

PRIMERGY TX140 S1

System configurator and order-information guide

November 2012

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PRIMERGY Server

Instructions

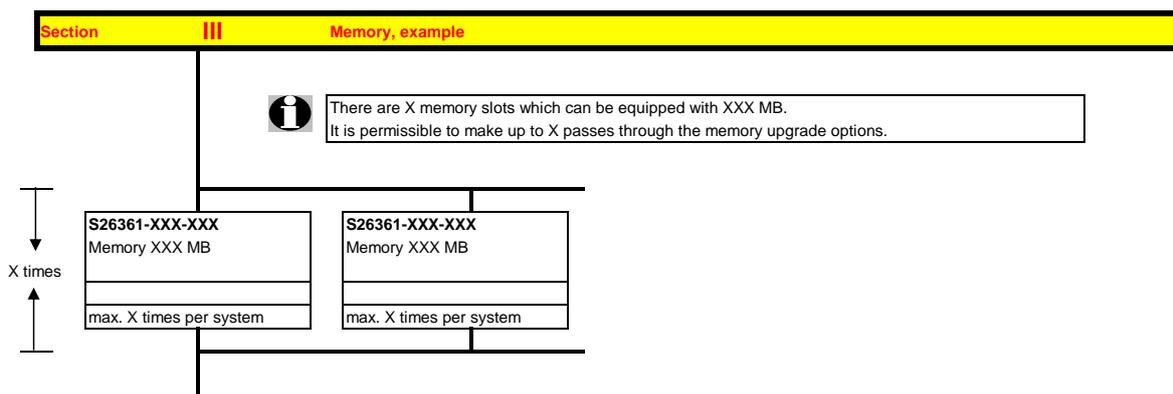
This document contains basic product and configuration information that will enable you to configure your system via PC-/ System-Architect.

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:

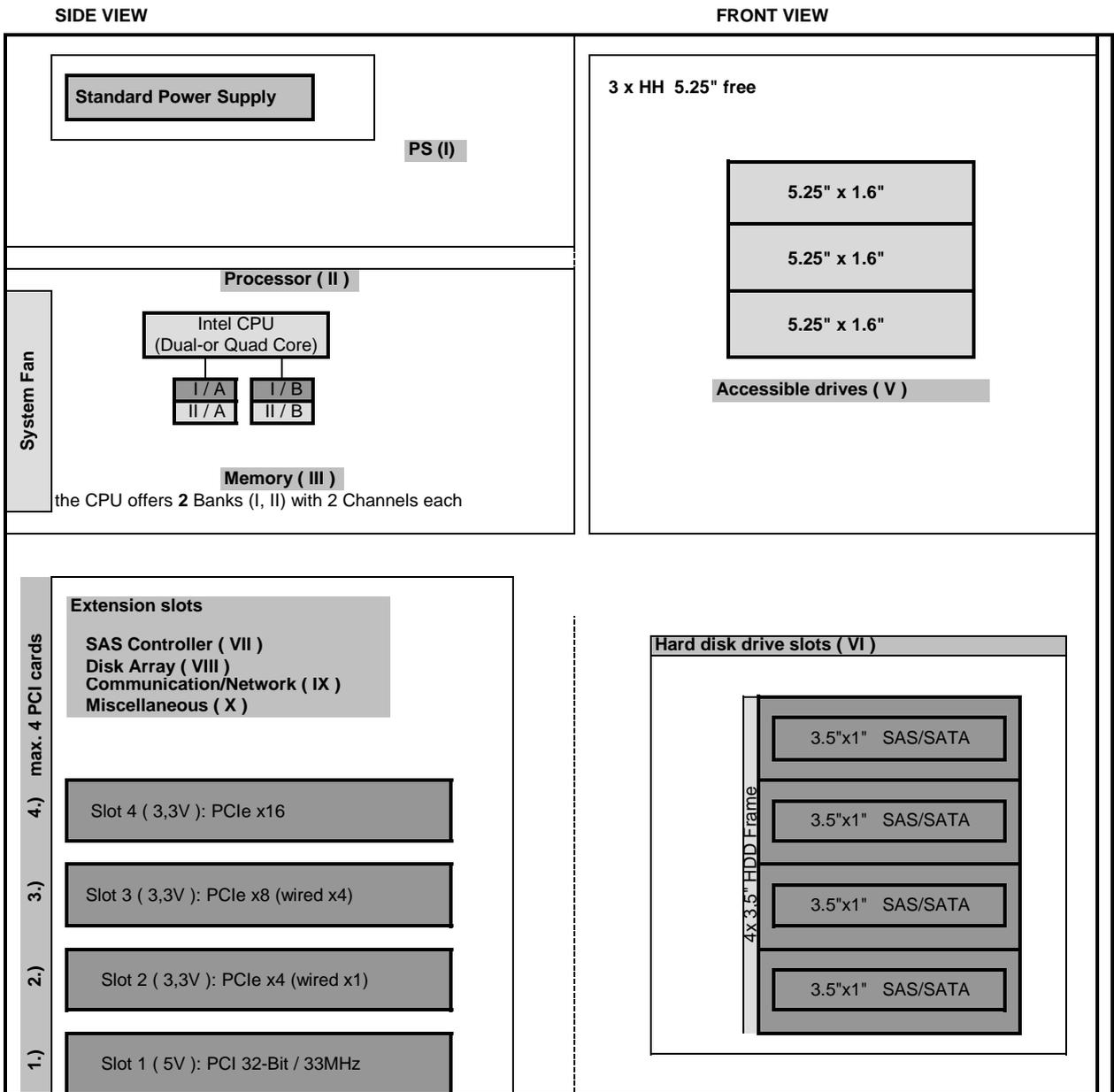
http://ts.fujitsu.com/products/standard_servers/index.html (internet)

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 TX140 S1 LFF (3.5") System Unit

System unit (I)

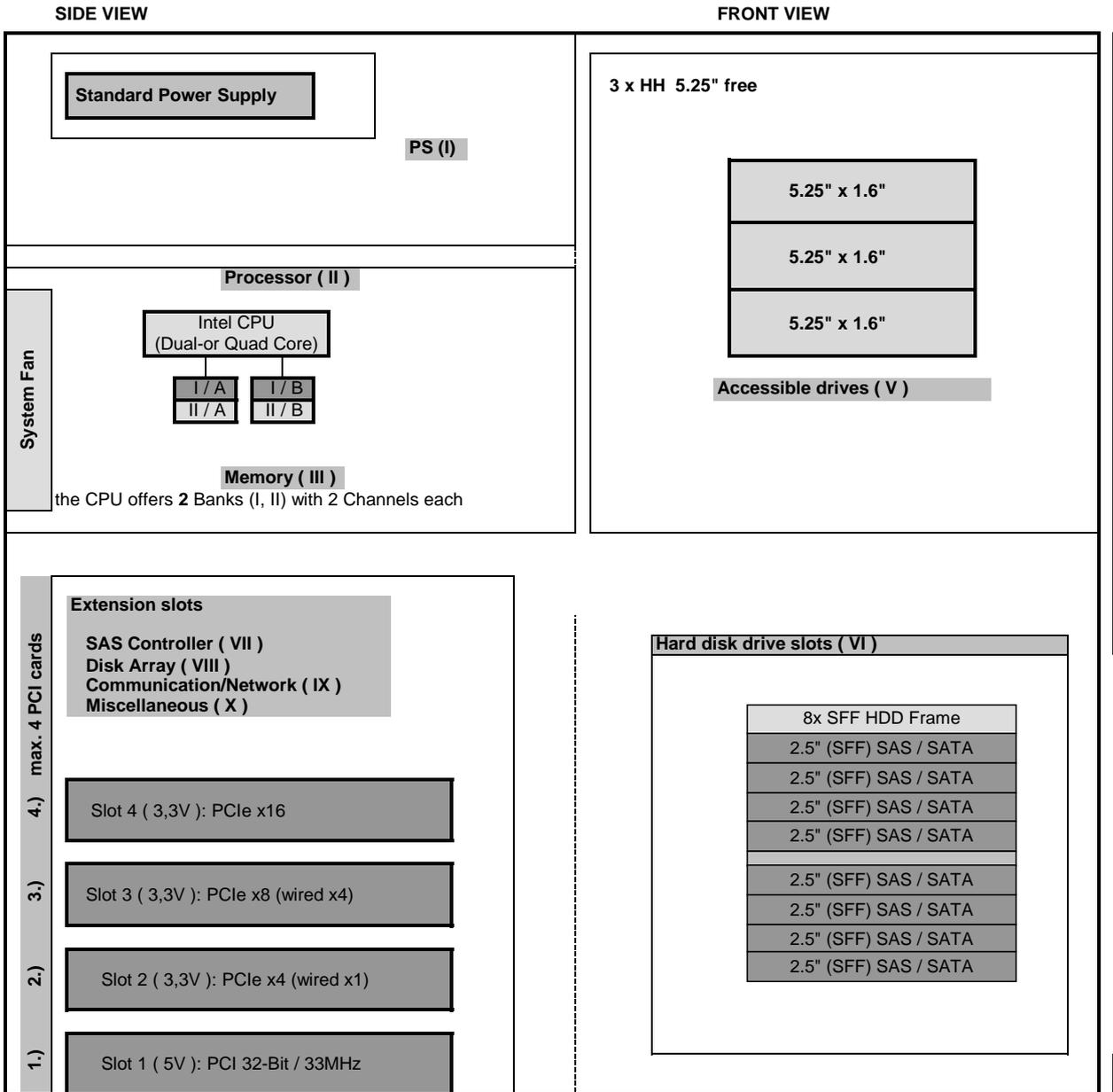


 Included in basic unit

 Option

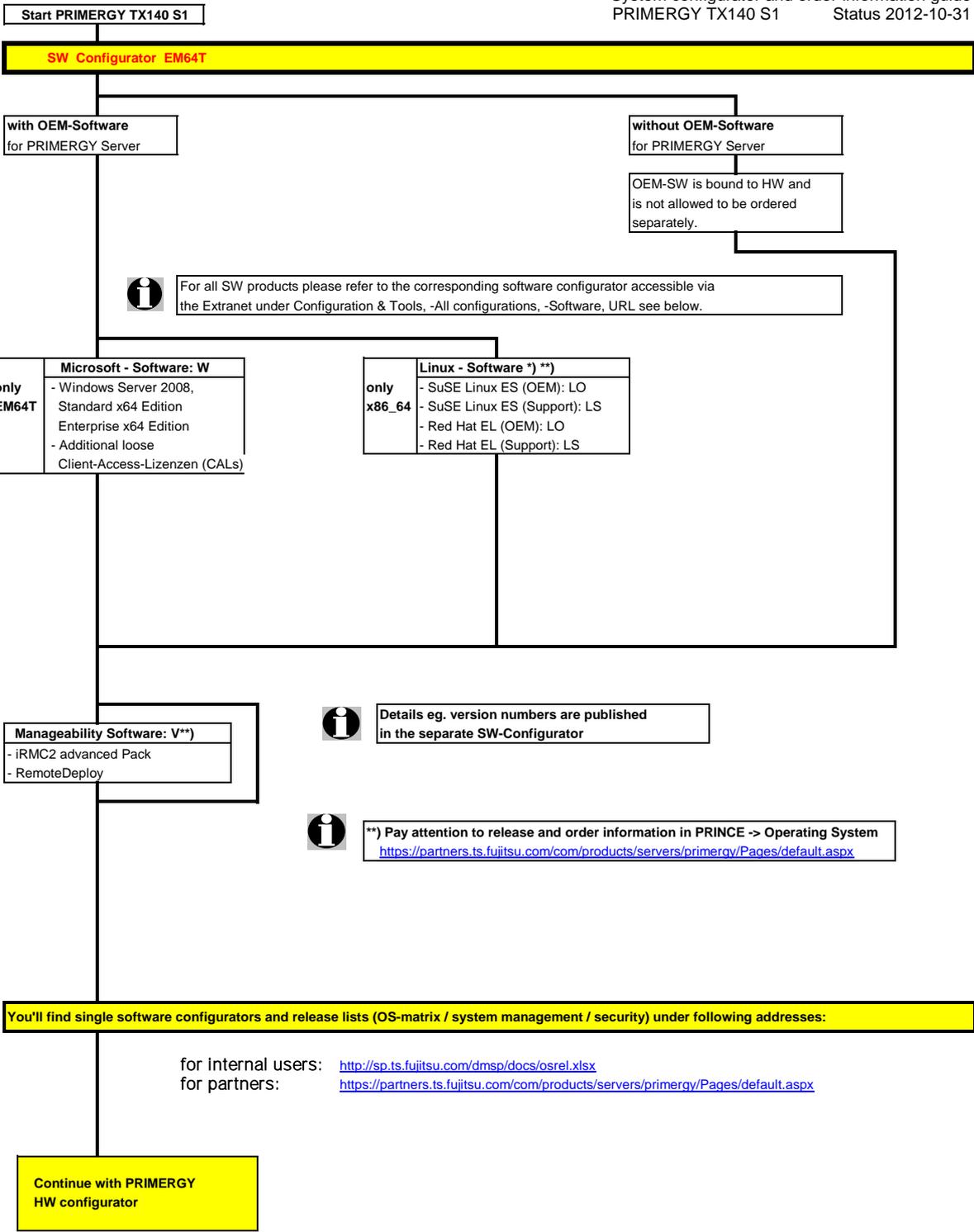
Configuration diagram PRIMERGY TX140 S1 LFF (3.5") System Unit

System unit (I)



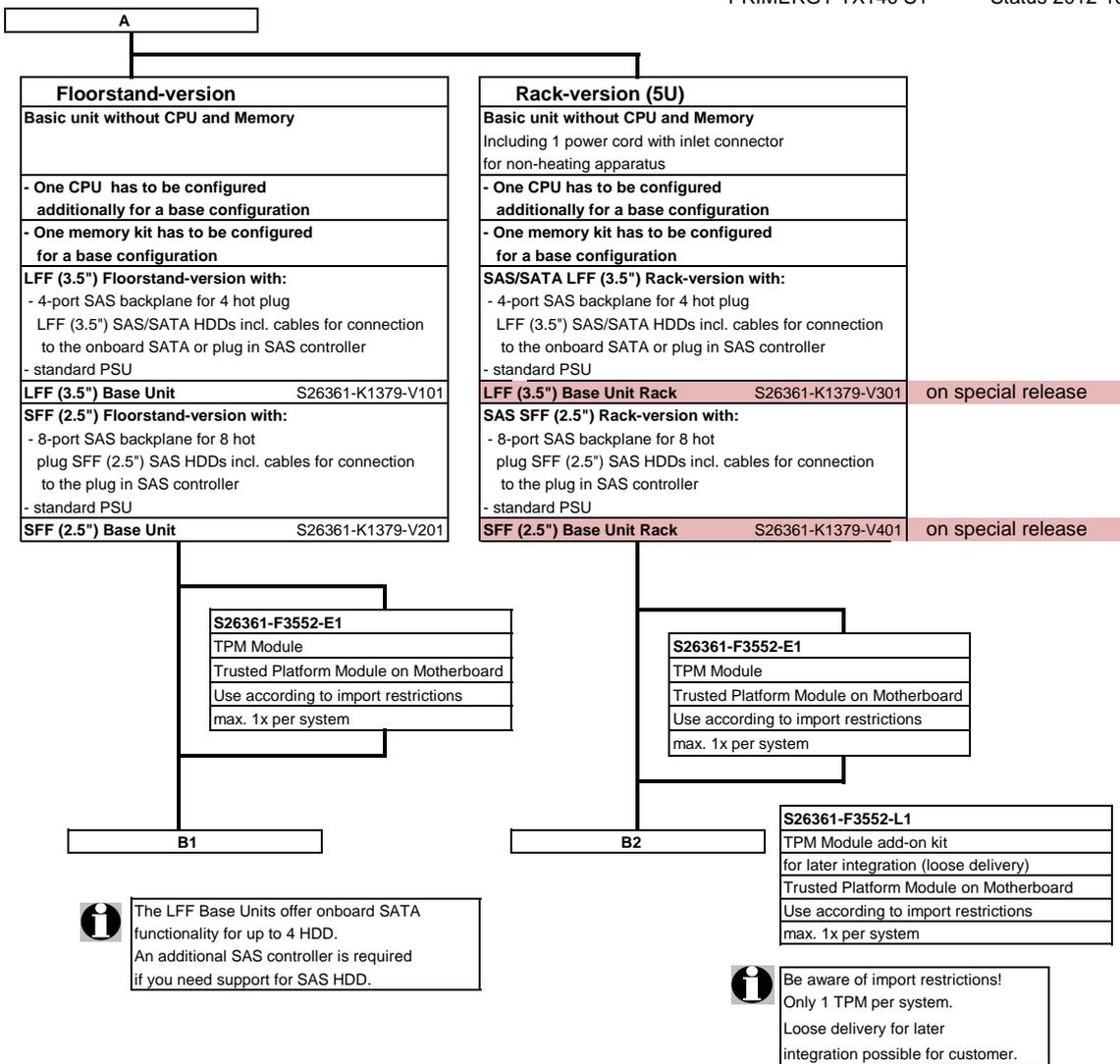
Included in basic unit

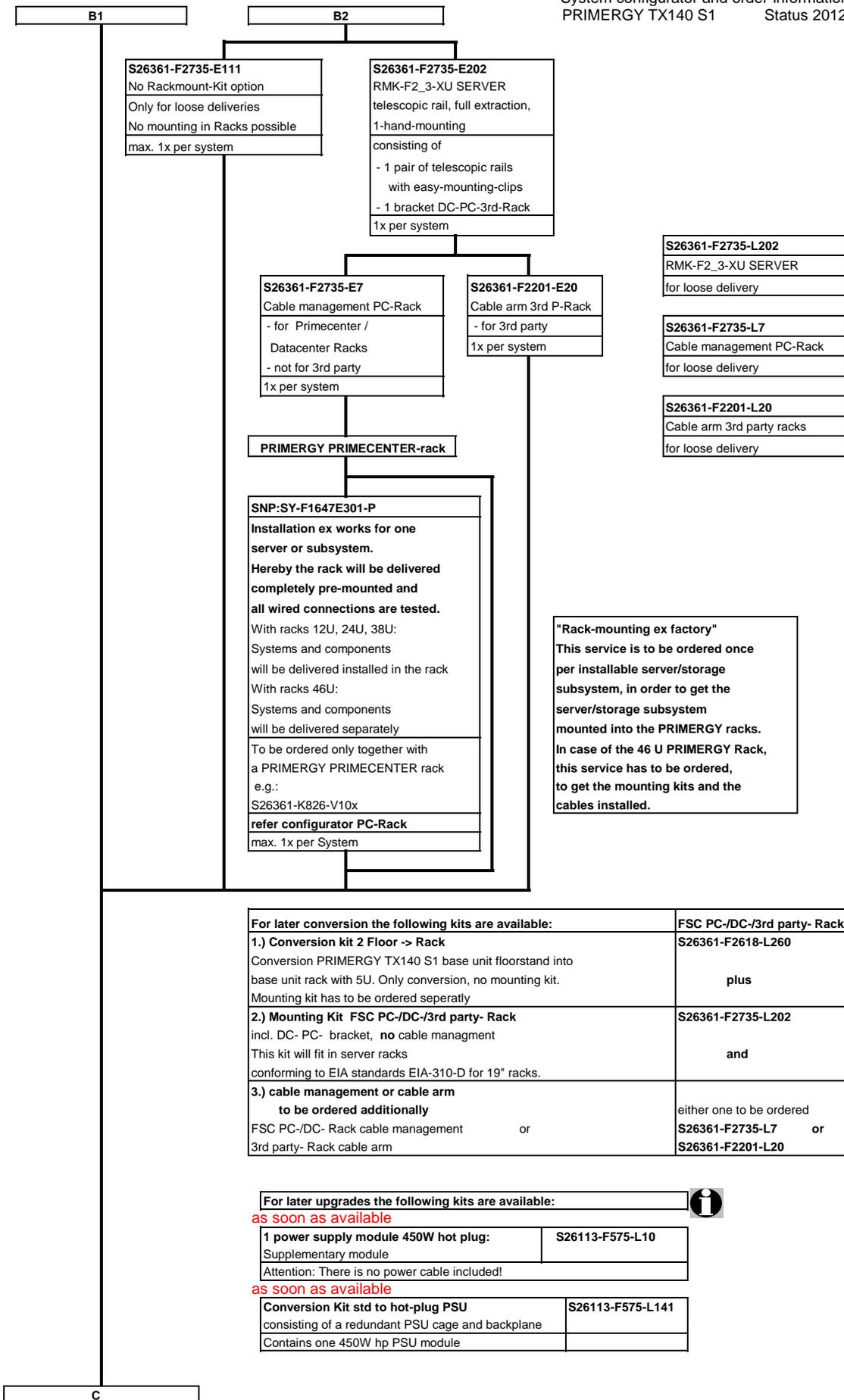
Option



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 bays for hot-plug HD's. Type depending on base unit:**
 - Type 1: 4x hot plug LFF (3.5") SAS or SATA HDD (LFF base units only)
 - Type 2: 8x hot plug SFF (2.5") SAS or SATA HDD (SFF base units only)
 - * **1 power supply (Standard Ps with 300W)**
 - * **System fan (No Hot-plug, No redundancy)**
 - * **3 bays 5.25" for accessible drives (half Hight)**
Systemboard D3049 with:
 - * heat pipe for the CPU
 - * Chipset Intel® C202 (codenamed Bromolow Cougar Point Essential)
 - * **4 PCI slots:**
 - 1 x PCIe x16 Gen2
 - 1 x PCIe x4 (x8 connected) Gen2
 - 1 x PCIe x1 (x4 connected) Gen2
 - 1 x 32Bit / PCI 33MHz, (5V)
 - * **4 memory slots for max. 32GB with 4x 8GB unbuffered DDR3 RAM or**
 - Memory is divided into 4 DIMMs (2 channels with 2 slots per channel)
 - First Memory (one module) has to be selected for an orderable basic unit
 - Memory upgrade is possible module wise
 - SDDC (Chipkill) is not supported
 - * **SATA-Controller on board (supporting RAID 0/1)**
 - * **2x1 Gbit Ethernet LAN on board (Intel Hartwell and Intel Lewisville) with ToE;**
and iSCSI boot integrated in System BIOS as selectable option
 - * **iRMC S3 (integrated Remote Management Controller) on-board server management controller**
with dedicated 10/100Management 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 VGA (15 pin)
 - * 10x USB 2.0 (UHCI) with 480MBit/s (6x external at the rear, 2x external at the frontside,
2x internal USB Interfaces for UFM, backup device or int. Card reader, no USB wakeup)
 - * 2x LAN RJ45, 1x Service-LAN RJ45 switchable
- *Internal Cables:**
1. SATA cable for BD/DVD.
 2. Cable for HDD Backplane
- * **ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates**
 - * **Documentation engl. (multilingual on CD)**





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Section II Processor

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

Dual-Core CPU's	
- 1x 64-bit Intel Pentium (3MB SLC) or Core-i3 (3MB TLC) occupies socket for one CPU	
Pentium	
Pentium G620 2.60GHz 3MB 2C/2T 1066MHz (65W)	S26361-F3579-E262
Core i3	
Core i3-2100 3.10GHz 3MB 2C/4T 1333MHz (65W)	S26361-F3579-E210
Core i3-2120 3.30GHz 3MB 2C/4T 1333MHz (65W)	S26361-F3579-E212 on special release
Quad-Core XEON CPU's	
- 1x 64-bit Intel Xeon UP (8MB shared TLC = Third Level Cache) Hyper-Threading; 1333 MHz DDR3 Bus and heat pipe occupies socket for one CPU	
Xeon E3-1220 3.10GHz 8MB 4C/4T 1333MHz Turbo (80W)	S26361-F3579-E322
Xeon E3-1230 3.20GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E323 on special release
Xeon E3-1240 3.30GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E324
Xeon E3-1270 3.40GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E327
Xeon E3-1280 3.50GHz 8MB 4C/8T 1333MHz Turbo (95W)	S26361-F3579-E328 on special release
Xeon E3-12xxL Power Optimized	
- 1x 64-bit Intel Xeon LV UP (4/8MB shared TLC = Third Level Cache) Hyper-Threading (HT); 1066 or 1333 MHz DDR3 Bus and heat pipe occupies socket for one CPU	
Xeon E3-1260L 2.40GHz 8MB 4C/8T 1333MHz Turbo (45W)	S26361-F3579-E316

Section III Memory

There are 4 memory slots to be used for max. 4 unbuffered DIMMS.
 => max. 32GB unbuffered DDR3 RAM for UDIMMs with 8GB moduels

Minimum one memory module or order code = first memory

Unbuffered (ub) UDIMMs

4x

- One DDR3- ub ECC memory module, 1.5V	
Memory 2GB 1333 SR	S26361-F3335-E524
Memory 4GB 1333 DR	S26361-F3335-E525
Memory 8GB 1333 DR	S26361-F3335-E526
Choose up to 4 order codes above.	

Section IV Graphics

i Graphics controller integrated in iRMCS3 (integrated Remote Management Controller)
 (max. Resolution: 1600 x 1200 at 16bpp)

S26361-F2748-E537
PY VGA card 512MB PCI-e x1
NVIDIA NVS300
512 MB PCIe-x1
2x DVI or 2x VGA or 1x DVI plus 1x VGA
cables adapters included
Dual head + fully 3-D
supported for Windows OS
only native driver support for Linux
full height bracket
max. 1x per system

i For deliveries to China with CCC label no grafic card is allowed within the configuration.
 It can be ordered as loose delivery only!

i The high end optional NVIDIA NVS300 graphic card offers dual head operation and fully 3D video support.
 The cables for either two times DVI or VGA connections are part of the delivery.
Remote Video direction via iRMC must be disabled.
 Only one card per server is allowed.

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

D

Section V Energy Star

S26361-F3301-E141
 TX140S1 E-Star Fam1
 for all 80W 4Core CPUs with std. PSU
 Limits configuration in accordance
 with Energy Star requirements
 max. 1x per system



The following order components out of the specific sections sections are allowed together with TX140 S1 E-Star Fam1:

SATA/SAS LFF (3.5") Base Unit with std PSU **S26361-K1379-V101**

Quad-Core CPU's	
Xeon E3-1220 3.10GHz 8MB 4C/4T 1333MHz Turbo (80W)	S26361-F3579-E322
Xeon E3-1230 3.20GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E323
Xeon E3-1240 3.30GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E324
Xeon E3-1270 3.40GHz 8MB 4C/8T 1333MHz Turbo (80W)	S26361-F3579-E327

Unbuffered (ub) UDIMMs (1.5V)	
Memory 2GB 1333 SR	S26361-F3335-E524
Memory 4GB 1333 DR	S26361-F3335-E525
Memory 8GB 1333 DR	S26361-F3335-E526

DVD & tape Drives	
DVD-ROM HH SATA	S26361-F3266-E2
DVD-RW supermulti HH SATA	S26361-F3267-E2
Blu-ray Triple Writer HH SATA	S26361-F3585-E2
max. 1x per system	

RAID Controller	
RAID Ctrl. SAS 6G 5/6 512 MB (D2616)	S26361-F3554-E512
max. 1x each per system	

LAN Controller	
Gigabit Ethernet Controller 1000TX	S26361-F3516-E1
Gigabit Ethernet Controller Dual 1000TX	S26361-F3610-E2
max. 1x each per system	

Hard Disk Drives 3.5" SATA	
HD 250GB 7.2krpm 3.5"	S26361-F3294-E250
HD 500GB 7.2krpm 3.5"	S26361-F3294-E500
HD 750GB 7.2krpm 3.5"	S26361-F3294-E750
HD 1000GB 7.2krpm 3.5"	S26361-F3294-E100
HD 2000GB 7.2krpm 3.5"	S26361-F3294-E200
max. 4x per system	

D

Section VI Accessible drives

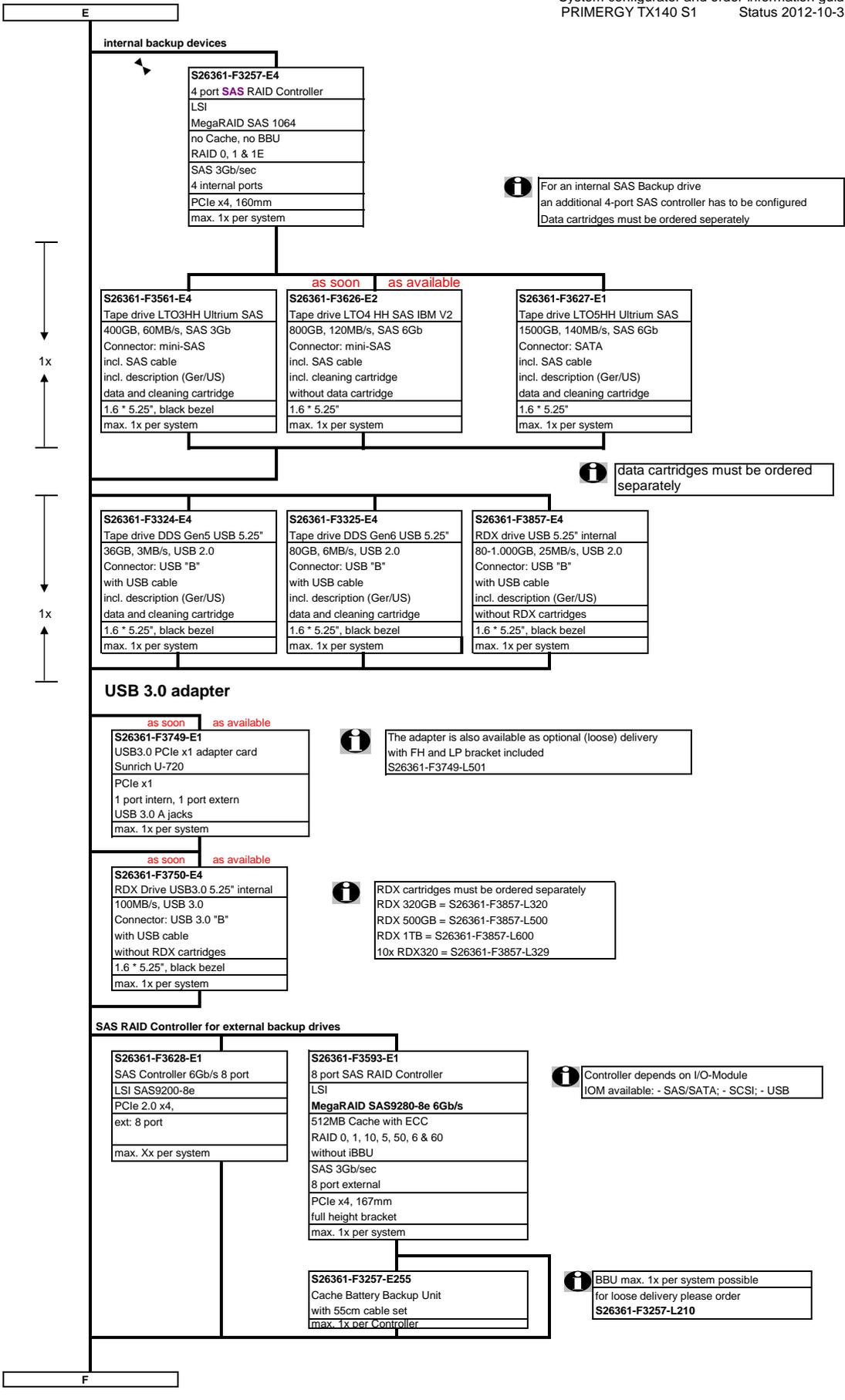
 There are 3 bays (1.6" x 5.25") for accessible drives.

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-F3585-E2 Blu-ray Triple Writer HH SATA 4x BD-RW, 16x DVD, 40x CD BD DL and all CD/DVD formats 1.6 x 5.25", black bezel max. 1x per system	S26361-F3641-E4 <i>as soon as available</i> Blu-ray Triple Writer slim SATA 4x BD-RW, 8x DVD, 24x CD BD DL and all CD/DVD formats with mounting frame 0.5 x 5.25", black bezel max. 1x per system
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 Following USB Components are available

1) USB DVD SM / Blu-Ray	<i>as soon as available</i>
External SuperMulti Drive	S26341-F103-L126
External Blu-Ray Drive	S26341-F103-L127
2) USB Keyboard:	
KBPC PX ECO Green IT, professional keyboard	S26381-K341-E1xx / L1xx
3) USB Mouse:	S26381-K430-L100
Laser Moue USB/PS2 Combo	
4) USB Sticks:	
MyUSBS A910 8GB, MLC Flash	S26391-F6048-L208
MyUSBS A910 16GB, MLC Flash	S26391-F6048-L216

E



Section VII Hard disks drives

Configurations with Eco SATA can only be mixed with BC SATA HDD type SAS and BC SATA drives with the same size can be mixed, but not used in one logical RAID volume

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

There is a 6 port SATA controller in the Base Unit for connection of up to 4 SATA LFF hard disks
For up to 4 3.5" SAS hard Drives, you must configure 1 of 3 different 8port SAS controller

4x

Business Critical (BC) SATA 3Gb/s HD 3.5" with hot plug/hot replace tray	
500GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E500
1000GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E100
2000GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E200
max. 4x per system	

S26361-F3293-E250	
HD 250GB 7.2krpm 3.5"	
7200rpm, <9.0 ms, 8MB Cache	
ECO SATA 3Gb/s	
hot plug/hot replace tray	
max. 4x per system	
G	

SAS 6Gb/s 3.5" with hot plug/hot replace tray	
300GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4005-E530
450GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4005-E545
600GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4005-E560
max. 4x per system	

S26361-F3291-E514	
HD 146GB 15krpm 3.5"	
15.000rpm, <4ms, 8MB Cache	
SAS 3Gb/s	
hot plug/hot replace tray	
max. 4x per system	

SAS / SATA SFF (2.5") Base Units: SAS or more than 4 SATA HDDs require a SAS Controller! see section VIII

Up to 4 SATA SFF (2.5") hard disks can be configured without a PCI SAS controller.
Up to 8 SAS or SATA SFF (2.5") hard disks can be configured as standard together with a SAS controller.

8x

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**

Business Critical (BC) SATA 3Gb/s HD 2.5" with hot plug/hot replace tray	
250GB 7.200rpm,<10,5ms, 8MB Cache	S26361-F3601-E250
500GB 7.200rpm,<10,5ms, 8MB Cache	S26361-F3601-E500
1000GB 7.200rpm,<10,5ms, 8MB Cache	S26361-F3601-E100
max. 8x per system	

ECO SATA 3Gb/s HD 2.5" with hot plug/hot replace tray	
160GB 5.400rpm,<10,5ms, 8MB Cache	S26361-F3297-E160
320GB 5.400rpm,<10,5ms, 8MB Cache	S26361-F3297-E320
500GB 5.400rpm,<10,5ms, 8MB Cache	S26361-F3297-E500
max. 8x per system	

Mix of ECO SATA with SAS HDDs is not possible !

SAS 6Gb/s 2.5" with hot plug/hot replace tray	
300GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E130
450GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E145
600GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E160
900GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E190
73GB 15krpm,<4,5ms, 8MB Cache	S26361-F4482-E573
146GB 15krpm,<4,5ms, 8MB Cache	S26361-F4482-E514
max. 8x per system	

configuration of SAS-HDDs requires SAS RAID controller

G

Section VIII External SAS Disk Array

SAS (RAID) Controller for external backup drives

S26361-F3628-E1
 SAS Controller 6Gb/s 8 port
 LSI SAS9200-8e
 PCIe 2.0 x4,
 ext: 8 port
 max. 1x per system

S26361-F3593-E1
 8 port SAS RAID Controller
 LSI
MegaRAID SAS9280-8e 6Gb/s
 512MB Cache with ECC
 RAID 0, 1, 10, 5, 50, 6 & 60
 without iBBU
 SAS 3Gb/sec
 8 port external
 PCIe x4, 167mm
 full height bracket
 max. 1x per system

i Controller depends on I/O-Module
 IOM available: - SAS/SATA; - USB

S26361-F3257-E255
 Cache Battery Backup Unit
 with 55cm cable set
 max. 1x per Controller

i BBU max.1x per system possible
 for loose delivery please order
S26361-F3257-L210

Section IX Internal Disk Array

SATA Configuration

i SATA Base Units contain a 6-port on-board SATA controller supporting RAID Levels 0, 1, 10

SAS Configuration

i you can choose between 3 types of 8 port SAS controller for the Base Unit:
 - LSI 1068e or 2008 based Modular RAID 0,1 (IME)
 - LSI 2108 based Modular RAID 5,6
 if you want to use SAS harddisks or more than 4 harddisks, then one Controller is required
 On special request based on customising projects up to 2 SATA 2,5" SSDs can be configured without a controller

Controller for 1 to 4 LFF (3.5") or 1 to 8 SFF (2.5") HDD

S26361-F3257-E8
 8 port SAS RAID Controller
 LSI
 MegaRAID SAS 1068
 no Cache, no BBU
 RAID 0, 1 & 1E
 SAS 3Gb/sec
 8 internal ports
 PCIe x4, 160mm
 max. 1x per system

S26361-F3554-E8
 RAID Ctrl SAS 6G 8port internal
 Based on chip LSI SAS2008
 LSI MegaRAID
 no Cache, no BBU
 RAID 0, 1 & 1E
 Support for 3Gb/s and 6Gb/s
 SATA and SAS hard drives
 PCIe x8
 Low-profile MD2 form factor
 max. 1x per system

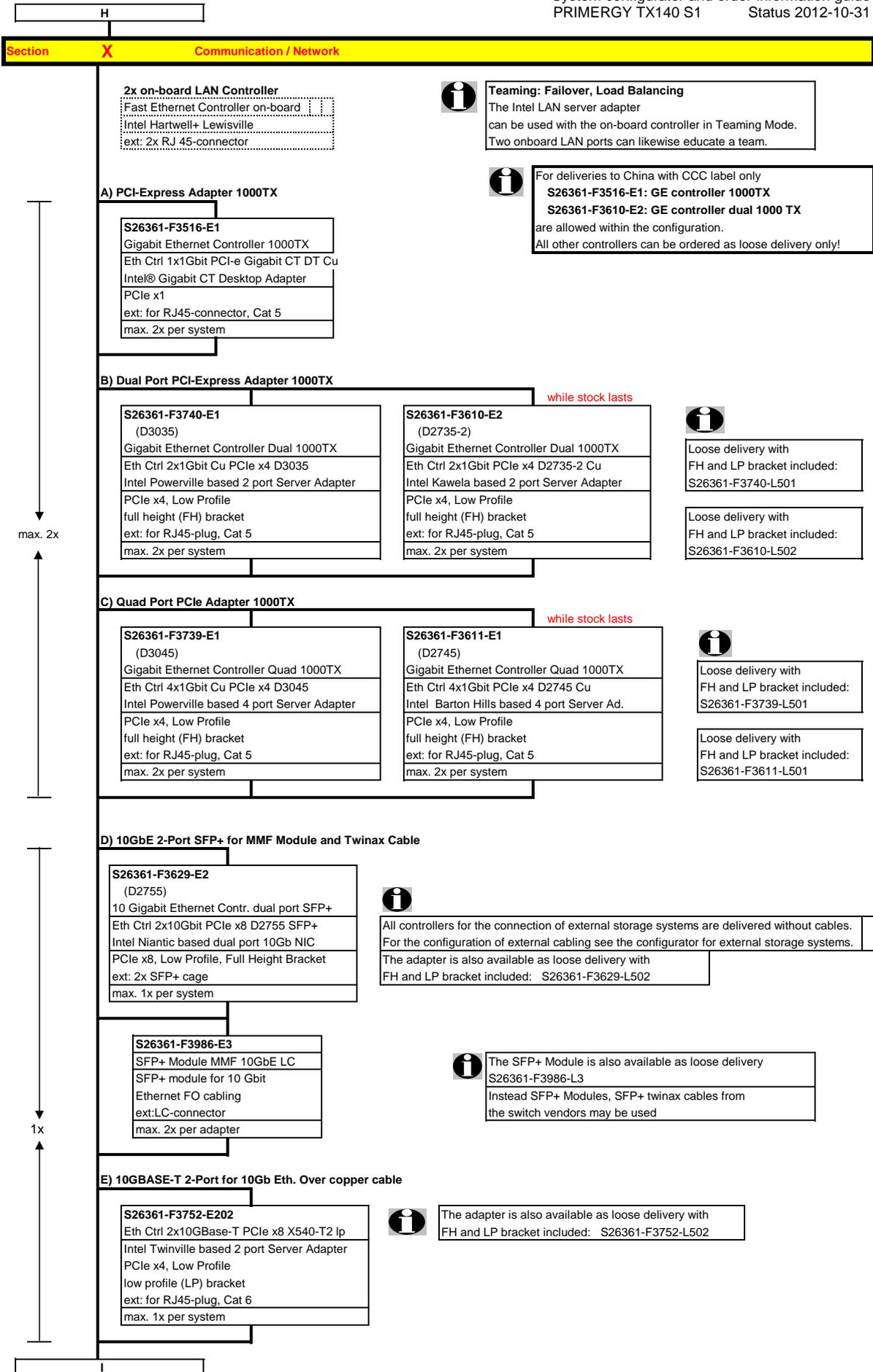
S26361-F3554-E512
 RAID Ctrl SAS 6G 8port internal
 Based on chip LSI SAS2108
 LSI MegaRAID
 512MB Cache with ECC
 RAID 0, 1, 10, 5, 50, 6, 60
 optional BBU
 Support for 3Gb/s and 6Gb/s
 SATA and SAS hard drives
 PCIe x8
 Low-profile MD2 form factor
 max. 1x per system

1 x

S26361-F3257-E255
 Cache Battery Backup Unit
 max. 1x per Controller

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

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Section XI System management options

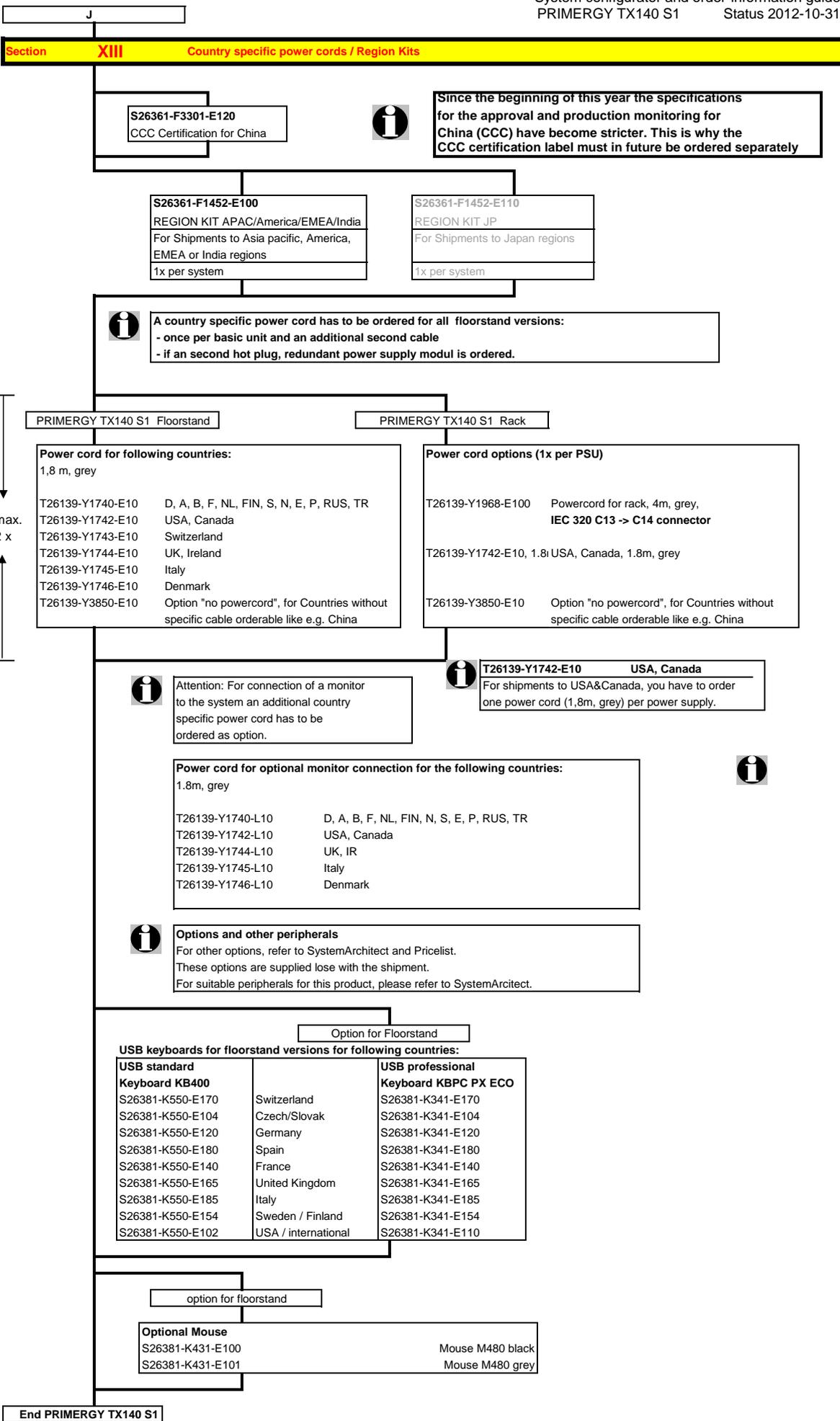
S26361-F1790-E242
iRMC S3 advanced pack
integrated remote management controller
activation key for
graphical console redirection
and remote media redirection
max. 1x per system

as soon as available

S26361-F2571-E27
Service LAN Option
Service LAN Port
Integrated in front (operating panel)
max. 1x per system

Section XII Miscellaneous

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Change Report

Date	Order number	Changes
2012-10-08	S26361-F3749-Exx	Added USB3.0 Adapter
2012-10-08	S26361-F3750-Ex	Added RDX Drive
28.02.2012	S26361-F3301-E120	add CCC Certification
2012-02-09	S26361-F3641-E4	BD slim writer added
2012-02-09	S26113-F575-L141	conversion kit std to hp introduced
2011-12-21	S26361-F4482-E114	SAS HD 6G 144GB - no longer available
2011-10-01	S26361-F3601-E250	new BC SATA HD - now available
2011-10-01	S26361-F3298-E64	64 GB SSD - no longer available
2011-06-21	S26361-F3294-E750	750GB SATA disk eliminated due to EOL
2011-06-21	S26361-F3291-E514	146GB SAS disk eliminated due to EOL
2011-06-01		First Release