

PRIMERGY TX300 S6

System configurator and order-information guide

June 2012



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Change report



PRIMERGY Server

Instructions

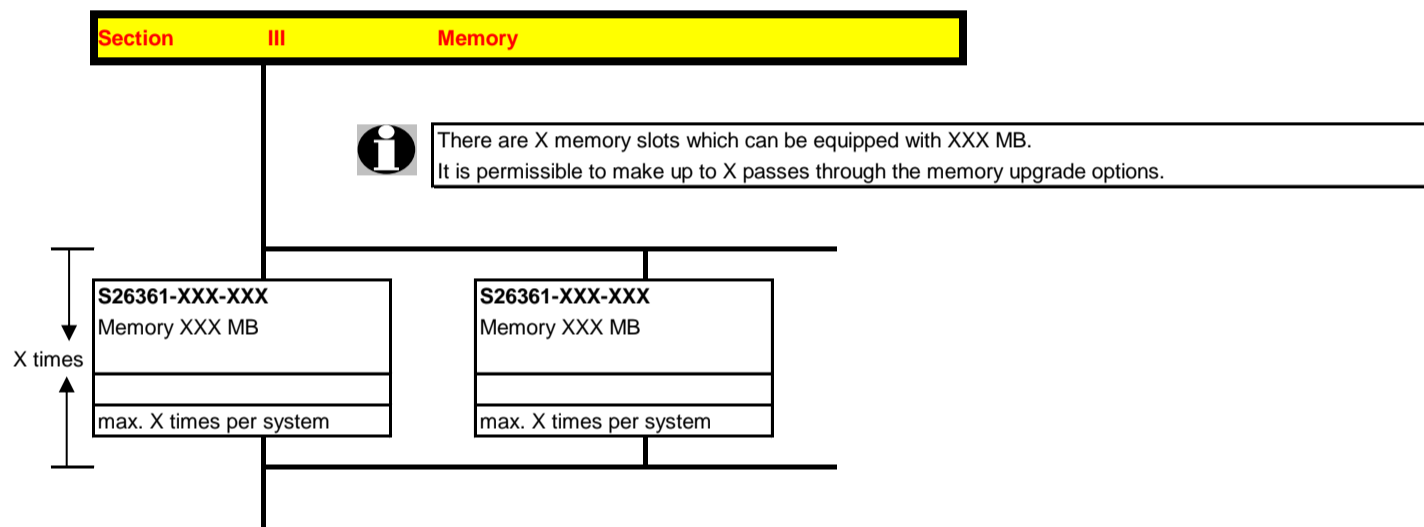
This document contains basic product and configuration information that will enable you to configure your system via PC-/SystemArchitect.

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

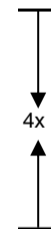
You can configure your individual PRIMERGY server in order to adjust your specific requirements.

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

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.



For further information see:

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

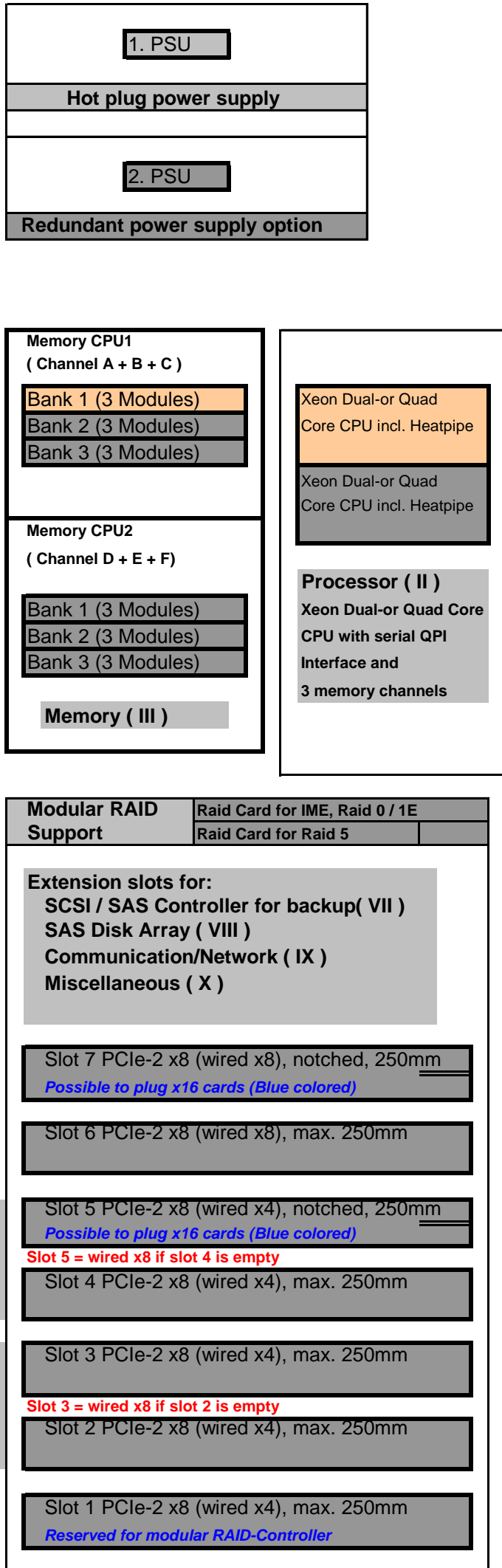
https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx (extranet)

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

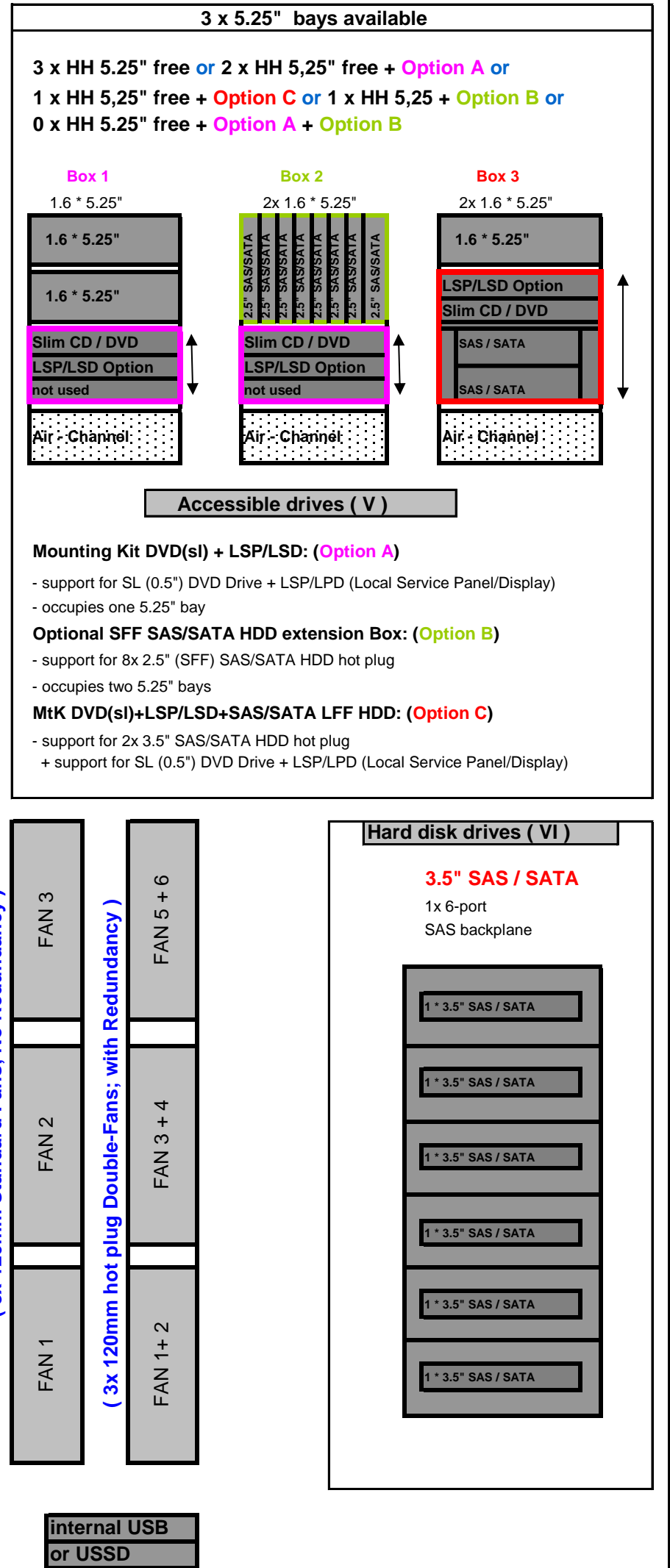
Configuration diagram PRIMERGY TX300 S6

System unit (I)

SIDE VIEW



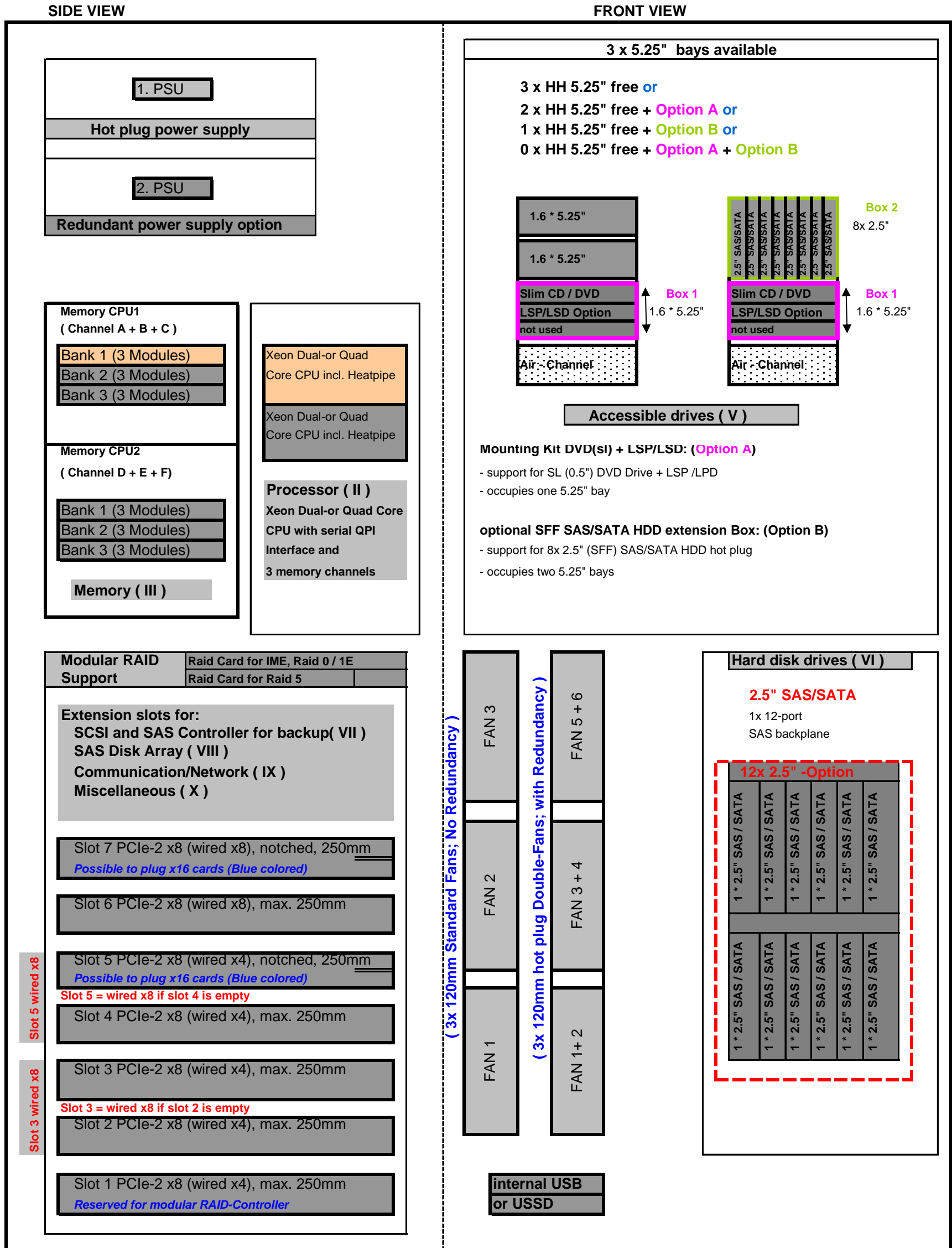
FRONT VIEW



Key: Included in basic unit Option (LP ready = Slots for low profile boards)
 One CPU (first CPU) and one memory per CPU (first memory) has to be selected for an orderable basic unit.

Configuration diagram PRIMERGY TX300 S6

System unit (I)



Key: Included in basic unit Option (LP ready = Slots for low profile boards)
 One CPU (first CPU) and one memory per CPU (first memory) has to be selected for an orderable basic unit.

Start PRIMERGY TX300 S6

SW Configurator 32 bit

with OEM-Software
for PRIMERGY Server

without OEM-Software
for PRIMERGY Server

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

OEM- SW is bound to HW and is not allowed to be ordered separately.
Exception: VMware SW

For all SW products please refer to the corresponding software configurator accessible via the Extranet under Configuration & Tools, -All configurations, -Software, URL see below.

Microsoft - Windows Server 2008 Server Licenses
 - Windows Server 2008 Enterprise
 - Windows Server 2008 Standard
 - Windows Server 2008 Foundation
 - Windows Web Server 2008

Linux - Software **)
 - Open Enterprise Server ***)
 - SuSE Linux ES (OEM): LO
 - Red Hat EL (OEM): LO


PRIMECLUSTER *)
 - Clustering
 - Load Balancing

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


SCO - Software: **)
 - SCO OpenServer (only 1- and 2-way Tower servers)
 - SCO UnixWare (only 1-, 2, and 4-way Tower and Rack servers)


x10sure *)
 x10sure Control Nodes and Compute Nodes
 Windows Server 2003 Compute Nodes
 for PRIMERGY BX600, RX/TX

MultiPath, Duplex Data Manager (DDM) W2K; W2K3 Linux (W-DDM)
 for PRIMERGY except all mono PY systems

 Details eg. version numbers are published on the page referred to


Manageability Software: V)**
 - iRMC advanced Pack
 - RemoteView Software
 - RemoteView Service Board
 - RemoteView Diagnosis
 - RemoteDeploy
 - Altiris Server Deployment

 *) Pay attention to the x10sure release and ordering information in the Extranet under <https://ts.fujitsu.com/x10sure>

 *) 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>

Backup-Software / Application-Software: U
 - ARCserve
 - openSM2

 ***) 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

Start PRIMERGY TX300 S6

SW Configurator 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 and Essentials for XenServer released for RX200S5, RX300S4/S5, RX600S4, BX620S4/S5, BX920S1

Microsoft Hyper-V Server and System Center Essentials
 - Microsoft System Center Essentials Management Suite for any server released for Windows Server 2008 SP2
 - Microsoft Hyper-V Server 2008 R2

Microsoft - Windows Server 2008 R2 Server Licenses
 - Windows Server 2008 R2 Datacenter
 - Windows Server 2008 R2 Enterprise
 - Windows Server 2008 R2 Standard
 - Windows Server 2008 R2 Foundation
 - Windows Web Server 2008 R2

Linux - Software *) **)
 # Open Enterprise Server ***)
 - SuSE Linux ES (OEM): LO
 - Red Hat EL (OEM): LO


Microsoft - Windows Server 2008 Server Licenses
 - Windows Server 2008 Datacenter
 - Windows Server 2008 Enterprise
 - Windows Server 2008 Standard
 - Windows Server 2008 Foundation
 - Windows Web Server 2008

PRIMECLUSTER *)
 - Clustering
 - Load Balancing

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

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

only EM64T **Manageability Software: V**)**
 - iRMC advanced Pack
 - RemoteView Software
 - RemoteView Service Board
 - RemoteView Diagnosis
 - RemoteDeploy

 *) 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

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

Section | SAS - Basic units

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

- * By a key lockable front bezel in floorstand version
- * Basic units with:
 - A.) - 1x 800W Hot-Plug Power Supply (no redundancy) + 3x 120mm Standard Fans (no redundancy)
 - B.) - 2x 800W Hot-plug and redundant Power Supplies + 3x hot-plug and redundant Double Fans
- 9 memory DIMMs per CPU (max 96GB) => Total 18 DIMMs (max 192GB) for two CPU's
- SAS backplane with 6 x 1" bays for 3.5" hot plug SAS or SATA HD's
- * 3 drive bays 5,25" for accessible drives free available.
- * Integrated ServerView Diagnostics Technology (Diagnosis LED's) for indication of internal failed components

Options:

- * 2nd hot plug power supply module 800W (PSU) for redundancy in Basic Unit A.)
- * 12x 2.5" HD backplane conversion kit
- * - Optional modular RAID 0/1 controllers with IME (Integrated Mirroring Enhanced) support based on LSI 1064 or LSI SAS2008 chipset or as alternative
- optional modular RAID 5 controller based on LSI SAS2108 chipset
- * One 0,5" bay can be configured with an optional LC- display for LocalView in a drawer or with an optional CSS (Customer Self Service) modul for indication of a failed component via LED's Simultaneously components are marked which can be replaced by the customer. This LEDs can be dispalyed during service even without mains connection.

Systemboard D2619 with:

- * Up to two Xeon Dual Core, Quad-Core, Turbo Quad Core or Turbo Six Core CPU's (LGA 1366 socket) with serial QPI links (Quick Path Interconnect) and three memory channels per CPU
- First CPU has to be selected for an orderable basic unit,
- * Chipset Intel® 5520P (codenamed Tylersburg-EP or 36D)
- * 7 PCI slots: - 2x PCIe-2 x8 (wired x8, notched, possible to plug x16 card)
- 5x PCIe-2 x8 (wired x4)
- From 4 PCIe-slots each two wired x4 slots can be combined to one wired x8 slot
- One PCIe-2-slot is populated with one of two possible modular Raid-controllers.
- * 18 memory slots for max. 384 GB (12x 32GB) RAM DDR3 available
- Memory is divided into 9 DIMMs per CPU (3 channels with 3 slots per channel)
- Max. three 8GB modules or two 16/32GB quad rank modules are possible per channel
- First Memory (one module) has to be selected for an orderable basic unit per CPU
- Memory upgrade is possible module wise
- Memory mirroring is supported with 2 identical modules in channel A+B CPU 1 or D+E 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 for memory modules,
- * Dual Port 10/100/1000 x4 PCI Express* Gigabit Ethernet Intel LAN controller Zoar on-board
- * iRMC S2 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100 Service LAN-port and integrated graphics controller.
- The Service LAN-port can be switched alternatively on standard Gbit LAN port 1
- * Graphics Controller integrated in iRMC S2 (integrated Remote Management Controller):
- 1600x1200x16bpp 60Hz, 1280x1024x16bpp 60Hz, 1024x768x32bpp 75Hz, 800x600x32bpp 85Hz,
- 640x480x32bpp 85Hz
- (1280x1024x24bpp 60Hz only possible if local monitor or remote video redirection is off)

A

A

Interfaces at the rear:

- * 1x RS-232-C (serial, 9 pins) (usable for BMC or OS or shared)
- * 1x RS-232-C (serial, 9 pins)
- * 1x VGA (15 pins)
- * 4x USB 2.0 (UHCI) with **480MBit/s**, no USB wakeup
- * 2x LAN RJ45, 1x Service-LAN RJ45

Interfaces on the front:

- * 3x USB 2.0 (UHCI) with **480MBit/s**, no USB wakeup
- * 1x VGA (15 pins) as an option

Interfaces internal:

- * 2x released internal USB Interfaces for backup devices,
- * 1x USB 2.0 (UHCI) with **480MBit/s** for dongle functionality, no USB wakeup

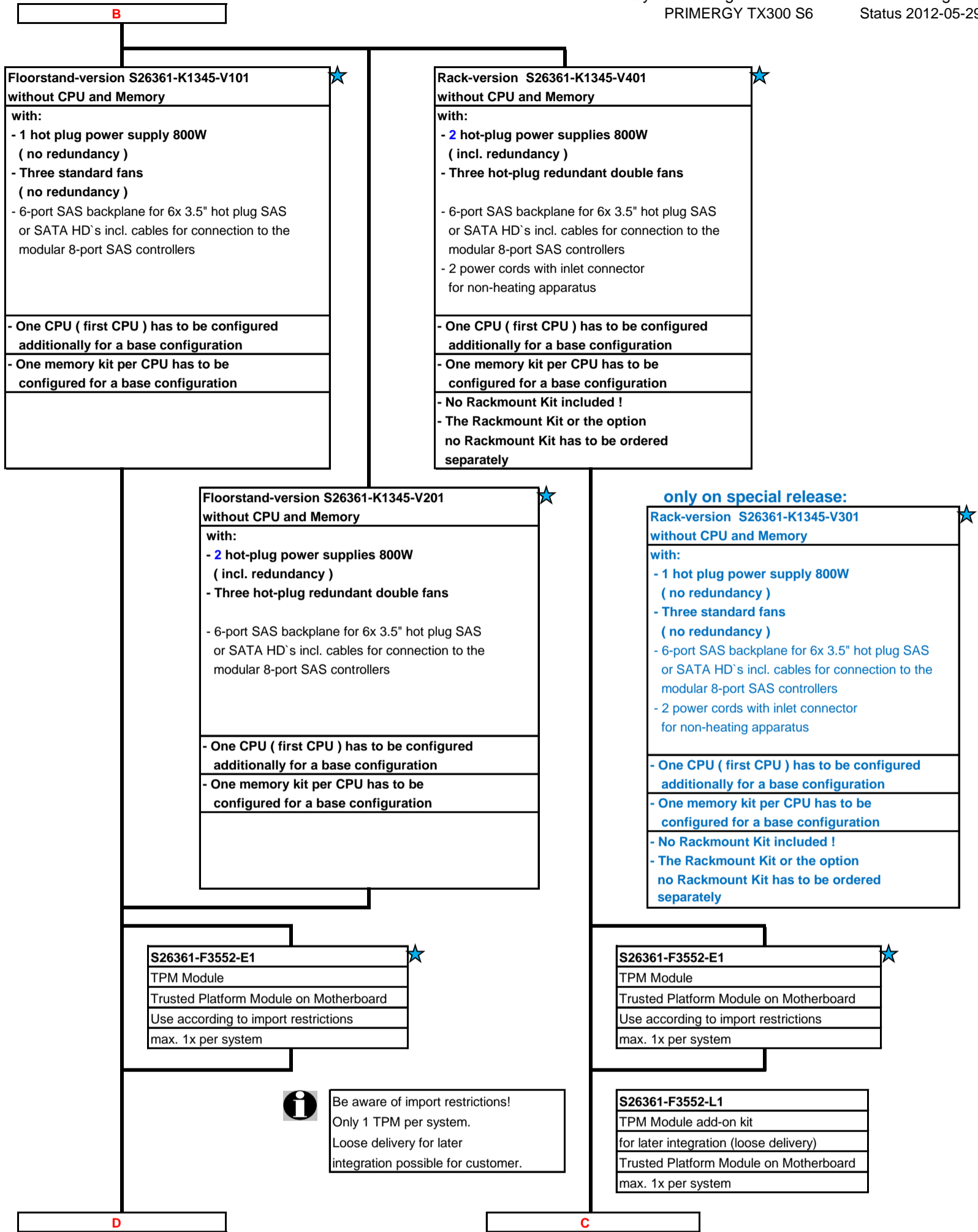
Cables:

- * SATA cable for DVD.
- * 2x SAS cables for connection of 4 SAS-ports each incl. signaling

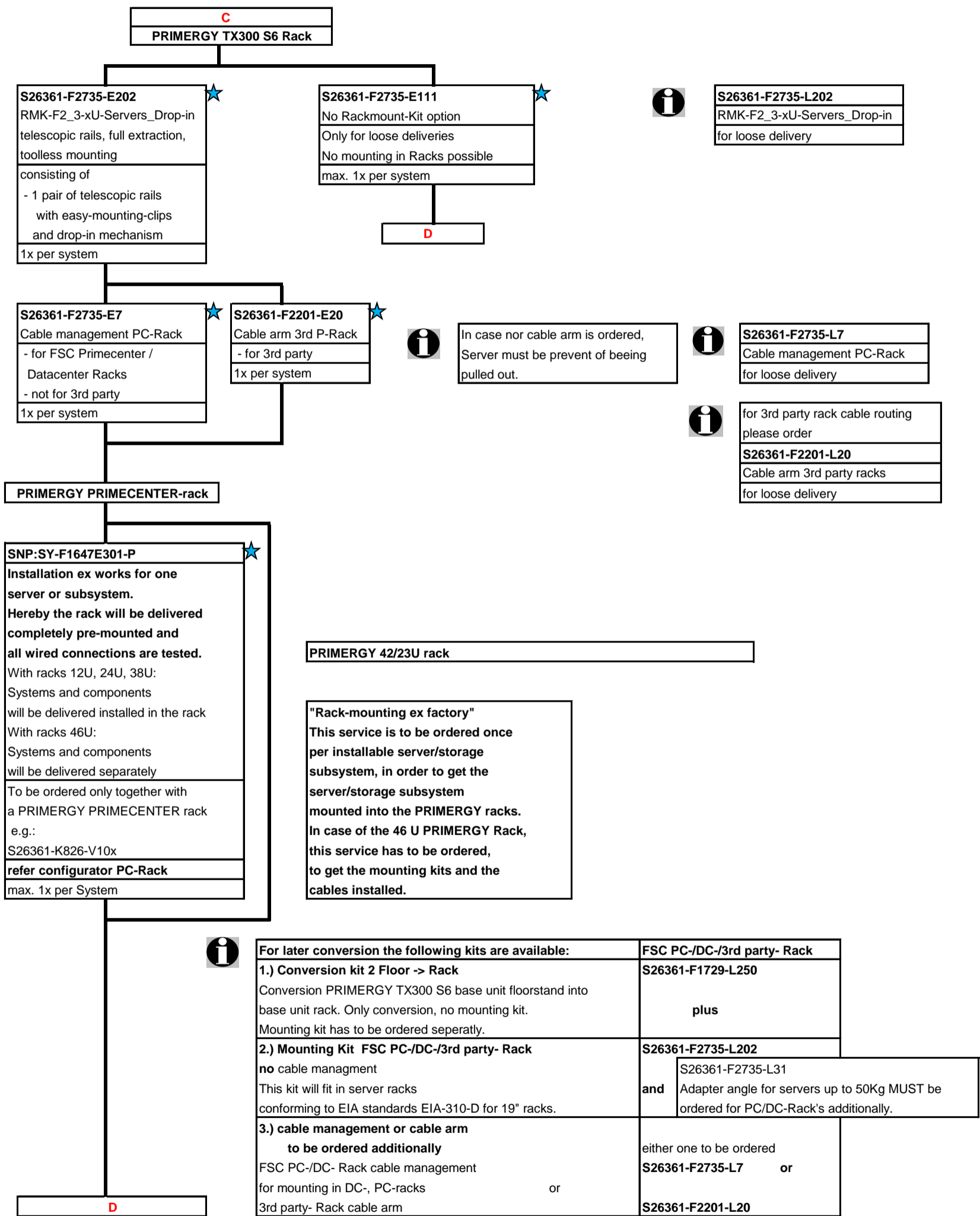
* ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates

* Documentation engl. (multilingual on CD)

B



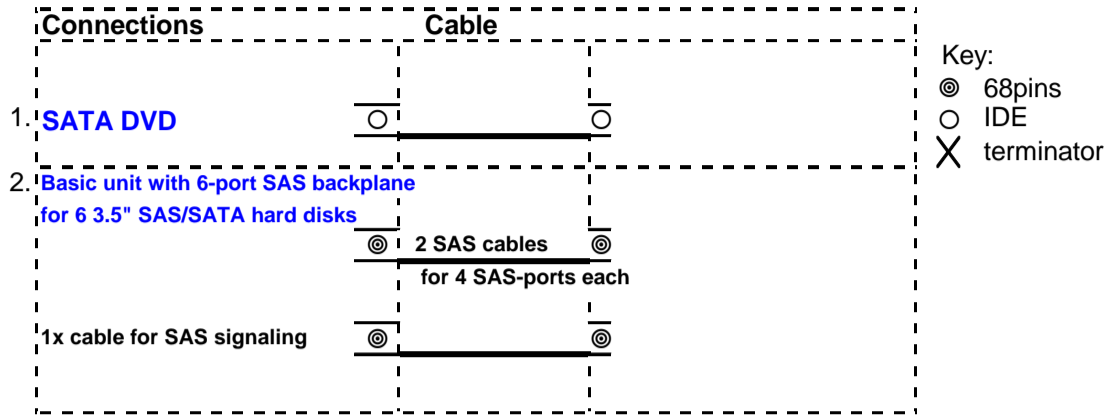
Mounting kits for PRIMERGY TX300 S6
 - 1 pair of telescopic rails full extraction
 - 1 Vario carrier DC-PC-3rd party Rack
 allows toolless adjustable in depth and easy mounting
 - 1 bracket PRIMECENTER and DataCentre-Racks
**Mounting kit for mounting of servers in FSC 19" PRIMECENTER- racks
 and all server racks conforming to EIA standard EIA-310-D for 19" racks.
 Therefore the mounting kit is variable in depth from 704-790mm**



For later conversion the following kits are available:		FSC PC-/DC-/3rd party- Rack
1.) Conversion kit 2 Floor -> Rack Conversion PRIMERGY TX300 S6 base unit floorstand into base unit rack. Only conversion, no mounting kit. Mounting kit has to be ordered seperatly.		S26361-F1729-L250 plus
2.) Mounting Kit FSC PC-/DC-/3rd party- Rack no cable managment This kit will fit in server racks conforming to EIA standards EIA-310-D for 19" racks.		S26361-F2735-L202 and S26361-F2735-L31 Adapter angle for servers up to 50Kg MUST be ordered for PC/DC-Rack's additionally.
3.) cable management or cable arm to be ordered additionally FSC PC-/DC- Rack cable management for mounting in DC-, PC-racks or 3rd party- Rack cable arm		either one to be ordered S26361-F2735-L7 or S26361-F2201-L20

D

Cables included in basic unit



Only possible for basic units S26361-K1267-V101 and -V301
 Provides PSU redundancy for Basic Units without redundancy

S26113-F556-E10 ★
 2nd power supply 800W
 (hot plug) for redundancy
 occupies one bay for
 hot plug power supply
 max. 1x per system



Only floorstand versions
 A second, redundant power supply requires an additional country specific power cord (section XIII)

for later upgrade of basic units S26361-K1345-V101 and -V301
 with redundant fan upgrade kit

Hot Plug Redundant Fan Upgrade Kit: For upgrade of standard into redundant fans Consist of three fan boxes with one redundant 120mm double fan each	S26361-F2544-L83
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1 power supply module 800W hot plug: Supplementary module	S26113-F556-L10
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E

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Section II 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	
Dual-Core CPU	
- 1x 64-bit Intel Xeon (4MB shared TLC = Third Level Cache) 800 MHz DDR3 Bus, 4,80 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5503 2C/2.00GHz/4M/4,80GT/s (80W)	S26361-F3277-E200
Quad-Core CPU's	
- 1x 64-bit Intel Xeon (4MB shared TLC = Third Level Cache) 800 MHz DDR3 Bus, 4,80 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5506 4C/2.13GHz/4M/4,8GT/s (80W)	S26361-F3278-E213
Xeon E5507 4C/2.26GHz/4M/4,8GT/s (80W)	S26361-F3278-E226
Xeon E5603 4C/1.60GHz/4M/4,80GT/s (80W)	S26361-F3648-E160
Xeon E5606 4C/2.13GHz/8M/4,80GT/s (80W)	S26361-F3648-E213
Xeon E5607 4C/2.26GHz/8M/4,80GT/s (80W)	S26361-F3648-E226
Turbo Quad-Core CPU's	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1066 MHz DDR3 Bus, 5,86 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5620 4C/2.40GHz/12M/5,86GT/s (80W)	S26361-F3618-E240
Xeon E5630 4C/2.53GHz/12M/5,86GT/s (80W)	S26361-F3618-E253
Xeon E5640 4C/2.66GHz/12M/5,86GT/s (80W)	S26361-F3618-E266
Turbo Six-Core CPU's	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 5,86 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon E5645 6C/2.40GHz/12M/5,86GT/s (80W)	S26361-F3633-E240
Xeon E5649 6C/2.53GHz/12M/5,86GT/s (80W)	S26361-F3649-E253
Turbo Six-Core CPU's	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 6,40 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon X5650 6C/2.66GHz/12M/6,40GT/s (95W)	S26361-F3619-E266
Xeon X5660 6C/2.80GHz/12M/6,40GT/s (95W)	S26361-F3619-E280
Xeon X5670 6C/2.93GHz/12M/6,40GT/s (95W)	S26361-F3619-E293
Xeon X5675 6C/3.06GHz/12M/6,40GT/s (95W)	S26361-F3619-E306
Xeon X5680 6C/3.33GHz/12M/6,40GT/s (130W)	S26361-F3619-E333
Xeon X5690 6C/3.46GHz/12M/6,40GT/s (130W)	S26361-F3619-E346
Frequency Optimized Turbo Quad-Core CPU's	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 5,86 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon X5647 4C/2.93GHz/12M/5,86GT/s (130W)	S26361-F3620-E293
Frequency Optimized Turbo Quad-Core CPU's	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1333 MHz DDR3 Bus, 6,40 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon X5667 4C/3.06GHz/12M/6,40GT/s (95W)	S26361-F3620-E306
Xeon X5677 4C/3.46GHz/12M/6,40GT/s (130W)	S26361-F3620-E346
Xeon X5687 4C/3.60GHz/12M/6,40GT/s (130W)	S26361-F3620-E360
Low Voltage Quad-Core CPU with max. 800MHz DDR3 speed	
- 1x 64-bit Intel Xeon (4MB shared TLC = Third Level Cache) 800 MHz DDR3 Bus, 4,80 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon L5609 4C/1.86GHz/12M/4,80GT/s (40W)	S26361-F3621-E186
Low Voltage Turbo Quad/Six-Core CPU's with max. DDR3 Bus Speed 1066MHz	
- 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT); 1066 MHz DDR3 Bus, 5,86 GT/s QPI Bus and passive heat sink occupies socket for one CPU	
Xeon L5630 4C/2.13GHz/12M/5,86GT/s (40W)	S26361-F3622-E213
Xeon L5640 6C/2.26GHz/12M/5,86GT/s (60W)	S26361-F3622-E226

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

on special release



on special release
on special release

F

F

Section III Memory



- There are 9 memory slots for max.
 72GB (9x 8GB single / dual rank 1.5V RDIMM's)
 96GB (6x 16GB quad rank 1.5V RDIMMs)
 12GB (6x 2GB UDIMMs)
=> max. 192GB for two CPU's (96GB per CPU)
(For explanation of following terms refer to section "Memory Configurations"
 - The memory area is divided into 3 channels per CPU with 3 slots per channel
 - Slot 1 of each channel belongs to memory bank 1, the slot 2 belongs to memory bank 2 and slot 3 belongs to memory bank 3
Systems with 3DPC (9 DIMMs / CPU) do not support mix of dual rank and quad rank modules

Registered and unbuffered memory modules can be selected
No mix of registered and unbuffered modules allowed.
DDR3 1066 and 1333MHz modules can be mixed, but run always with the slower speed.
With two DIMMs per channel, 1.5V DIMMs operate with 1333Mhz, 1.35V with 1066MHz as max., dep. on CPU
If 1.5V DIMMs and 1.35V (Low Voltage) DIMMs are mixed, DIMMs will run at 1.5V
SDDC (Chipkill) is supported only for registered memory modules.

1.) In the "Independent Channel Mode" is following configuration possible
 - Each slot can optionally be equipped either with registered x4 organized DDR3 modules:
 2GB **single rank**, 4GB and 8GB **dual rank**, **16GB quad rank**
 or with unbuffered x8 organized DDR3 modules: 2GB **dual rank**

2.) In the "Spare Channel Mode" is following configuration possible
 - Each memory bank can optionally be equipped with 3x2GB **single rank**,
 3x4GB and 3x8GB **dual rank** or **3x 16GB quad rank** DDR3 modules.
Each slot of one bank has to be equipped with identical modules for spare channel mode
 In channel A and B of CPU 1 or channel D and E of CPU 2 are always the active memory modules,
 in channel C of CPU 1 and channel F of CPU 2 is always the spare module

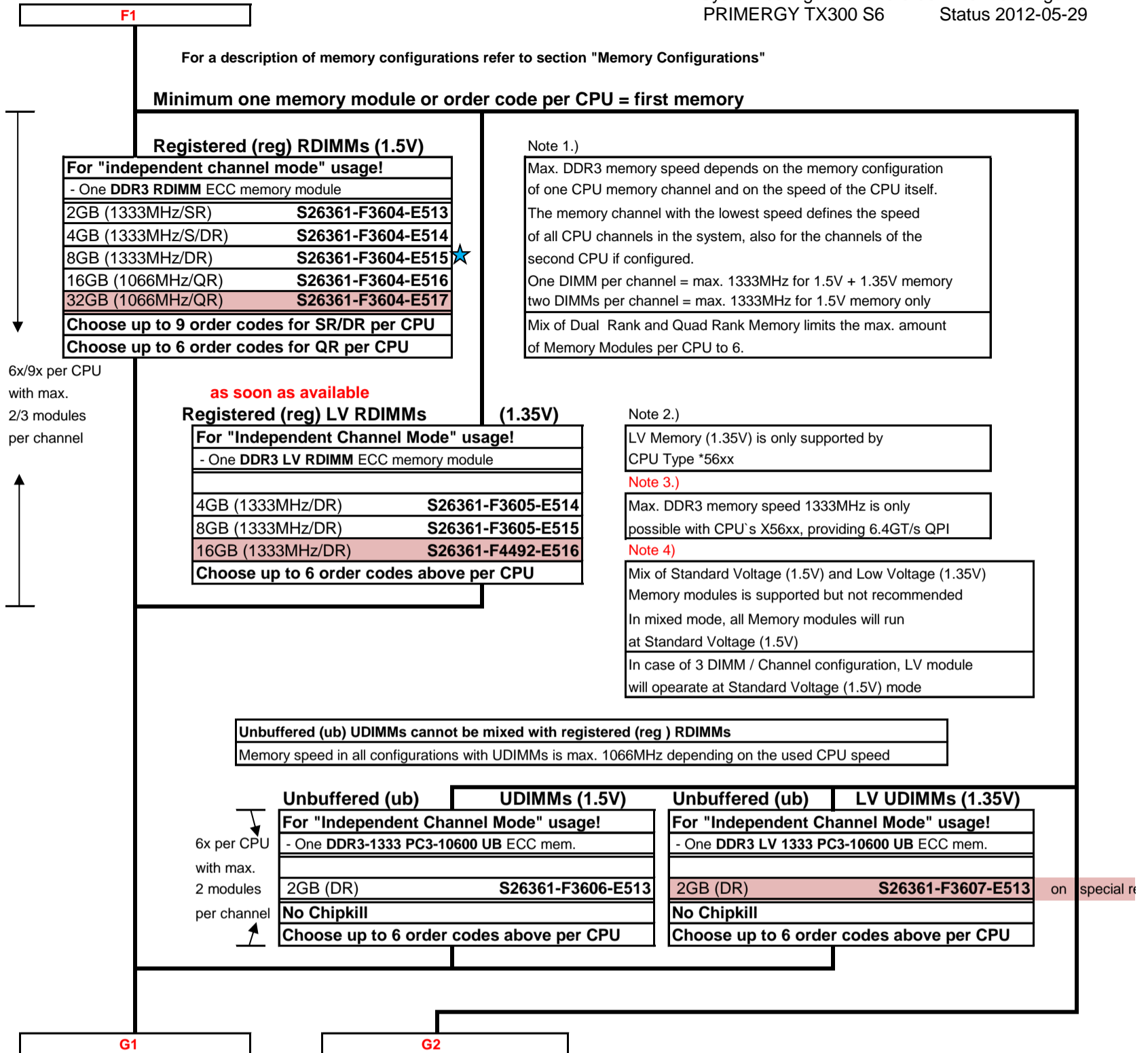
 No special order codes with UDIMMs are offered for this mode

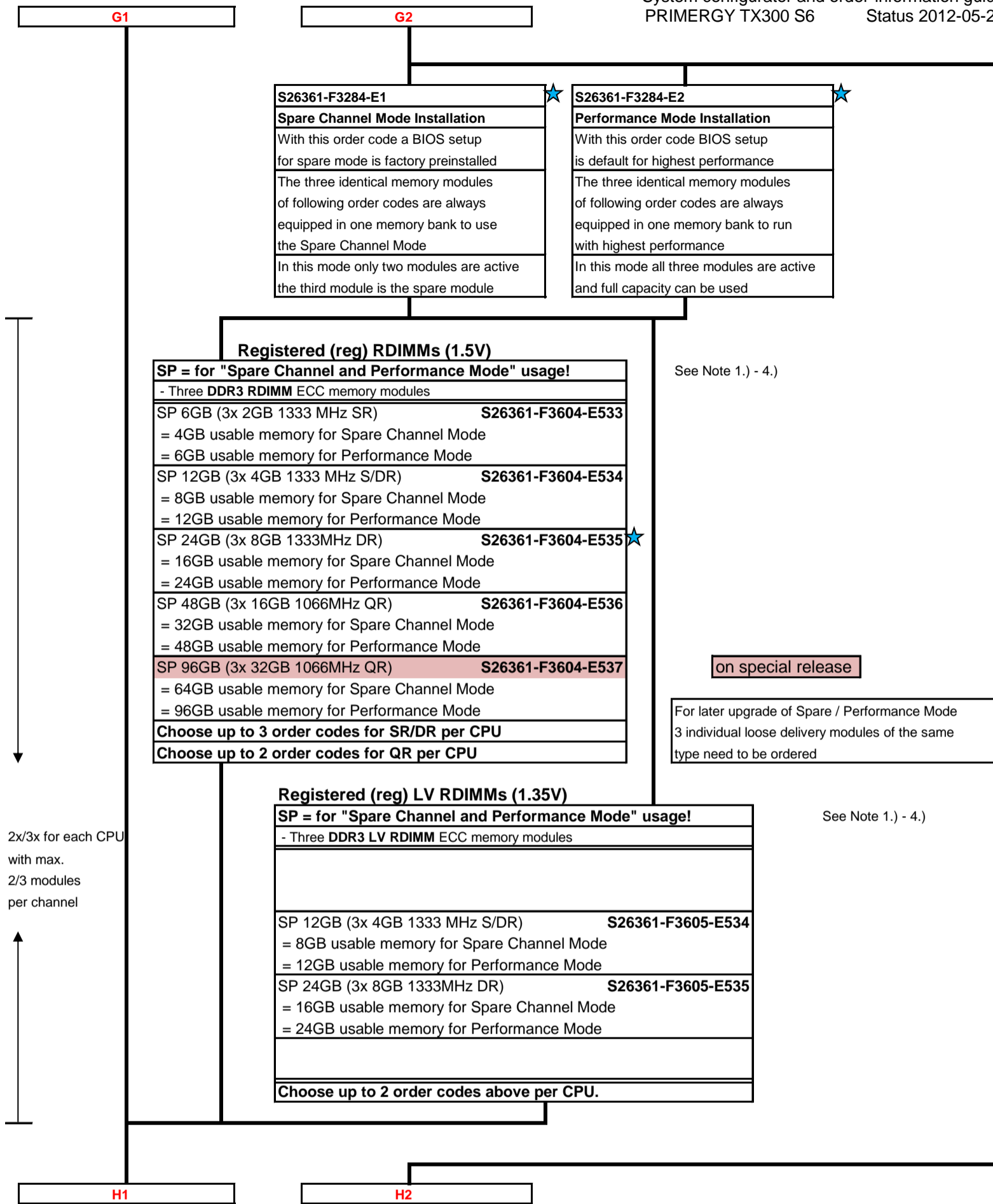
3.) In the "Mirrored Channel Mode" is following configuration possible
 - Each memory bank can optionally be equipped with 2x2GB **single rank**,
 2x4GB and 2x8GB **dual rank** or 2x16GB quad rank DDR3 modules.
In each memory bank channel A and B of CPU 1 or channel D and E of CPU 2 have to be equipped with identical modules for mirrored channel mode. Channel C of CPU 1 and channel F of CPU 2 is not equipped
 In channel B is always the mirrored memory of channel A of CPU 1
 In channel E is always the mirrored memory of channel D of CPU 2

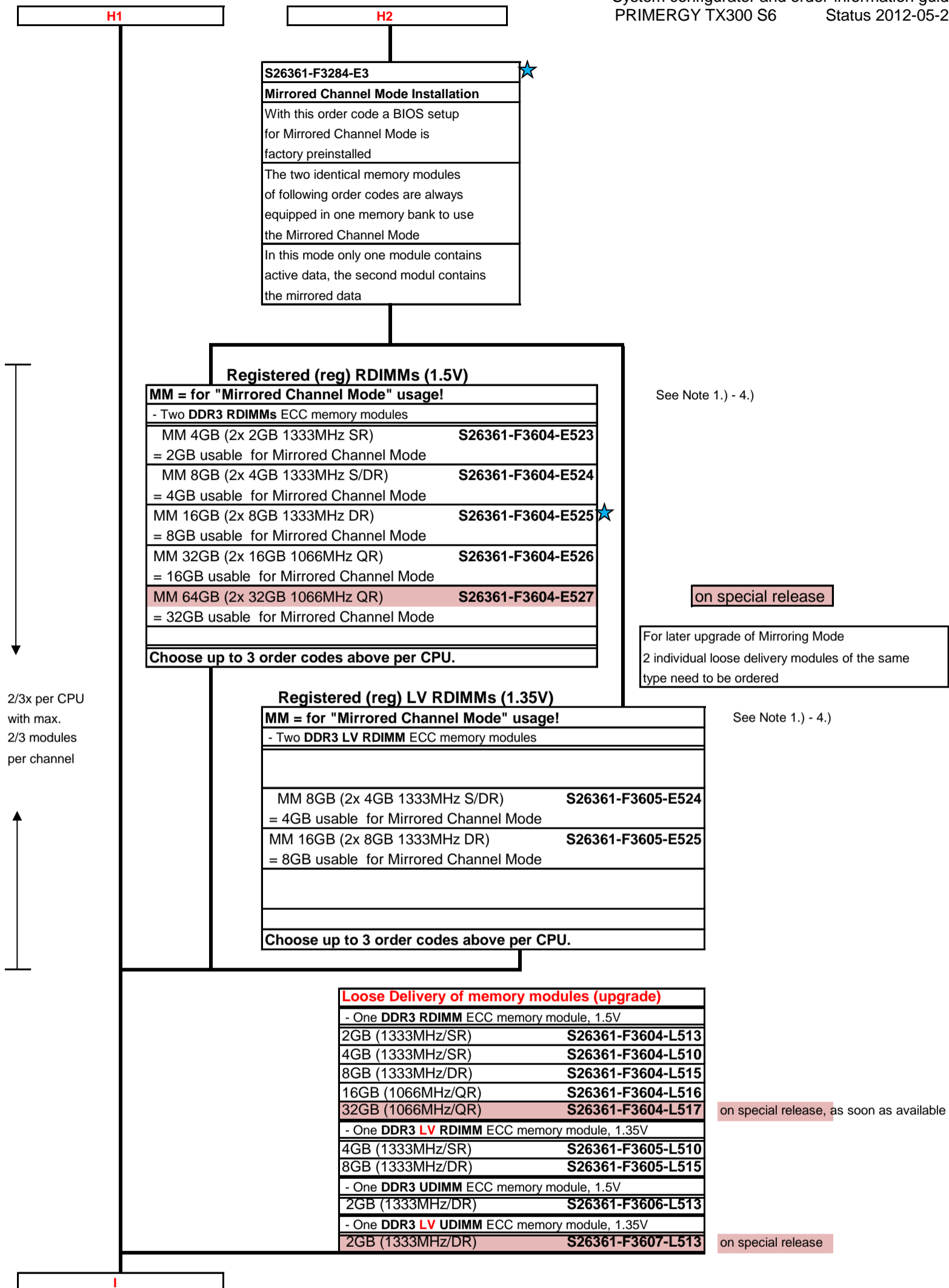
 No special order codes with UDIMMs are offered for this mode

- For each CPU minimum 1 memory module has to be configured in Independent Channel Mode
 (=> Additional memory extensions can still be configured up to eight times per CPU) or
one bank has to be equipped with two modules (channel A+B for CPU 1 or D+E for CPU 2) in Mirrored Channel Mode
 (=> Additional memory extensions can still be configured up to two times per CPU) or
one bank has to be equipped with three modules (channel A+B+C for CPU 1 or D+E+F for CPU 2) in Spare Channel Mode or Performance Mode
 (=> Additional memory extensions can still be configured up to two times per CPU)

F1







I

Section IV Graphics

Graphics Controller integrated in iRMC S2 (integrated Remote Management Controller):
 1600x1200x16bpp 60Hz, 1280x1024x16bpp 60Hz, 1024x768x32bpp 75Hz, 800x600x32bpp 85Hz, 640x480x32bpp 85Hz
 (1280x1024x24bpp 60Hz only possible if local monitor or remote video redirection is off)

S26361-F2571-E16 ★
 Optional Front-VGA
 consists of internal cable and front VGA connector
 max. 1x per system

S26361-F2748-E537
 PY VGA LP card 512MB PCI-e x1
 NVIDIA NVS300
 512 MB PCI-e-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 OS
 full high bracket
 max. 1x per system



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.
 This PCI-e-x1 card can also be installed in any PCI-e-x4, x8 or x16 slot.
 Only one card per server is allowed.

PY VGA card must be installed in slot 4



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

J

Memory Configuration PRIMERGY TX300 S6

Each CPU offers **9 Slots** for DDR3 Memory Modules organised in **3 Banks and 3 Channels**.

If you need more than 9 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 4 different kinds of DDR3 Memory Modules available: UDIMM / UDIMM LV and RDIMM / RDIMM LV

UDIMM and RDIMM offer different functionality. Mix of UDIMM + RDIMM is not allowed.

Mixing of Standard + Low Voltage DIMM's of the same type is allowed, but not recommended (therefore not configurable ex works)

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

Mixing of SR / DR and QR Memory Modules will limit the max. amount of modules per CPU to 6.

Mode	Configuration	UDIMM	RDIMM	Application
chip kill support	any	n.a.	yes	detect multi-bit errors
Independant Channel Mode	1, 2 or 3 Modules per Bank	x	x	offers max. flexibility, upgradeability, capacity use UDIMM modules for lowest cost
Mirrored Channel Mode	2 identical Modules / Bank	**)	x	offers maximum security
Performance Mode *)	3 identical Modules / Bank	**)	x	offers maximum performance and capacity
Spare Channel Mode *)	3 identical Modules / Bank	**)	x	balances security and capacity

*) = Performance Mode and Spare mode use different BIOS settings.

**) = technically possible but no Order Numbers available, use at your own risk

x = order codes available

Capacity	Configuration	UDIMM	RDIMM	RDIMM LV	Notes
Min. Memory per CPU	1 Module / CPU	1x2GB	1x2GB	1x 4GB	with one CPU
Max. Memory per CPU	6/9 Modules / CPU	6x2GB	6x16GB	6x 8GB	with one CPU
Max. Memory per System	12 Modules / System	24GB	192GB	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

One DIMM per channel = max. 1333MHz, two DIMMs per channel = max. 1333MHz, three DIMMs per channel = max. 800MHz,

The memory channel with the lowest speed defines the speed of all CPU channels in the system,

DIMM Type	DIMM Slots per Channel	DIMMs populated per Channel	Memory Speed max (CPU dependent)	Ranks per DIMM
RDIMM 1.5V 1333Mhz	2 / 3	1	800, 1066, 1333	SR / DR
	2 / 3	1	800, 1066	QR
	2 / 3	2	800, 1066, 1333	Mix of SR + DR
	2 / 3	2	800	Mix of QR + SR / DR
	3	3	800	Mix of SR + DR
RDIMM LV / 1.35V 1333Mhz	2 / 3	1	800, 1066, 1333	SR / DR
	2 / 3	1	800, 1066	QR*
	2 / 3	2	800, 1066	Mix of SR + DR
	2 / 3	2	800	Mix of QR* + SR / DR
	3	3	800	Mix of SR + DR **
UDIMM 1.5V 1333Mhz	2 / 3	1	800, 1066, 1333	SR / DR
	2 / 3	2	800, 1066, 1333	Mix of SR + DR
UDIMM LV / 1.35V 1333Mhz	2 / 3	1	800, 1066, 1333	SR / DR
	2 / 3	2	800, 1066	Mix of SR + DR

* no memory modules released for this configuration

** lost LV-mode, memory will switch to 1,5V Vcc automatically

Used CPU	Max. Memory-Bus speed depending on DIMMs / channel if following memory speed is used for specific CPU's														
	UDIMM 1333 MHz 1.5V			UDIMM 1333 MHz LV / 1.35V			RDIMM 1333 MHz 1.5V			RDIMM 1333 MHz LV / 1.35V			RDIMM 1066 MHz (QR) 1.5V		
Populated Dimms / Channel	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Dual-Core CPU with max. 800MHz DDR3 speed (4.8GT/s)															
Xeon E5503 2C/2.00GHz/2M/4,80GT/s (80W)	800	800	-	800	800	-	800	800	800	800	800	-	800	800	-
Quad-Core CPU's with max. 800MHz DDR3 speed (4.8GT/s)															
Xeon E5506 4C/2.13GHz/4M/4,8GT/s (80W)	800	800	-	800	800	-	800	800	800	800	800	-	800	800	-
Xeon E5507 4C/2.26GHz/4M/4,8GT/s (80W)	800	800	-	800	800	-	800	800	800	800	800	-	800	800	-
Turbo Quad-Core CPU's with max. 1066MHz DDR3 speed (5.86GT/s)															
Xeon E5620 4C/2.40GHz/12M/5,86GT/s (80W)	1066	1066	-	1066	1066	-	1066	1066	800	1066	1066	-	1066	800	-
Xeon E5630 4C/2.53GHz/12M/5,86GT/s (80W)	1066	1066	-	1066	1066	-	1066	1066	800	1066	1066	-	1066	800	-
Xeon E5640 4C/2.66GHz/12M/5,86GT/s (80W)	1066	1066	-	1066	1066	-	1066	1066	800	1066	1066	-	1066	800	-
Turbo Six-Core CPU's with max. 1333MHz DDR3 speed (6.4GT/s)															
Xeon X5650 6C/2.66GHz/12M/6,40GT/s (95W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Xeon X5660 6C/2.80GHz/12M/6,40GT/s (95W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Xeon X5670 6C/2.93GHz/12M/6,40GT/s (95W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Xeon X5680 6C/3.33GHz/12M/6,40GT/s (130W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Frequency Optimized Turbo Quad-Core CPU's with max. 1333MHz DDR3 speed (6.4GT/s)															
Xeon X5667 4C/3.06GHz/12M/6,40GT/s (95W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Xeon X5677 4C/3.46GHz/12M/6,40GT/s (130W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-
Low Voltage Quad-Core CPU with max. 1066MHz DDR3 speed (4.8GT/s)															
Xeon L5609 4C/1.86GHz/12M/4,80GT/s (40W)	1066	1066	-	1066	1066	-	1066	1066	800	1066	1066	-	1066	1066	-
Low Voltage Turbo Quad-Core CPU with max. 1066MHz DDR3 speed (5.86GT/s)															
Xeon L5630 4C/2.13GHz/12M/5,86GT/s (40W)	1066	1066	-	1066	1066	-	1066	1066	800	1066	1066	-	1066	800	-
Xeon L5640 6C/2.40GHz/12M/5,86GT/s (60W)	1333	1333	-	1333	1066	-	1333	1333	800	1333	1066	-	1066	800	-

SR - Single Rank - 1Rx4
 DR - Dual Rank - 2Rx4
 QR - Quad Rank - 4Rx4

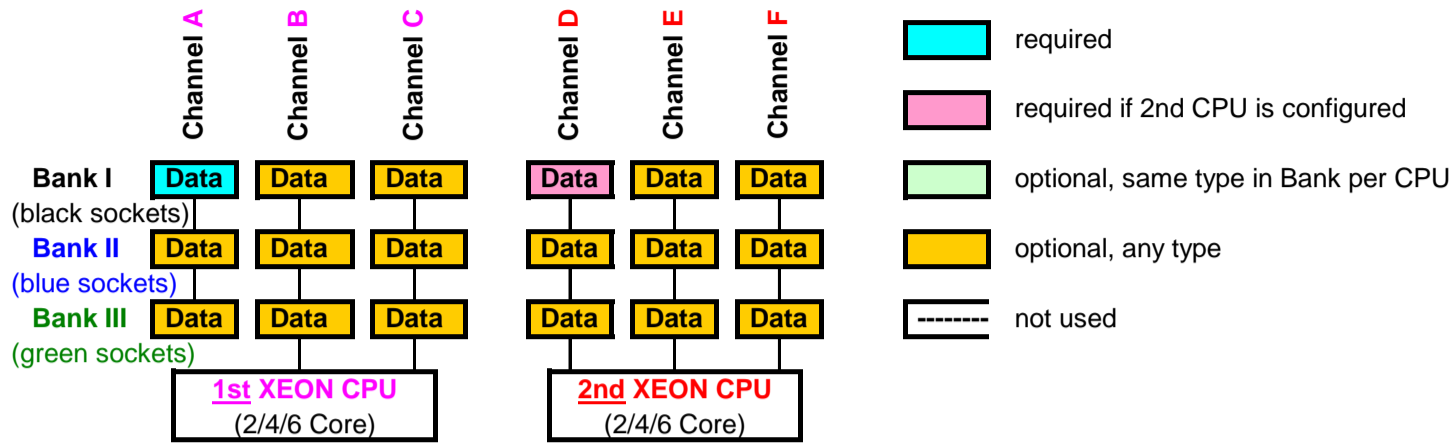
1DPC = 1 DIMM per Channel
 2DPC = 2 DIMM per Channel
 3DPC = 3 DIMM per Channel

1333
1066
800
not supported
special release

Configuration hints:

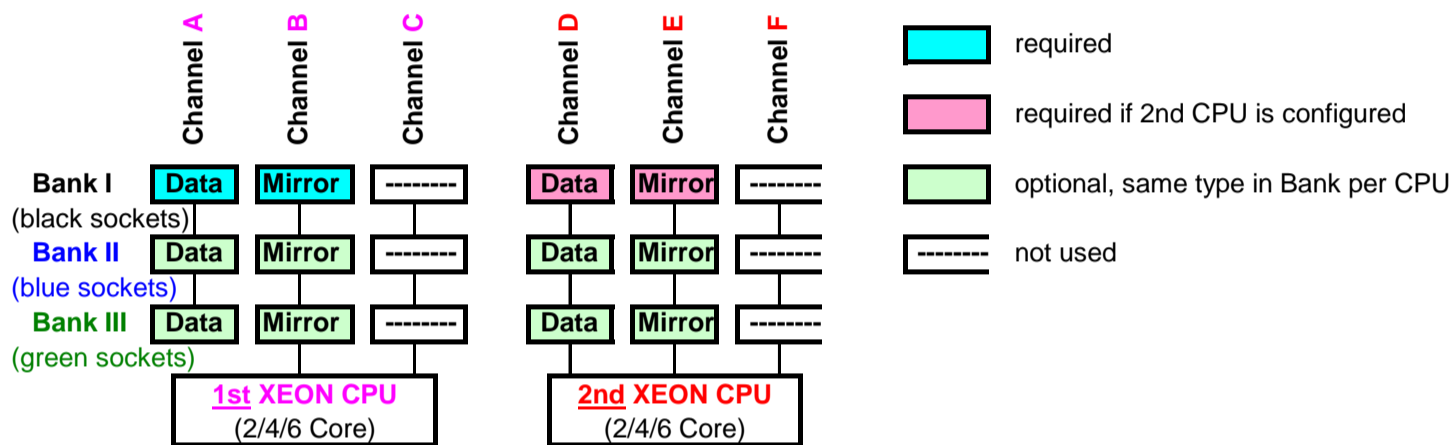
- The memory sockets on the systemboard offer a color coding:
 - Bank I** black sockets
 - Bank II** blue sockets
 - Bank III** green sockets
- A so called Bank consists of 1 memory module on every Channel available on one CPU (examples see below)
 - Bank I on CPU 1** up to 3 memory modules connected to Channel A, B and C on the first CPU
 - Bank II on CPU 1** up to 3 memory modules connected to Channel A, B and C on the first CPU
 - Bank III on CPU 1** up to 3 memory modules connected to Channel A, B and C on the first CPU
 - Bank I on CPU 2** up to 3 memory modules connected to Channel D, E and F on the second CPU
 - Bank II on CPU 2** up to 3 memory modules connected to Channel D, E and F on the second CPU
 - Bank III on CPU 2** up to 3 memory modules connected to Channel D, E and F on the second CPU
- See below and next page for a detailed descriptions of the memory configuration supported.

1. Independent Channel Mode



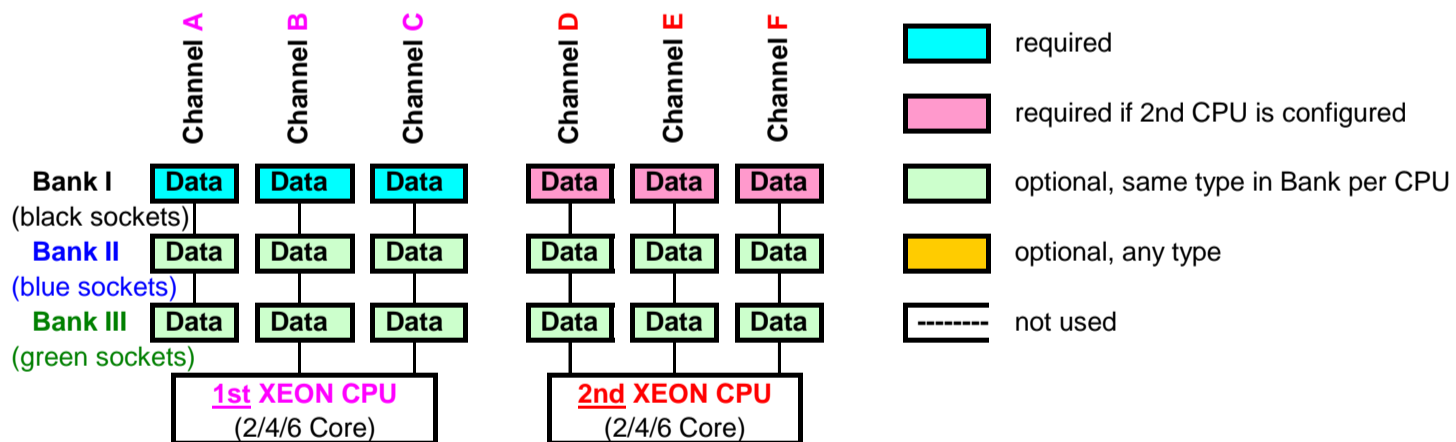
Independent Channel Mode allows all channels to be populated in any order
 Can run with differently rated DIMMs and use the settings of the slowest DIMM installed in the system

2. Mirrored Channel Mode



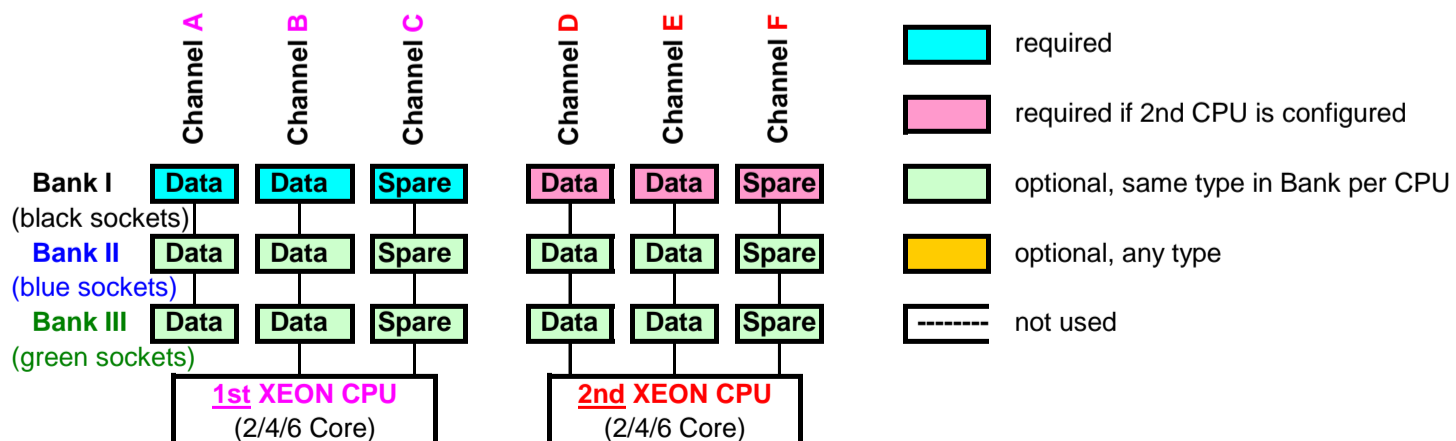
Mirrored Channel Mode requires identical modules on channel A and B (1st CPU) or channel D and E (2nd CPU)
 50% of the capacity is used for the mirror => the available memory for applications is only half of the installed memory
 Channel C (1st CPU) or channel F (2nd CPU) are not usable in Mirrored Channel Mode

3. Performance Channel Mode



Performance Channel Mode requires identical modules on all channels of each Bank per CPU

4. Spare Channel Mode



Spare Channel Mode requires identical modules (same capacity and technology) on all channels of each Bank per CPU
 one third of the capacity is used for the spare => the available memory for applications is two thirds of the installed memory

J

Section V Accessible drives and 3.5" SAS / SATA HDD extension box

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

i
 see Conf. diagram
 Option B

N1

Configuration of Option B

O

i
 see Conf. diagram
 Option C

S26361-F2826-E103 ★
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 **LSD/LSP** option
 - 1x 0.5 * 5.25" **SATA DVD**
 - 2x 1 * 3.5" **SAS HD's only**
 One 0.5 * 3.5" satin black bezel for LSD/LSP 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-E204 ★
Mounting Kit DVD(sl) + LSP/LSD
 Occupies **one 5.25" x 1.6" bay** in the accessible bay area
 Offers bays for:
 - 1x **LSD/LSP** option
 - 1x 0.5 * 5.25" **SATA DVD**
 max. 1x per system

i
 see Conf. diagram
 Option A

S26361-F2557-E202 ★
 Local Service Panel incl. ad.
 Customer Self Service
 LSP module incl. adapter
 0.5" x 5.25"
 max. 1x per System

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

S26361-F2557-E205 ★
 Local Service Panel incl. mount. kit
 Customer Self Service
 LSP module incl. mounting kit
 0.5" x 5.25"
 max. 1x per system

S26361-F2557-E106 ★
 Local Service Display incl. mount. kit
 Customer Self Service
 LSD module incl. mounting kit
 0.5" x 5.25"
 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-F3531-E2 ★
 Blu-ray Combo slim SATA
 6x BD-ROM, 16x DVD, 40x CD
 BD DL and all CD/DVD formats
 0.5 x 5.25", satin black bezel
 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", satin black bezel
 max. 1x per system

S26361-F3266-E2 ★
 DVD-ROM HH SATA
 16x DVD 48x CD
 1,6 x 5,25", Front schwarz
 max. 1x pro System

S26361-F3267-E2 ★
 DVD-RW supermulti HH SATA
 alle Formate, DUAL/DL, DVD-RAM
 nur W2K, W3K und Linux
 1,6 x 5,25", Front schwarz
 max. 1x pro System

S26361-F3530-E2 ★
 Blu-ray Combo HH SATA
 6x BD-ROM, 16x DVD, 40x CD
 BD DL und alle CD/DVD Formate
 1,6 x 5,25", Front schwarz
 max. 1x pro System

S26361-F3585-E2 ★
 Blu-ray Triple Writer HH SATA
 4x BD-RW, 16x DVD, 40x CD
 BD DL und alle CD/DVD Formate
 1,6 x 5,25", Front schwarz
 max. 1x pro System

K

K

↓ 2x ↑	<table border="1"> <tr> <td>S26361-F3324-E4 ★</td> </tr> <tr> <td>Tape drive DDS Gen5 USB 5.25"</td> </tr> <tr> <td>36GB, 3MB/s, USB 2.0</td> </tr> <tr> <td>Connector: USB "B"</td> </tr> <tr> <td>with USB cable</td> </tr> <tr> <td>incl. description (Ger/US)</td> </tr> <tr> <td>incl. cleaning cartridge</td> </tr> <tr> <td>1.6 * 5.25", black bezel</td> </tr> <tr> <td>max. 2x per system</td> </tr> </table>	S26361-F3324-E4 ★	Tape drive DDS Gen5 USB 5.25"	36GB, 3MB/s, USB 2.0	Connector: USB "B"	with USB cable	incl. description (Ger/US)	incl. cleaning cartridge	1.6 * 5.25", black bezel	max. 2x per system	<table border="1"> <tr> <td>S26361-F3325-E4 ★</td> </tr> <tr> <td>Tape drive DDS Gen6 USB 5.25"</td> </tr> <tr> <td>80GB, 6MB/s, USB 2.0</td> </tr> <tr> <td>Connector: USB "B"</td> </tr> <tr> <td>with USB cable</td> </tr> <tr> <td>incl. description (Ger/US)</td> </tr> <tr> <td>incl. cleaning cartridge</td> </tr> <tr> <td>1.6 * 5.25", black bezel</td> </tr> <tr> <td>max. 2x per system</td> </tr> </table>	S26361-F3325-E4 ★	Tape drive DDS Gen6 USB 5.25"	80GB, 6MB/s, USB 2.0	Connector: USB "B"	with USB cable	incl. description (Ger/US)	incl. cleaning cartridge	1.6 * 5.25", black bezel	max. 2x per system	<table border="1"> <tr> <td>S26361-F3857-E4</td> </tr> <tr> <td>RDX drive USB 5.25" internal</td> </tr> <tr> <td>80-320GB, 25MB/s, USB 2.0</td> </tr> <tr> <td>Connector: USB "B"</td> </tr> <tr> <td>with USB cable</td> </tr> <tr> <td>incl. description (Ger/US)</td> </tr> <tr> <td>without RDX cartridges</td> </tr> <tr> <td>1.6 * 5.25", black bezel</td> </tr> <tr> <td>max. 2x per system</td> </tr> </table>	S26361-F3857-E4	RDX drive USB 5.25" internal	80-320GB, 25MB/s, USB 2.0	Connector: USB "B"	with USB cable	incl. description (Ger/US)	without RDX cartridges	1.6 * 5.25", black bezel	max. 2x per system
S26361-F3324-E4 ★																														
Tape drive DDS Gen5 USB 5.25"																														
36GB, 3MB/s, USB 2.0																														
Connector: USB "B"																														
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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. description (Ger/US)																														
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RDX drive USB 5.25" internal																														
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Connector: USB "B"																														
with USB cable																														
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1.6 * 5.25", black bezel																														
max. 2x per system																														

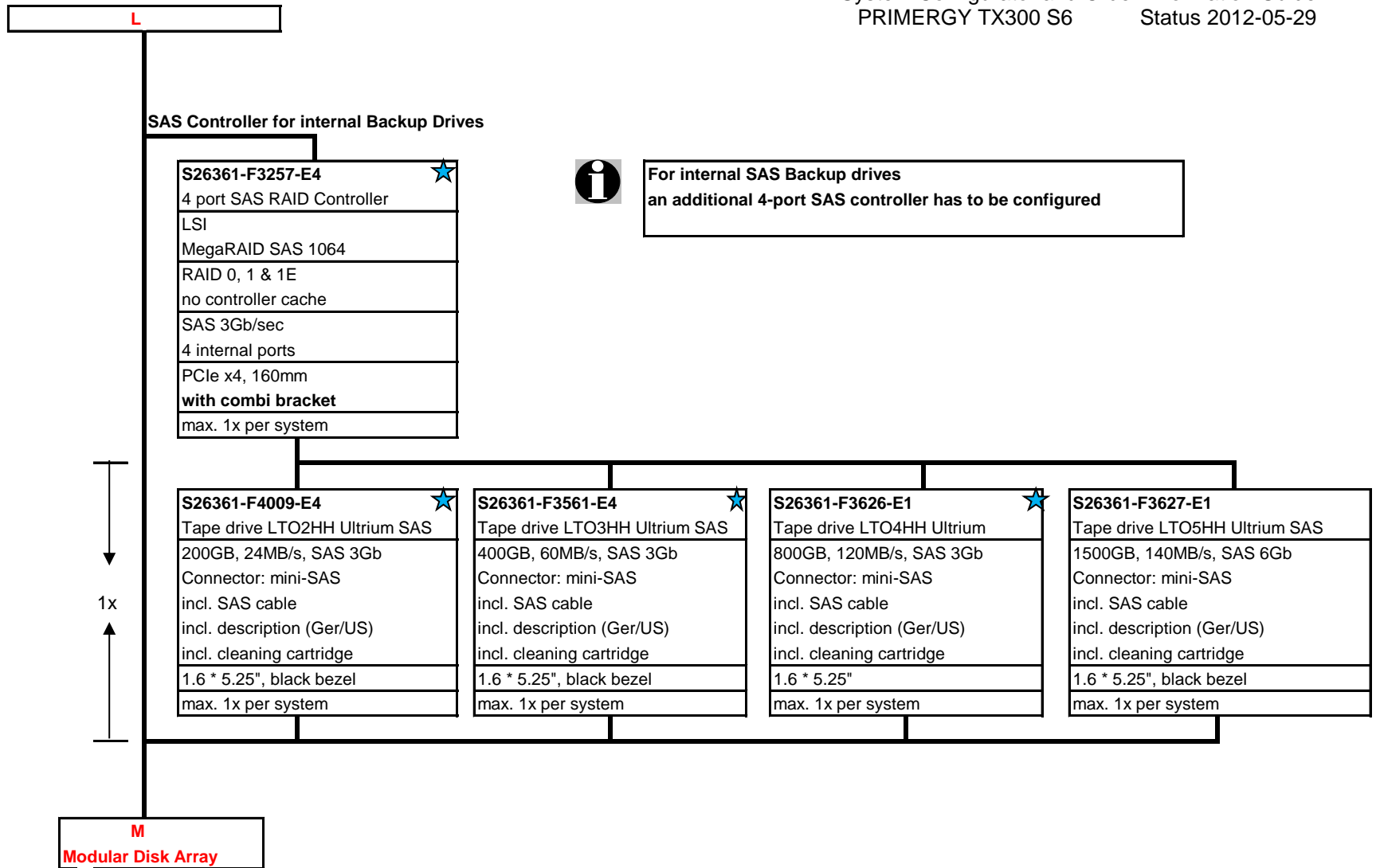
i RDX cartridges must be ordered separately
 RDX 160GB = S26361-F3857-L160
 RDX 320GB = S26361-F3857-L320
 RDX 500GB = S26361-F3857-L500
 RDX 1TB = S26361-F3857-L600 *
 10x RDX160 = S26361-F3857-L169
 10x RDX320 = S26361-F3857-L329
 * as soon as available

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

Following USB Components are available	
1) USB DVD SM / Blu-Ray	
External SuperMulti Drive (as soon as released)	S26341-F103-L119
External Blu-Ray Drive (as soon as released)	S26341-F103-L120
2) USB Memorybird:	
MyUSBS A910 8GB, MLC Flash	S26391-F6048-L208
MyUSBS A910 16GB, MLC Flash	S26391-F6048-L216

For Keyboard and Mouse options please see section micel.

L



M

Section M-VI Modular Raid 0/1 and Raid5 Controller for 2.5" & 3.5" Hard Disks

For internal 3.5" hard disks one of the following modular RAID-controllers is required

1x

<p>S26361-F3554-E8 ★</p> <p>RAID Ctrl SAS 6G 8port internal</p> <p>Based on chip LSISAS2008</p> <p>LSI MegaRAID</p> <p>no Cache, no BBU</p> <p>RAID 0, 1 & 1E</p> <p>Support for 3Gb/s and 6Gb/s</p> <p>SATA and SAS hard drives</p> <p>PCIe x8</p> <p>Low-profile MD2 form factor</p> <p>max. 1x per system</p>

Modular Raid 0/1 controller with IME support for SAS/SATA-HDs
 This RAID controller supports 6 HDDs on the 6 internal SAS ports or 8 HD's with F-D-L-HDD-Box 3 if configured.

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

Modular Raid 5 controller for SAS/SATA-HDs
RAID levels 0, 1, 10, 5, 50, 6 and 60 are supported
 These RAID controllers supports 6 HDDs on the 6 internal SAS ports or 8 HD's with F-D-L-HDD-Box 3 if configured.
 Tapes and optical devices (e.g. DVD) are not supported.
 Also there is no support of any external storage by this RAID solution.
 Additionally two internal 3,5" SAS or SATA HD's in the F-D-L-HDD-Box 3 are supported by usage of the remaining 2 SAS ports.

<p>S26361-F3257-E170 ★</p> <p>Cache Battery Backup Unit</p> <p>with 70cm cable set</p> <p>max. 1x per Controller</p>

BBU max. 3x per system possible
 for loose delivery please order
S26361-F3257-L110

<p>S26361-F2826-E135 ★</p> <p>Conversion Option to 2.5" HD Basic Unit</p> <p>Drive Bay with one backplane for up to 12x 2.5" HD slots</p> <p>max. 1x per system</p>
--

M1
 3.5" HDD's

M2
 2.5" HDD Extension

M1

Section M-VII 3.5" SAS / SATA Hard disk drives

i In a basic unit with a 6x 3.5" HD backplane, the remaining 2 SAS ports of the 8-port modular SAS RAID-controllers can be used for additional two SAS or SATA HD's through the configuration of the 3.5" HD SAS / SATA extension F-D-L-HDD-Box 3 which offers extra two bays for SAS or SATA HD's

i Up to 6 or 8 (with F-D-L-HDD-Box 3) 3.5" SAS or SATA hard disks can be configured.
3.5" SAS drives and 3.5" BC SATA drives can be mixed, but not used in one logical RAID volume

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. 6x (or 8x) per system

S26361-F3700-E500
 HD 500GB 7.2krpm 3.5"
 7200rpm,<9.0 ms, 16MB Cache
ECO SATA 6Gb/s
 hot plug/hot replace tray
max. 6x (or 8x) per system

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. 6x (or 8x) per system	

S26361-F3291-E514
 HD 146GB 15krpm 3.5"
 15.000rpm,<4ms, 8MB Cache
SAS 3Gb/s
 hot plug/hot replace tray
max. 6x (or 8x) per system

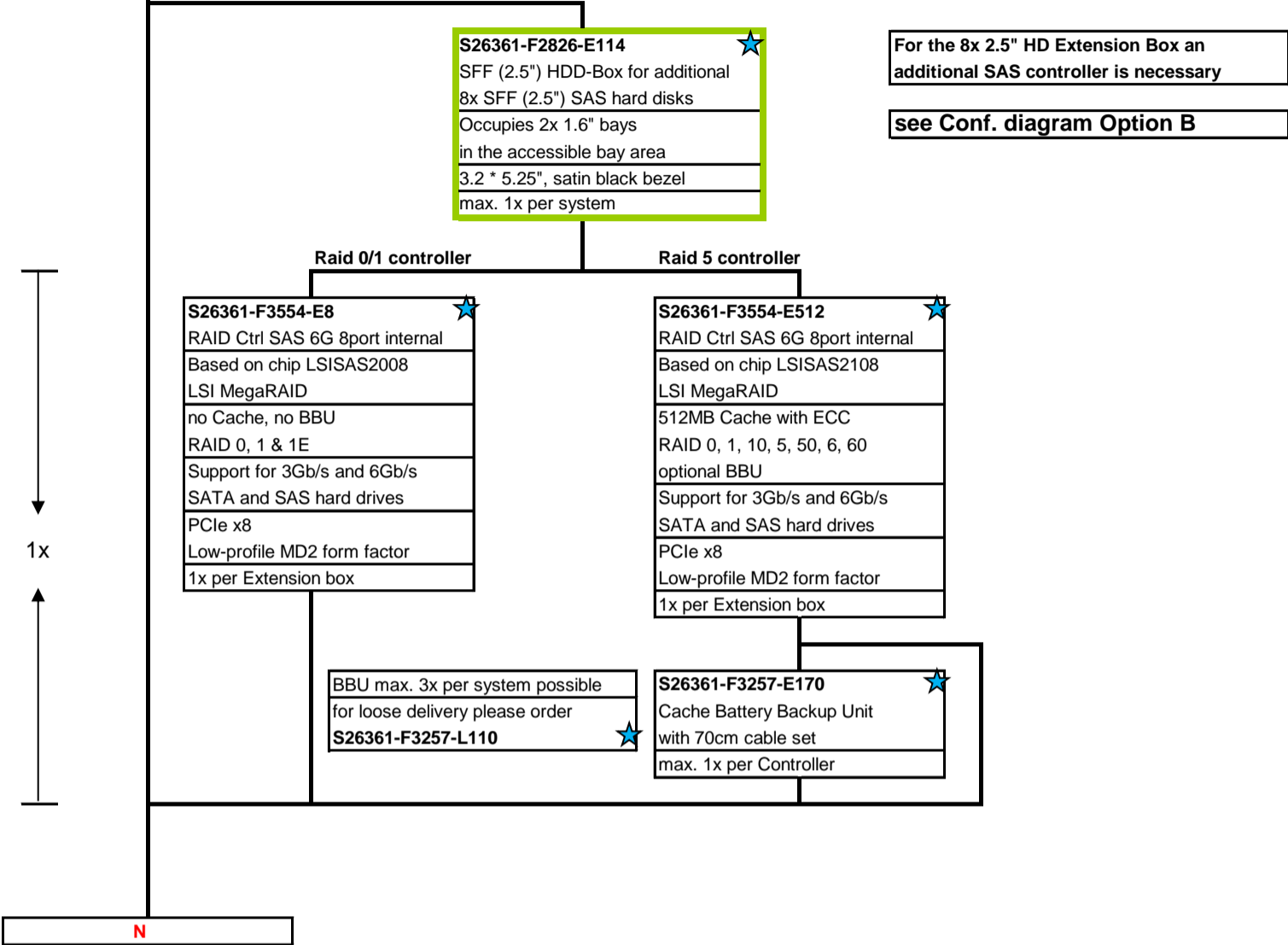
Business Critical (BC) SATA 3Gb/s HD 3.5" with hot plug/hot replace tray	
500GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E500 ★
1000GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E100 ★
2000GB 7.200rpm,<9,0ms, 8MB Cache	S26361-F3294-E200 ★
max. 6x (or 8x) per system	

6x or 8x with SAS/SATA F-D-L-HDD-Box 3

M2
2.5" HDD Extension

M2

Section N-VI Upgrade-Kit to 2.5" HD Basic Unit



N

Section N-VIII 2.5" SAS / SATA Hard disk drives

Up to 12x 2.5" SAS/SATA hard disks can be configured.
 Additional 8x 2.5" HD's with 2.5" HD Extension Box
Mixed configurations with ECO SATA drives and SAS drives are not allowed

SSD SATA 2.5"

S26361-F3298-E32
SSD 32GB
SATA 3Gb/s
hot plug/hot replace tray
max. 8x per system

S26361-F3298-E64
SSD 64GB
SATA 3Gb/s
hot plug/hot replace tray
max. 8x per system

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. 12x (or 20x) 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. 12x (or 20x) per system	

i Mix of ECO SATA with SAS HDDs is not possible !

12x Base Unit
or
8x Extension Box

M

SSD SAS 2.5"

as soon as available

S26361-F4541-E100
SSD SAS 100GB, SLC
Solid State Disk
SAS 6Gb/s
Enterprise Performance
hot plug/hot replace tray
max. 12x (or 20x) per system

S26361-F4541-E200
SSD SAS 200GB, SLC
Solid State Disk
SAS 6Gb/s
Enterprise Performance
hot plug/hot replace tray
max. 12x (or 20x) per system

S26361-F4541-E400
SSD SAS 400GB, SLC
Solid State Disk
SAS 6Gb/s
Enterprise Performance
hot plug/hot replace tray
max. 12x (or 20x) per system

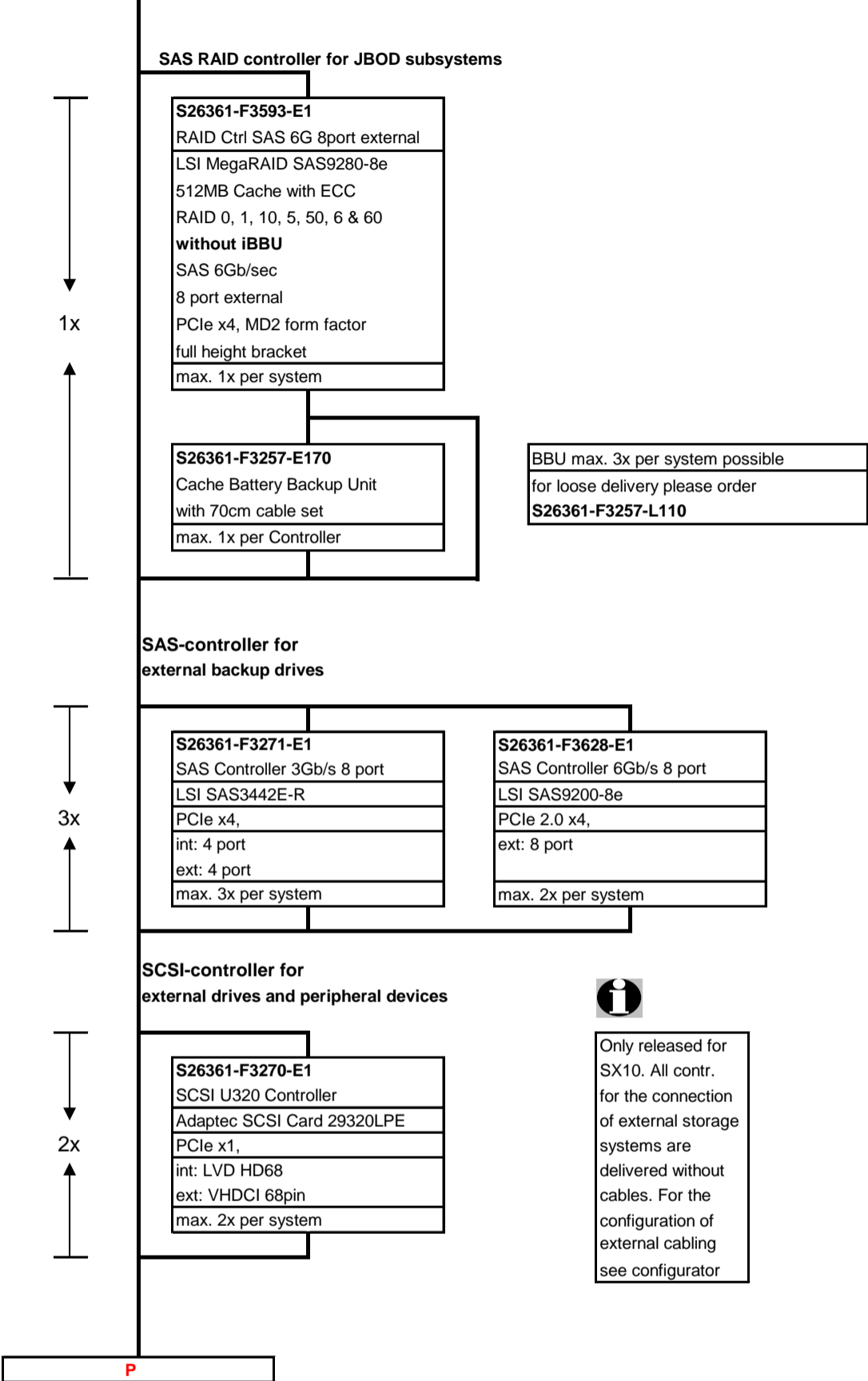
SAS 6Gb/s 2.5" with hot plug/hot replace tray	
300GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E130 ★
450GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E145 ★
600GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E160 ★
900GB 10000rpm,<4,5ms, 8MB Cache	S26361-F4482-E190 ★
73GB 15krpm,<4,5ms, 8MB Cache	S26361-F4482-E573 ★
146GB 15krpm,<4,5ms, 8MB Cache	S26361-F4482-E514 ★
max. 12x (or 20x) per system	

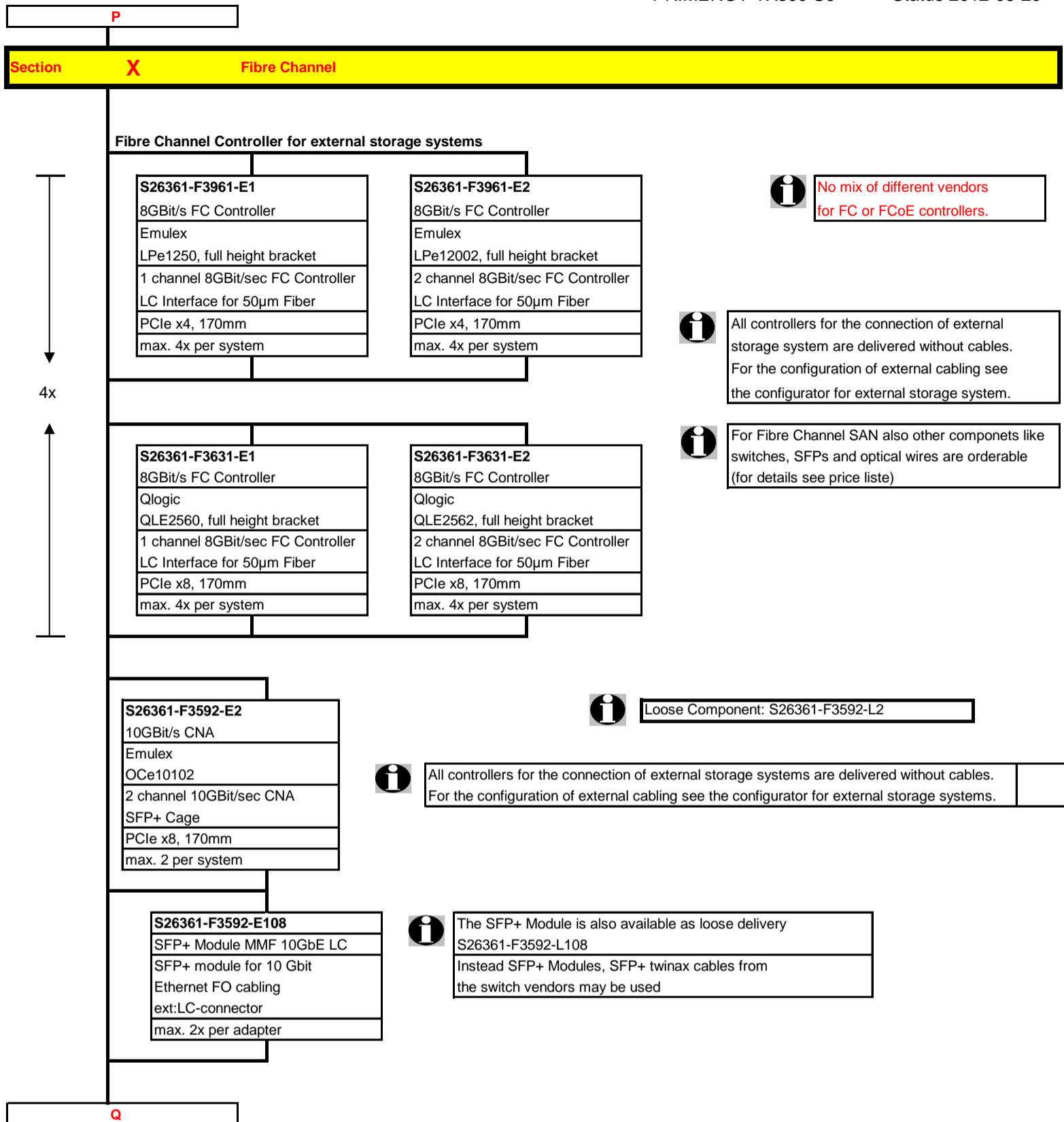
i configuration of SAS-HDDs requires SAS RAID controller

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Section IX External SAS Disk Array, SAS backup drives or SCSI peripheral devices





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Section XI Communication / Network

Dual Port GBit on-board LAN Controller

Gigabit Ethernet Controller on-board
 Dual Port GBit LAN controller
 Intel 82575EB (Zoar) *
 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.

* Supporting iSCSI boot (also diskless) by system BIOS and native iSCSI initiators

* 2 PCIe-2 slots wired x8 and 5 PCIe-2 slots wired x4:
 Slot 7 and 6 are wired x8
 Slot 5 is wired x8 if slot 4 is not populated
 Slot 3 is wired x8 if slot 2 is not populated
 Slot 1 is wired x4 populated by modular RAID



A PCIe-2 x4 card can also be plugged in a PCIe-2 x8 slot
 A PCIe-2 x8 card can also be plugged in a PCIe-2 x4 slot (mechanical x8)
 A PCIe-2 x16 card can be plugged in a notched PCIe-2 x8 slot

A) 1-Port Copper PCI-Express Adapter 1000TX

S26361-F3516-E1 (Shelter Island)
 Gigabit Ethernet Controller 1000TX LP
 Eth Ctrl 1x1Gbit PCI-e Gigabit CT DT Cu LP
 Intel® Gigabit CT Desktop Adapter
 PCIe x1
 ext: for RJ45-connector, Cat 5
 max. 4x per system

S26361-F3241-E1 (Glyndon)
 Gigabit Ethernet Contr. 1000TX
 Eth Ctrl 1x1Gbit PCI-e Pro/1000PT Cu
 Intel PRO/1000 PT Server Adaptor
 PCIe x1
 ext: for RJ45-connector, Cat 5
 max. 4x per system

B) 1-Port MMF PCI-Express Adapter 1000SX

S26361-F3242-E1 (Sheepshead Bay)
 Gigabit Ethernet Contr. 1000SX
 Eth Ctrl 1x1Gbit PCI-e Pro/1000PF LC
 Intel PRO/1000 PF Server Adapter
 PCIe x4
 ext: LC-connector
 max. 4x per system

4x

C) 2-Port Copper PCIe Adapter 1000TX

S26361-F3610-E2
 Gigabit Ethernet Controller Dual 1000TX
 Eth Ctrl 2x1Gbit PCIe x4 D2735 Cu
 Intel Kawela based 2 port Server Adapter
 PCIe x4,
 ext: for RJ45-plug, Cat 5
 max. 4x per system



Loose delivery with:
 S26361-F3610-L502

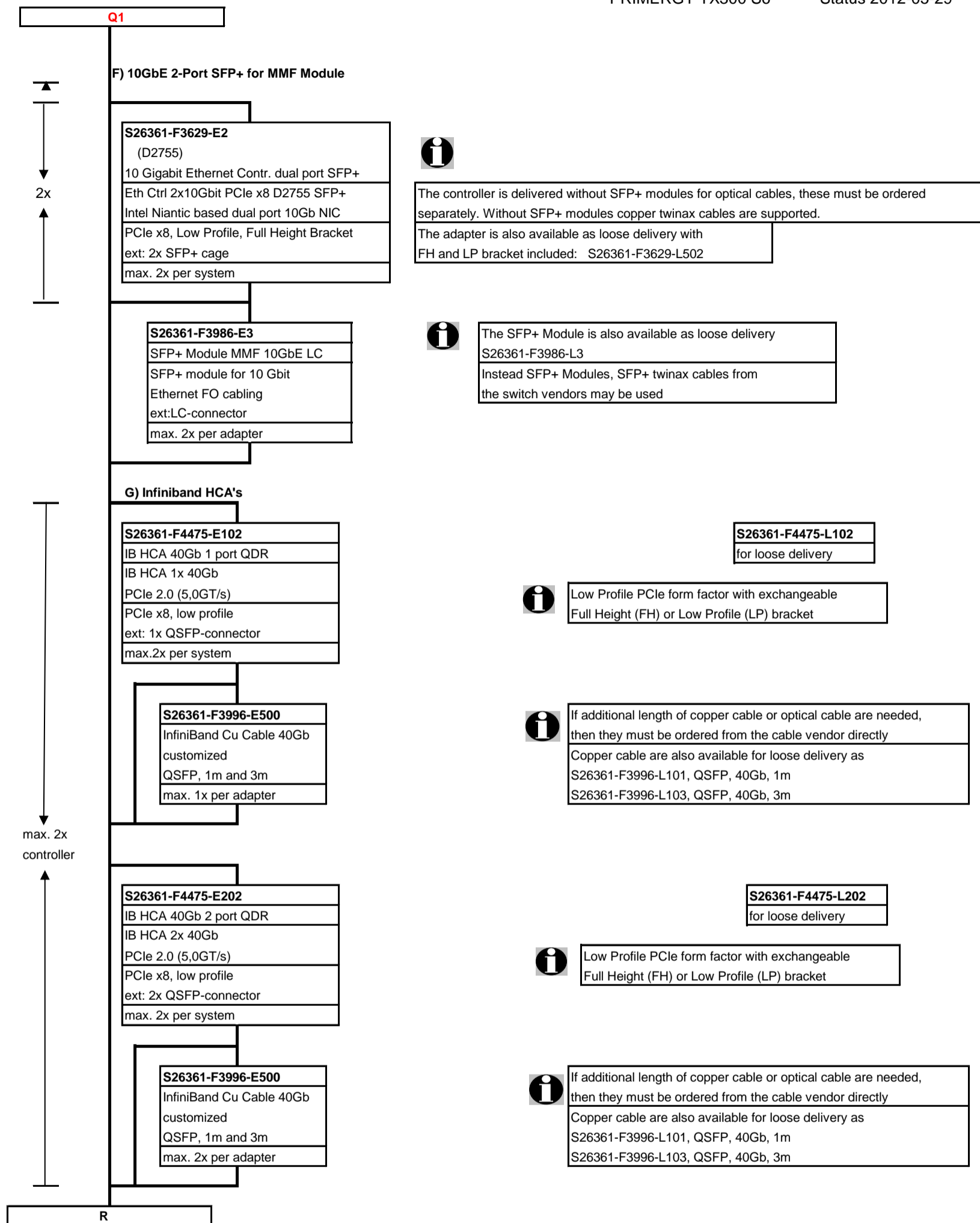
D) 4-Port Copper PCIe Adapter 1000TX

S26361-F3611-E1
 Gigabit Ethernet Controller Quad 1000TX
 Eth Ctrl 4x1Gbit PCIe x4 D2745 Cu
 Intel Barton Hills based 4 Port Server Ad.
 PCIe x4,
 ext: for RJ45-plug, Cat 5
 max. 4x per system



Loose delivery with:
 S26361-F3611-L501

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Section XII Energy Star

S26361-F3301-E301
 TX300 S6 E-Star Fam1
 Limits configuration in accordance
 with Energy Star requirements
 max. 1x per system

The following order components out of the specific sections
 are allowed together with TX300 S6 E-Star Fam1: 


Turbo Quad-Core CPU's
 - 1x 64-bit Intel Xeon (12MB shared TLC = Third Level Cache); Hyper-Threading (HT);
 1066 MHz DDR3 Bus, 5,86 GT/s QPI Bus and passive heat sink
 occupies socket for one CPU

Xeon E5620 4C/2.40GHz/12M/5,86GT/s (80W)	S26361-F3618-E240
Xeon E5630 4C/2.53GHz/12M/5,86GT/s (80W)	S26361-F3618-E253
Xeon E5640 4C/2.66GHz/12M/5,86GT/s (80W)	S26361-F3618-E266

Always 2x per system (only one CPU is out of Energy Star specification) 

Registered (reg) RDIMMs (1.5V)

8GB (1333MHz/DR)	S26361-F3604-E515
max. 18x per system	
SP 24GB (3x 8GB 1333MHz DR)	S26361-F3604-E535
max. 6x per system	
MM 16GB (2x 8GB 1333MHz DR)	S26361-F3604-E525
max. 6x per system	




DVD Drives

Blu-ray Combo slim SATA	S26361-F3531-E2
DVD-RW supermulti slim SATA	S26361-F3269-E2
DVD-ROM HH SATA	S26361-F3266-E2
DVD-RW supermulti HH SATA	S26361-F3267-E2
Blu-ray Combo HH SATA	S26361-F3530-E2
Blu-ray Triple Writer HH SATA	S26361-F3585-E2

max. 1x per system 


Tape Drives

Tape drive DDS Gen5 USB 5.25"	S26361-F3324-E4
Tape drive DDS Gen6 USB 5.25"	S26361-F3325-E4
Tape drive LTO2HH Ultrium SAS	S26361-F4009-E4
Tape drive LTO3HH Ultrium SAS	S26361-F3561-E4
Tape drive LTO4HH Ultrium SAS	S26361-F3626-E1
Tape drive LTO5HH Ultrium SAS	S26361-F3627-E1

max. 1x per system 

Hard Disk Drives 2.5" SAS

HD 300GB 10krpm 2.5"	S26361-F4482-E130
HD 73GB 15krpm 2.5"	S26361-F4482-E573
HD 146GB 15krpm 2.5"	S26361-F4482-E514

max. 20x per system 

Hard Disk Drives 3.5" SATA

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. 8x per system 


4Gbit/s Fibre Channel Controller

Emulex LPe11002	S26361-F3306-E2
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max. 2x per system 

Gigabit Ethernet Controller

Gigabit Ethernet Controller Quad 1000TX	S26361-F3462-E1
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max. 2x per system 

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Section XIII System Management Products (RemoteView)

S26361-F1790-E241 ★
iRMC S2 advanced pack
integrated remote management controller
activation key for
graphical console redirection
and remote media redirection
max. 1x per system

iRMC S2 (integrated Remote Management Controller) onboard server management controller with dedicated 10/100 Service LAN-port and integrated graphics controller. The Service LAN-port can be switched alternatively on standard Gbit LAN port

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Section XIV Country specific power cord

S26361-F3301-E120
 CCC Certification for China



Since the beginning of this year the specifications for the approval and production monitoring for China (CCC) have become stricter. This is why the CCC certification label must in future be ordered separately



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

PRIMERGY TX300 S6 Floorstand

PRIMERGY TX300 S6 Rack

Power cord for floorstand versions for following countries:

1.8m, grey

- T26139-Y1740-E10 D, A, B, F, NL, FIN, N, S, E, P, RUS, TR
- T26139-Y1742-E10 USA, Canada
- 2x 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



Country specific power cords are not required for rack versions, except for USA & Canada. 2 power cords are shipped in a rack version with inlet connector for non-heating apparatus.



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

option for floorstand

USB keyboards for floorstand versions for following countries:

USB standard Keyboard KB400	USB standard Keyboard KB500		USB professional Keyboard KBPC PX	USB professional Keyboard KBPC PX ECO
S26381-K550-E170	S26381-K500-E170	Switzerland	S26381-K340-E170	S26381-K341-E170
S26381-K550-E104	S26381-K500-E104	Czech/Slovak	S26381-K340-E104	S26381-K341-E104
S26381-K550-E120	S26381-K500-E120	Germany	S26381-K340-E120	S26381-K341-E120
		Germany / Int		S26381-K341-E122
S26381-K550-E180	S26381-K500-E180	Spain	S26381-K340-E180	S26381-K341-E180
S26381-K550-E140	S26381-K500-E140	France	S26381-K340-E140	S26381-K341-E140
S26381-K550-E165	S26381-K500-E165	United Kingdom	S26381-K340-E165	S26381-K341-E165
S26381-K550-E185	S26381-K500-E185	Italy	S26381-K340-E185	S26381-K341-E185
S26381-K550-E154	S26381-K500-E155	Sweden / Finland	S26381-K340-E155	S26381-K341-E154
S26381-K550-E102	S26381-K500-E110	USA / international	S26381-K340-E110	S26381-K341-E110

option for floorstand

Optional Mouse

- S26381-K431-E100 Mouse M480 black
- S26381-K431-E101 Mouse M480 grey

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 US, CDN
- T26139-Y1744-L10 UK, IR
- T26139-Y1745-L10 Italy
- T26139-Y1746-L10 Denmark



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



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.

End PRIMERGY TX300 S6

Change Report

Date	Order number	Changes
2012-02-28	S26361-F3301-E120	add CCC Certification
2012-01-30	S26361-F3641-E2	new Blue-ray Triple Writer added
2012-01-25	S26361-F3700-E500	500GB 3.5" ECO-SATA 6G added by Ö. Karakas
2011-12-21	S26361-F4482-E114	SAS HD 6G 144GB - no longer available
2011-11-25	S26361-F4492-E516	New 16GB 2R 1333 memory module on status 35
2011-10-30	S26361-F4541-Ex00	new SAS SSD with 100, 200, 400 GB added - as soon as 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
2011-07-29	S26361-F4482-E190	new 6Gb SAS-HD 900GB - as soon as available
2011-06-09	S26361-F3604-E517	32GB QR Module added on special release
2011-05-03	S26361-F3610-E2/L502	Formal change from E1 / L501
2011-04-07	S26361-F2735-L202	Adapter angle ...L31 must be ordered for asym. PC/DC racks additionally
2011-03-31	S26361-F3629-E2	10 Gigabit Ethernet controller added
2011-02-21		Corrected notched slots in configuration diagram
2011-01-19		Data Cartridges removed from DDS & LTO drive description
2011-01-10	S26361-F3648-E160	Westmere-EP Refresh CPUs added
2010-12-16	S26361-F3228-L1	Intel Dual & Quad Port Ethernet Adapter removed
2010-12-30	S26361-F3585-E2	Blu-ray Triple Writer HH SATA - now available
2010-11-18	S26361-F3628-E1	Ctrl SAS 6G 8port external added
2010-09-30	S26361-F3555-E1	10 Gigabit Ethernet Controller - now available
2010-09-30	S26361-F3505-E1	10 Gigabit Ethernet Controller - no longer available
2010-09-30	S26361-F3627-E1	New LTO5 SAS drive - now available
2010-09-13	S26361-F3626-E1	Upgrade - New LTO4 SAS drive
2010-08-26		RDX Cartridges Update
2010-08-23	S26381-K341-E122	Germany / Int Keyboard added
2010-08-01	S26361-F3611-E1	New Quad LAN GbE controller - as soon as available
2010-08-01	S26361-F3610-E1	New Dual LAN GbE controller - as soon as available
2010-07-16		No longer 3.5" HDD SAS Drives because of system architect restrictions
2010-07-05		EPA restrictions implemented
2010-06-23	S26381-K431-E101	Added Mouse M480 grey
2010-05-12	S26381-K341-E1**	Added USB professional Keyboard KBPC PX ECO (available from July 2010)
2010-05-04		SAS RAID Controller descriptions updated
2010-03-22		Added USB Standard Keyboard KB400
2010-03-01		First Release