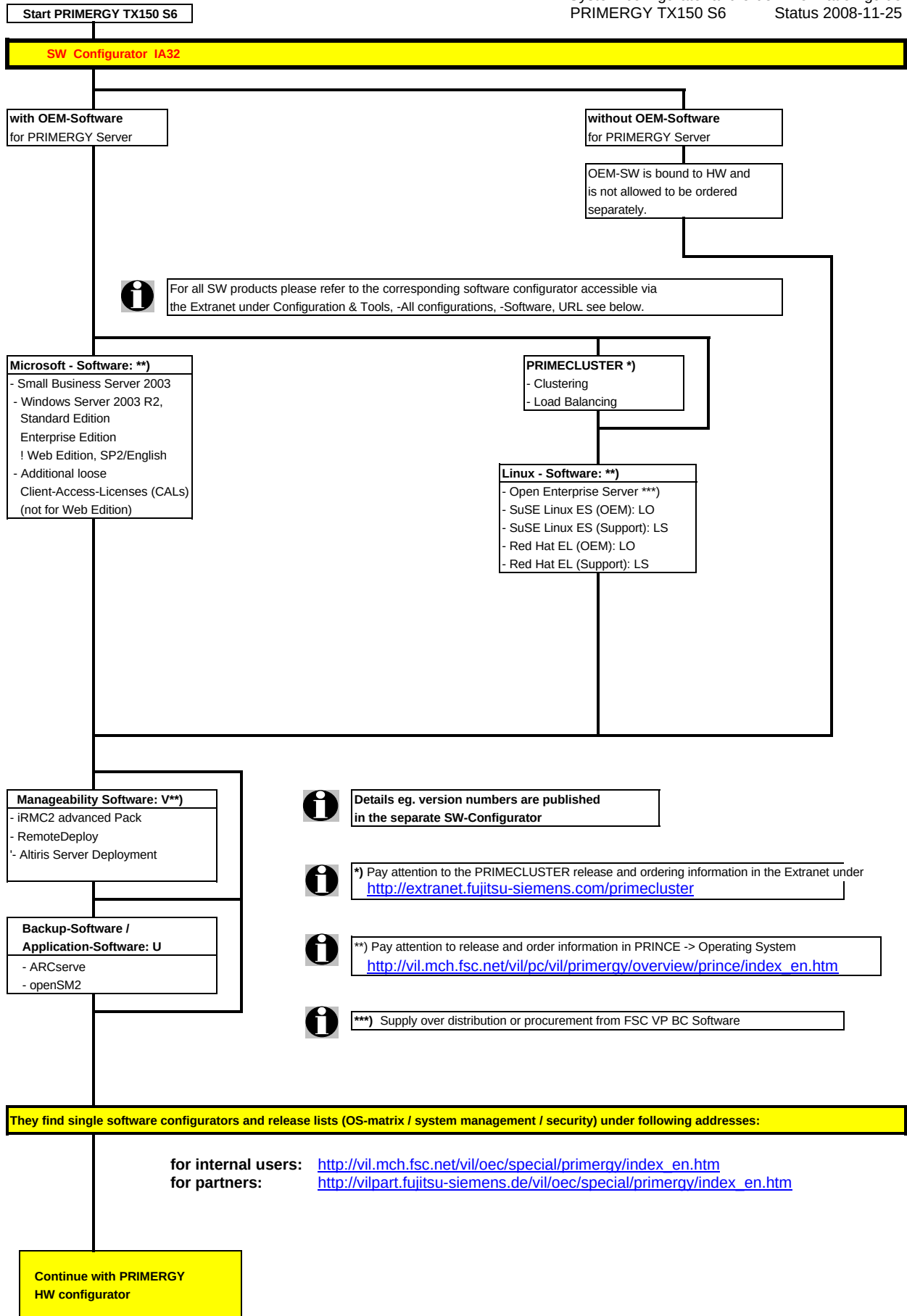
one DVD (slim line or standard) is mandatory

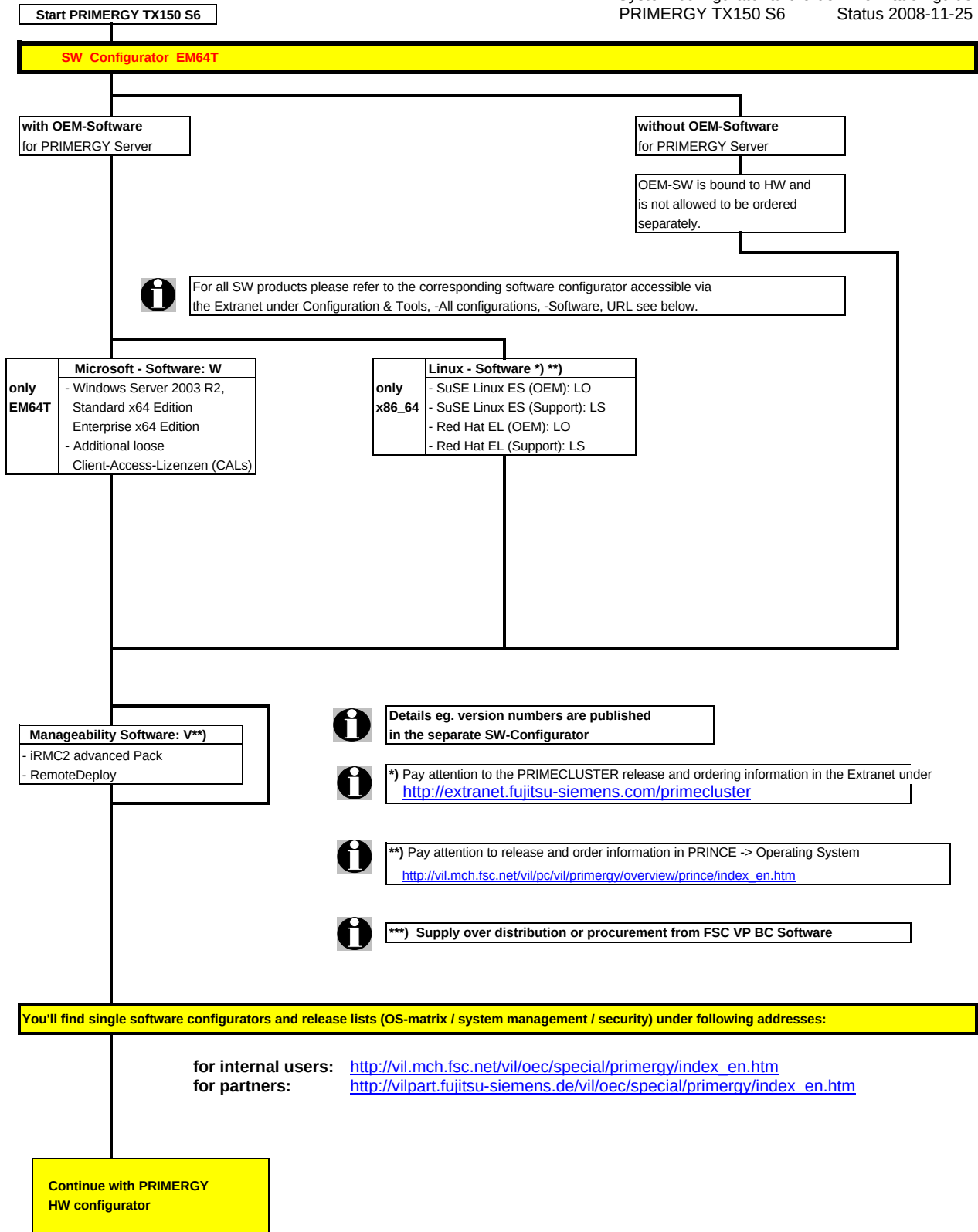
Hard disk drives (VI)



Key:

- Included in basic unit
- Option





Section

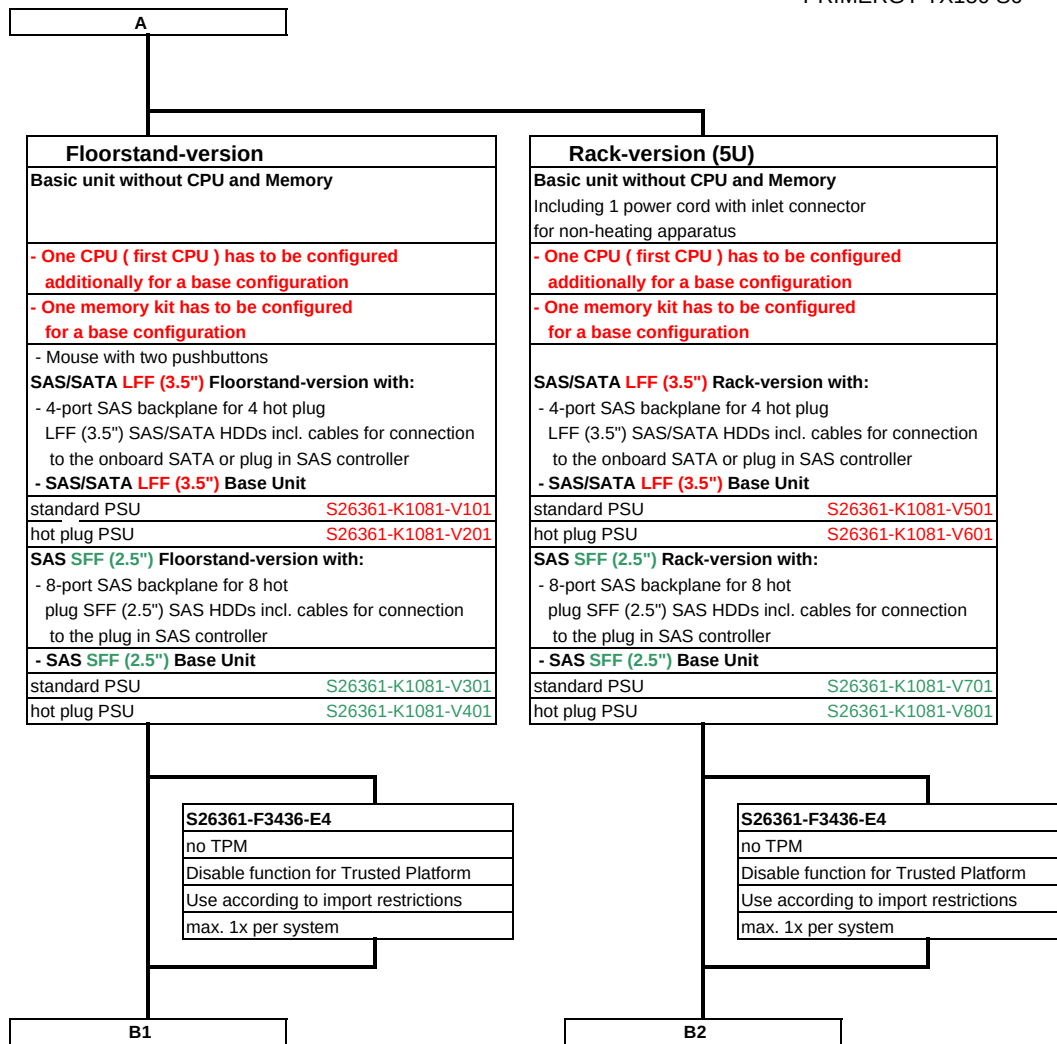


Basic unit

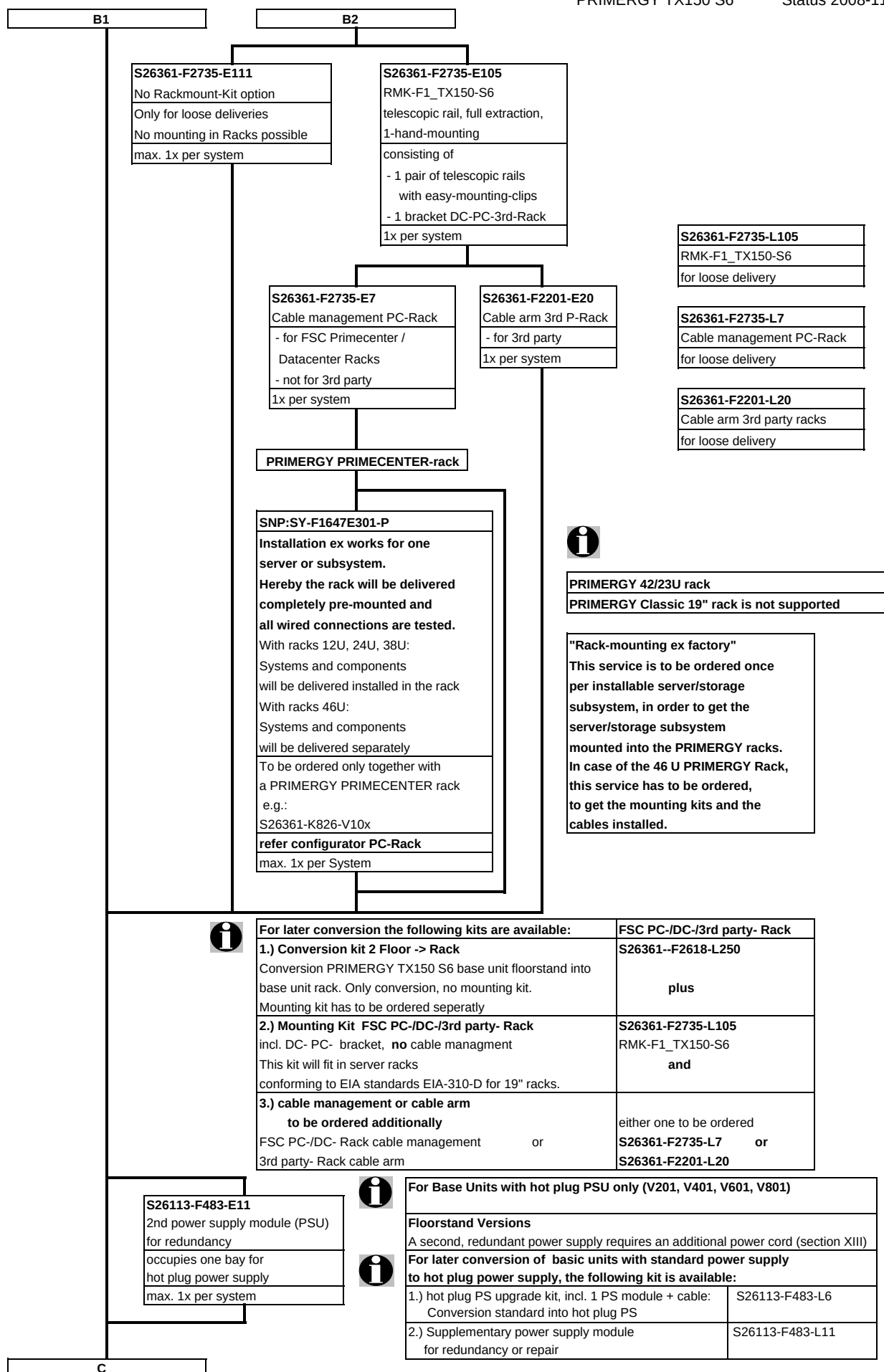
**System unit, Rack and Floorstand, including:**

- * **Lockable front door and sliding screen in floorstand version**
 - sliding screen for accessible drive bays
 - Door for hot plug HDD bays
 - Both may be locked or sliding screen may be left open while door is still locked
- * **backplane with 4 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 hot plug SFF (2.5") SAS HDD (SAS SFF base units only)
- * **1 power supply (Standard PS) or hot plug PSU**
in addition there is an upgrade to hot plug redundant PSU available
- * **System fan (No Hot-plug, No redundancy)**
- * **3 bays 5.25" for accessible drives (half Hight)**
- * **1 bay 3.5" for FDD**
- Systemboard with:**
 - * **One Xeon UP Dual- or Quad-Core CPU supporting 64Bit EM64T and Intel® VT / EIST / DBS Technology.**
 - * **Chipset Intel® 3210 (codenamed Bigby-P)**
 - * **6 PCI slots:**
 - 2x PCIe x8, short (167mm max)
 - 1x PCIe x4, short (167mm max)
 - 3x 32Bit / PCI 33MHz, 2x long (5V)
 - * **4 memory slots for max. 8GB DDR2 / PC2-6400 RAM**
 - 2-way memory interleave technology => 2 banks with 2 slots each, max. 4GB modul per slot,
 - * **SATA-Controller on board (supporting RAID 0/1; RAID 5 with iButton Option)**
 - * **1 Gbit Ethernet LAN on board (Bcom 5755) with TPM 1.2**
and iSCSI boot integrated in System BIOS as selectable option
 - * **iRMC S2 (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)
- Interfaces:**
 - * 1x RS-232-C (9-pin) (usable for BMC or OS or shared)
 - * 1x RS-232-C (serial, 9pin), as option
 - * 1x Centronics (parallel, 25 pin, EPP/ECP compatible), as option
 - * 1x keyboard (PS/2)
 - * 1x mouse (PS/2)
 - * 1x VGA (15 pin)
 - * 8x USB 2.0 (UHCI) with 480MBit/s (4x external at the rear, 1x external at the frontside,
2x internal USB Interfaces for backup devices 1x internal Type A, no USB wakeup)
 - * 1x LAN RJ45, 1x Service-LAN RJ45
- *internal Cables:**
 - 1. SATA cable for CD/DVD.
 - 2. Cable for HDD Backplane
 - 3. USB cable (for 1 internal Backup)
- * PS/2 mouse (floorstand version only)
 - * ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates
 - * Documentation engl. (multilingual on CD)

A



The LFF Base Units offer onboard SATA functionality for up to 4 HDD.
An additional SAS controller is required if you need support for SAS HDD.



C

Section II Processor

One of following CPU's has to be selected for an orderable basic unit	
Mono-Core CPU's	
- 1x 32-bit Intel Celeron (512 kB SLC = Second Level Cache on Chip) and heat pipe occupies socket for CPU	
Celeron 440 (2.0GHz/512kB/800) / 35W	S26361-F3239-E440
Dual-Core CPU's	
- 1x 64-bit Intel Pentium Dual Core E2xxx (1MB SLC) or Core2 Duo Exx00 (2/3MB SLC) or Xeon UP (4/6MB SLC) and heat pipe occupies socket for one CPU	
Pentium Dual Core E2200 (2.2GHz/1M/800) / 65W	S26361-F3239-E220
Core2 Duo E7200 (2.53GHz/3M/1066) / 65W	S26361-F3239-E720
Xeon UP E3110 (3.00GHz/6M/1333) / 65W	S26361-F3239-E311
Xeon UP E3120 (3.16GHz/6M/1333) / 65W	S26361-F3239-E312
Quad-Core CPU's	
- 1x 64-bit Intel Xeon UP (8/12MB SLC = Second Level Cache on Chip) and heat pipe occupies socket for one CPU	
Xeon UP X3220 (2.40GHz/8M/1066) / 95W	S26361-F3239-E322
Xeon UP X3360 (2.83GHz/12M/1333) / 95W	S26361-f3239-E336

Section III Memory



There are 2 memory banks with 2 DIMM slots each.

Single channel memory configuration allow maximum flexibility:

Additional memory can be configured as single memory modules.

Dual channel memory configurations for maximum performance:

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

- For each basic unit slot 1 has to be equipped with one memory module,
(either 512MB, 1GB, 2GB)

Minimum one Memory (one module) = first Memory has to be selected for an orderable basic unit

4x ↓ ↑	S26361-F3870-E513 Main memory 512MB DDR2 800/PC2-6400 ub ECC consisting of one module occupies one slot max. 4x per system	S26361-F3870-E514 Main memory 1GB DDR2 800/PC2-6400 ub ECC consisting of one module occupies one slot max. 4x per system	S26361-F3870-E515 Main memory 2GB DDR2 800/PC2-6400 ub ECC consisting of one module occupies one slot max. 4x per system

Section IV Graphics



Graphics controller integrated in iRMC2 (integrated Remote Management Controller)
(max. Resolution: 1600 x 1200 at 16bpp)

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Section V Accessible drives



There are 3 bays (1.6" x 5.25") for accessible drives and 1 bay for FDD.
For LFF SAS base units **an HDD extension box can be configured**
(occupies 2x 5.25") providing 2x LFF (3.5") bays for hot plug HDDs.

S26361-F2826-E102
F-D-L-HDD-Box 2
Occupies **two 5.25" x 1.6"** bays
in the accessible bay area
Offers bays for:
- 1x **CSS** option
- 1x 0.5 * 5.25" SATA **DVD-ROM**
- 2x 1 * 3.5" SAS **HD's**
One 0.5 * 3.5" anthracite bezel
for CSS bay
One 0.5 * 5.25" anthracite bezel
for 0.5 * 5.25" DVD bay
Two 1 * 3.25" anthracite bezels
for SAS HDD bays
max. 1 per system

S26361-F2826-E203
mounting Kit sl DVD and CSS
Occupies one 5.25" x 1.6" bays
in the accessible bay area
Offers bays for:
- 1x CSS option
- 1x 0.5 * 5.25" SATA DVD-ROM
max. 1x per system



F-D-L-HDD-Box 2
to be used in SAS LFF
(3.5") Base Unit only



see Conf. diagram **Option C**

S26361-F2557-E201
Local Service Panel incl. adapter
Customer Self Service
CSS module incl. adapter
0.5" x 5.25"
max. 1x per System



see Conf. diagram
Option A

S26361-F2557-E204
Local Service Panel incl. mount. kit
Customer Self Service
CSS module incl. mounting kit
0.5" x 5.25"
max. 1x per system

S26361-F3268-E1
CD-RW / DVD drive 0.5"
24/24/24x / 8x
SATA
0.5 x 5.25", anthracite bezel
max. 1x per system

S26361-F3269-E1
DVD-RW 8x super multi drive
all formats, DUAL/DL, DVD-RAM
SATA
0.5 x 5.25", anthracite bezel
max. 1x per system

S26361-F3531-E1
Blu-ray Combo slim SATA
6x BD-ROM, 16x DVD, 40x CD
BD DL and all CD/DVD formats
0.5 x 5.25", anthracite bezel
max. 1x per system

S26361-F3266-E1
DVD-ROM 16/48x
SATA
incl. description (Ger/US)
1.6 x 5.25", anthracite bezel
max. 1x per system

S26361-F3267-E1
DVD-RW 16x super multi drive
all formats, DUAL/DL, DVD-RAM
SATA
1.6 x 5.25", anthracite bezel
max. 1x per system

S26361-F3530-E1
Blu-ray Combo HH SATA
6x BD-ROM, 16x DVD, 40x CD
BD DL and all CD/DVD formats
1.6 x 5.25", anthracite bezel
max. 1x per system

S26361-F2575-E1
Floppy disk drive 1"
Connector: 26pin
incl. description (Ger/US)
1" * 3.5", anthracite bezel
max. 1x per system

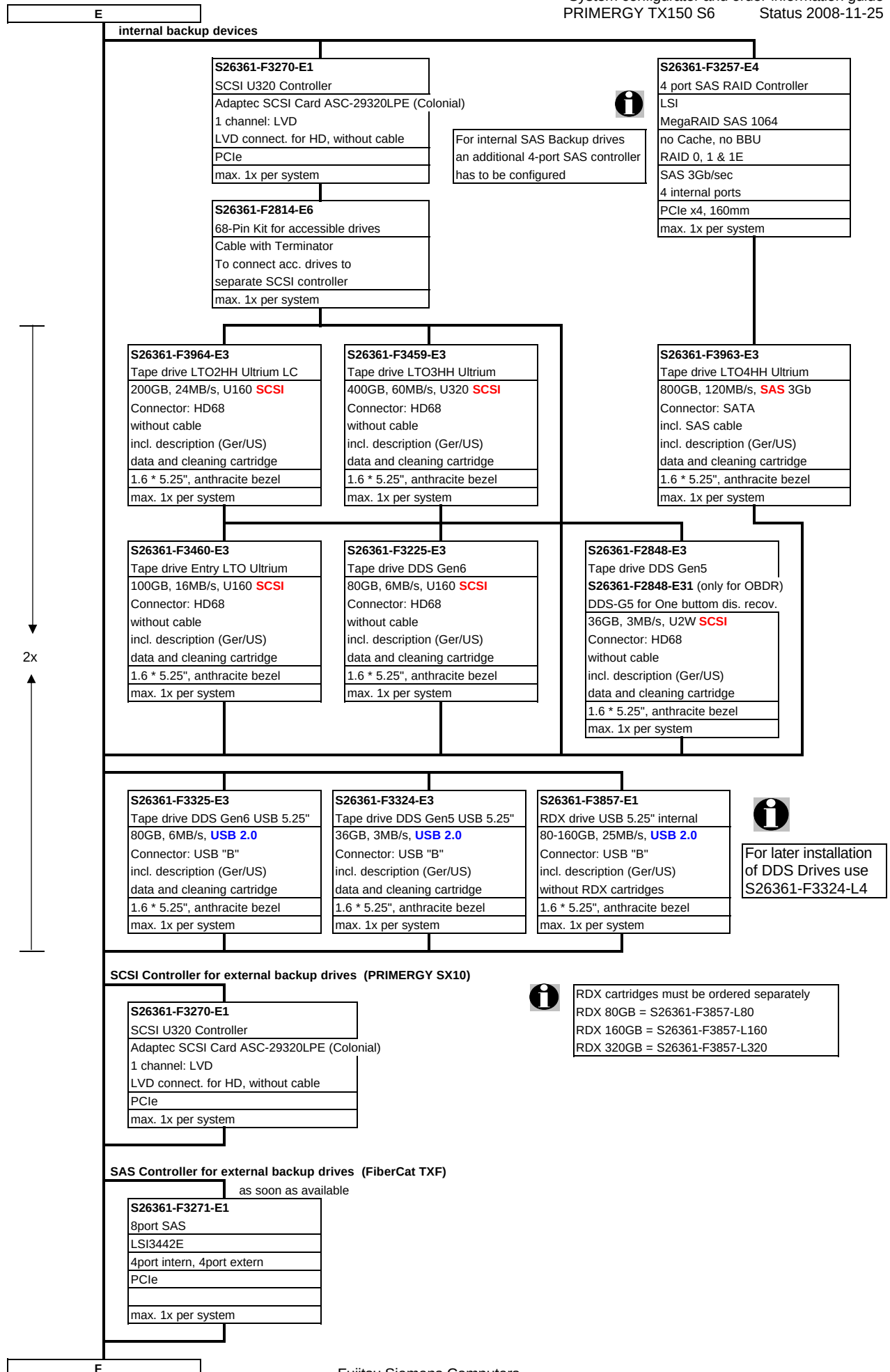


If installation is done locally, make sure you have internal
or external FDD available for driver installation.

Following USB Components are available

1) USB DVD+-RW: Traveller III DVD DL super multi drive (USB cable incl.)	S26391-F3152-L300
2) FDD USB: external USB FDD (USB cable included)	S26391-F264-L226
3) USB Keyboard: KBPC PX D, professional keyboard	S26381-K340-V120
4) USB Mouse: Optical Wheel Mouse	S26381-K403-L100
5) USB Memorybird: 2GB	S26391-F6047-L102

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Section VI Hard disks drives

SAS/SATA LFF (3.5") Base Units: SAS HDD Require SAS Controller! see section VIII internal Disk Array



There is a 6 port SATA controller in the Base Unit.
Up to 4 SATA LFF (3.5") hard disks can be configured.
Mixed Configurations are not supported in SATA base units.
If you need SAS, you can choose between two types of 8 port SAS controller to enable the Base Unit.
Up to 4 SAS or SATA LFF (3.5") hard disks can be configured.
If LFF SAS HDD Extension Box, Option C is used up to 6 SAS LFF (3.5") hard disks can be configured.
Mixed Configurations of SAS and SATA HDDs connected to the same Backplane are not supported.
If you need to run Mixed Configurations:
- order the SATA drives needed as L-Number
- make shure SAS and SATA drives are not used on the same Backplane



Hot replace is only possible running RAID.

4/6x

S26361-F3204-E573
HD 73GB 15krpm 3.5"
15.000rpm,<4ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 4/6x per system

S26361-F3204-E514
HD 146GB 15krpm 3.5"
15.000rpm,<4ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 4/6x per system

S26361-F3204-E530
HD 300GB 15krpm 3.5"
15.000rpm,<4ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 4/6x per system

S26361-F3204-E545
HD 450GB 15krpm 3.5"
15.000rpm,<4ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 4/6x per system

4x

S26361-F3218-E160
HD 160GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 8MB Cache
SATA 3Gb/s
hot plug/hot replace tray
max. 2x per system

S26361-F3265-E250
HD 250GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 8MB Cache
SATA 3Gb/s
hot plug/hot replace tray
max. 2x per system

S26361-F3265-E500
HD 500GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 8MB Cache
SATA 3Gb/s
hot plug/hot replace tray
max. 2x per system

S26361-F3265-E750
HD 750GB 7.2krpm 3.5"
7200rpm,<9.0 ms, 8MB Cache
SATA 3Gb/s
hot plug/hot replace tray
max. 2x per system

S26361-F3265-E100
HD 1TB 7.2krpm 3.5"
7200rpm,<9.0 ms, 8MB Cache
SATA 3Gb/s
hot plug/hot replace tray
max. 2x per system

SAS SFF (2.5") Base Units: Requires SAS Controller! see section VIII internal Disk Array



you can choose between two type of 8 port SAS controller for the Base Unit.
Up to 8 SAS SFF (2.5") hard disks can be configured as standard.



Hot replace is only possible running RAID.

8x

S26361-F3208-E173
HD 73GB 10krpm 2.5"
10000rpm,<4,5ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 8x per base unit

S26361-F3208-E114
HD 146GB 10krpm 2.5"
10000rpm,<4,5ms, 8MB Cache
SAS 3Gb/s
hot plug/hot replace tray
max. 8x per base unit

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Section VII External SAS Disk Array

S26361-F3890-E1 8 port SAS RAID Controller LSI MegaRAID SAS8880E 512MB Cache with ECC RAID 0, 1, 10, 5, 50, 6 & 60 without iBBU SAS 3Gb/sec 8 port external PCIe x4, 167mm low profile bracket max. 1x per system	S26361-F3890-E10 8 port SAS RAID Controller LSI MegaRAID SAS8880E 512MB Cache with ECC RAID 0, 1, 10, 5, 50, 6 & 60 with iBBU SAS 3Gb/sec 8 port external PCIe x4, 167mm low profile bracket max. 1x per system
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Section VIII internal Disk Array

SATA Configuration



SATA Base Units contain a 6-port on-board SATA controller supporting RAID Levels 0, 1
RAID 5 requires a FW-Extension option (iButton)

S26361-F3217-E100 SATA Software RAID5 LSI LSI MegaSR enabling key SATA 3Gb/sec internal SATA port only uses SATA ports of Southbridge max. 1x per system
--

SAS Configuration



you can choose between two types of 8 port SAS controller for the Base Unit:
- LSI 1068e based Modular RAID 0,1 (IME)
- LSI 1078 based Modular RAID 5,6
if you want to use SAS harddisks one Controller is required

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

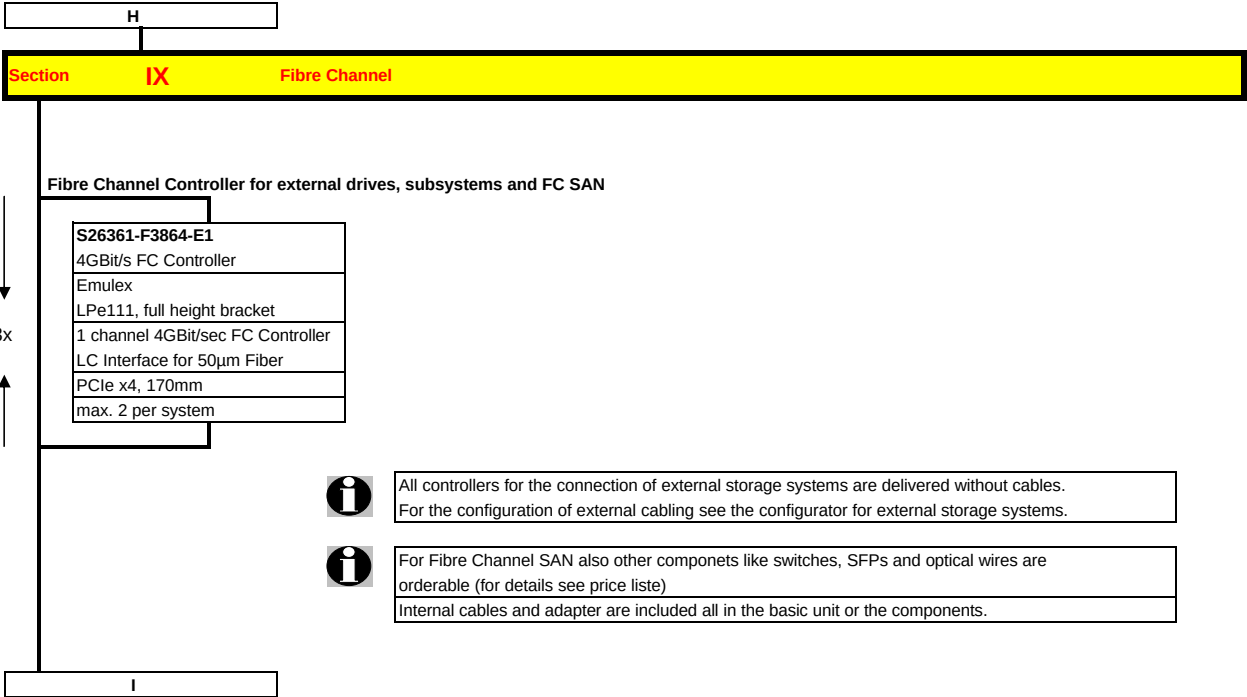
S26361-F3257-E8 8 port SAS RAID Controller LSI MegaRAID SAS 1068 RAID 0, 1 & 1E no controller cache SAS 3Gb/sec 8 internal ports PCIe x4, 160mm with combi bracket max. 1x per system	S26361-F3257-E256 8 port SAS RAID Controller LSI MegaRAID SAS 1078 256MB Cache with ECC optional BBU SAS 3Gb/sec 8 internal ports PCIe x4, 160mm with combi bracket max. 1x per system	S26361-F3257-E512 8 port SAS RAID Controller LSI MegaRAID SAS 1078 512MB Cache with ECC optional BBU SAS 3Gb/sec 8 internal ports PCIe x4, 160mm with combi bracket max. 1x per system
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S26361-F3257-E55 Cache Battery Backup Unit max. 1x per Controller
--



L-Order-Number is:
S26361-F3257-L10

H



Section X Communication / Network

1x on-board LAN Controller

Fast Ethernet Controller on-board
1Gbit Bcom 5755
with TPM 1.2
ext: for RJ 45 connector
SW: VLAN



Teaming: Failover, Load Balancing

If used with additional server adapter, the onboard LAN controller can operate in Teaming Mode.

A) PCI Adapters with Teaming capability 10-1000TX /SX

S26361-F3142-E2
Gigabit Ethernet Controller 1000TX
Eth Ctrl 1x1Gbit PCI32 PRO/1000GT Cu
Intel Pro/1000 GT Desktop Adapter
PCI 32 (33/66MHz),
ext: for RJ45-connector, Cat 5
max. 2x per system



Teaming: Failover, Load Balancing

If used with additional server adapter, the Intel Pro/1000 GT Desktop Adapter can operate in Teaming Mode.

B) Dual Port PCI-Express Adapter 1000TX

S26361-F3228-E1
Gigabit Ethernet Controller Dual 1000TX
Eth. Ctrl 2x1Gbit PCIe PRO/1000PT Cu
Intel Pro/1000PT dual Port Server Adapter
PCIe x4
ext: for RJ45-plug, Cat 5
max. 2x per system

C) PCI-Express Adapter 1000TX/SX

S26361-F3241-E1
Gigabit Ethernet Contr. 1000TX
Eth Ctrl 1x1Gbit PCI-e Pro/1000PT Cu
Intel PRO/1000 PT Server Adapter
PCIe x1
ext: for RJ45-connector, Cat 5
max. 2x per system

S26361-F3242-E1
Gigabit Ethernet Contr. 1000SX
Eth Ctrl 1x1Gbit PCI-e Pro/1000PF LC
Intel PRO/1000 PF Server Adapter
PCIe x4
ext: LC-connector
max. 2x per system

S26361-F3516-E1
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

D) Quad Port PCIe Adapter 1000TX

S26361-F3462-E1
Gigabit Ethernet Controller Quad 1000TX
Eth Ctrl 4x1Gbit PCI-X PRO/1000PT Cu
Intel PRO/1000 PT Quad Port Low Profile Server Adapter
PCIe x4
ext: for RJ45-plug, Cat 5
max. 2x per system

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Section XI System management options

S26361-F1790-E241
iRMC2 advanced pack
integrated remote management controller
activation key for
graphical console redirection
and remote media redirection
max. 1x per system

S26361-F1790-E221
RemoteView Software V5.0
Installation and configuration of
RemoteView Web and LAN FrontEnd
BMC-Manager, RTDS and FreeDOS
Online manuals

Section XII Miscellaneous

S26361-F2571-E8
External on-board parallel port Interface
Cable and external
connector interface (25 pins)
fits I/O shield cutoff
max. 1x per system for ext.

S26361-F2571-E10
External on-board serial port Interface
Cable and external
connector interface (9 pins)
fit's PCI cutoff (see Info-Box)
max. 1x per system for ext.



housing offers additional cutoff - no PCI slot occupied

K

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Section XIII Country specific power cords



A country specific power cord has to be ordered for all floorstand versions:
- once per basic unit and an additional second cable
- if an second hot plug, redundant power supply modul is ordered.

PRIMERGY TX150 S6 Floorstand

PRIMERGY TX150 S6 Rack

Power cord for following countries:

1,8 m, grey

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



Country specific power cords are not required for rack versions, except for USA & Canada. Power cords are shipped in a rack version with inlet connector for non-heating apparatus. (1x with Standard PSU, 2x with hot plug upgrade)



T26139-Y1742-E10 USA, Canada
For shipments to USA&Canada, you have to order one power cord (1,8m, grey) per power supply.

max.
2 x



Attention: For connection of a monitor to the system an additional country specific power cord has to be ordered as option.

Power cord for optional monitor connection for the following countries:

1.8m, grey

T26139-Y1740-L10	D, A, B, F, NL, FIN, N, S, E, P, RUS, TR
T26139-Y1742-L10	USA, Canada
T26139-Y1743-L10	Switzerland
T26139-Y1744-L10	UK, IR
T26139-Y1745-L10	Italy
T26139-Y1746-L10	Denmark



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 SystemArchitect.

Option for Floorstand

keyboards for floorstand versions for following countries:

S26381-K397-E110	USA / international
S26381-K397-E120	Germany
S26381-K397-E140	France
S26381-K397-E155	Sweden / Finland
S26381-K397-E165	United Kingdom
S26381-K397-E180	Spain
S26381-K397-E185	Italy

USB Keyboard: S26381-K340-E120
KBPC PX D, professional keyboard

End PRIMERGY TX150 S6

Change Report

[illegible]