

PRIMERGY RX100 S5

System configurator and order-information guide

May 2010

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PRIMERGY Server

Instructions

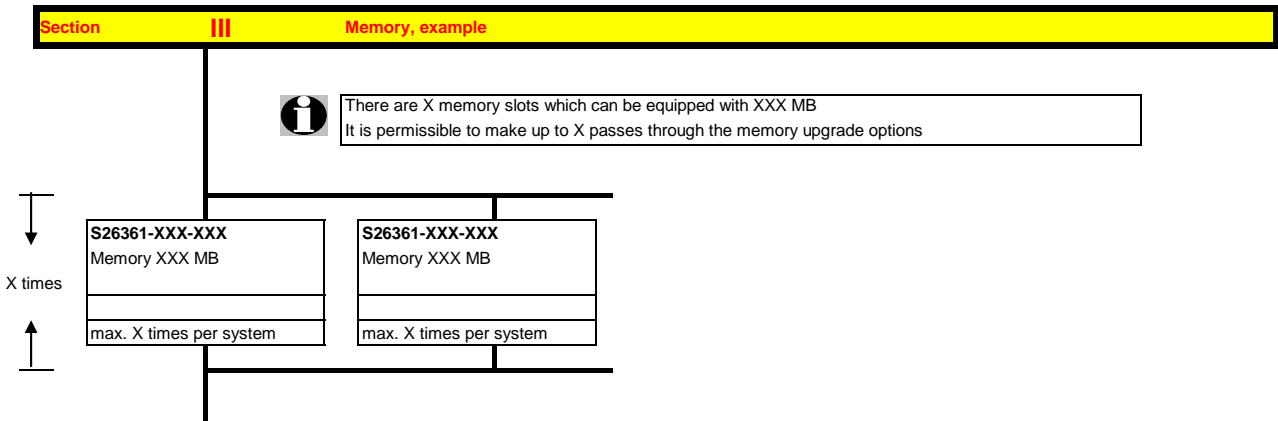
This document contains basic product and configuration information that will enable you to configure your system via PC-/System-Architect

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

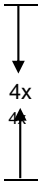
You can configure your individual PRIMERGY server in order to adjust your specific requirements.

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.



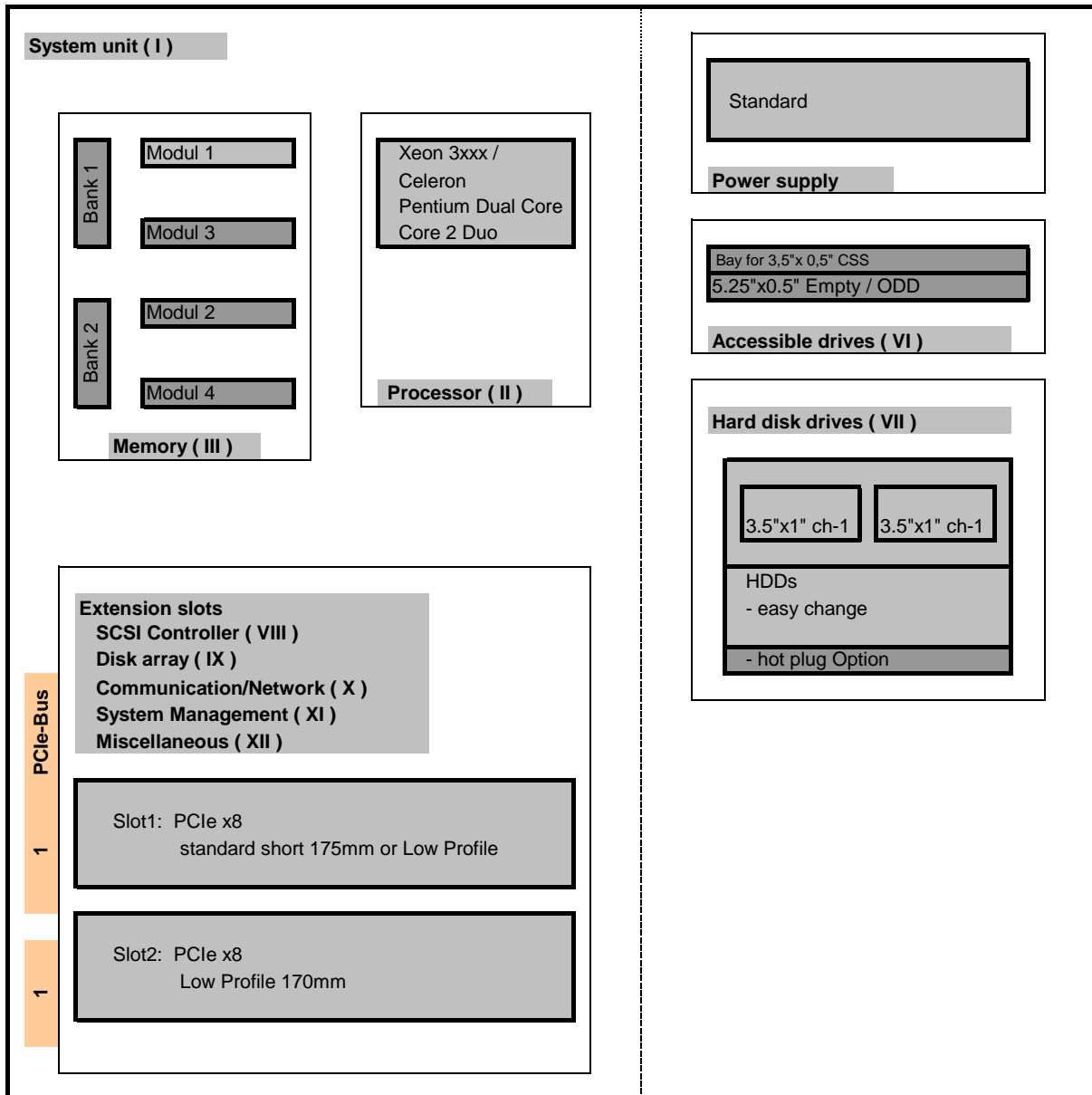
For further information see:

http://ts.fujitsu.com/products/standard_servers/inc (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 RX100 S5



Key:

- Included in basic unit
- Option

Start PRIMERGY RX100 S5


SW - Configurator 32 bit

with OEM-Software
for PRIMERGY Server

without OEM-Software
for PRIMERGY Server

VMware-Software
- VCMS VirtualCenter Management Server


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

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

MS - Software: W **)
- Windows Server 2003 R2, Standard Edition
- Web Edition, SP2/English
- Additional loose Client-Access-Licenses (CALs) (not for Web Edition)

PRIMECLUSTER *)
- Clustering
- Load Balancing

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

 Details eg. version numbers are published in the separate SW-Configurator

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

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

They find single software configurators and release lists (OS-matrix / system management / security) under following addresses:

**for internal users:
for partners:**

Continue with PRIMERGY HW configurator

Start PRIMERGY RX100 S5

SW - Configurator EM64T

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.

only EM64T	Microsoft - Software: W
	- Windows Server 2003 R2, Standard x64 Edition - Additional loose Client-Access-Lizenzen (CALs)

only x86_64	Linux - Software *) (**)
	- SuSE Linux ES (OEM): LO - SuSE Linux ES (Support): LS - Red Hat EL (OEM): LO - Red Hat EL (Support): LS

only EM64T	Manageability Software: V**)
	- RemoteView Software - RemoteDeploy - IRMC advanced Pack



Details eg. version numbers are published in the separate SW-Configurator

You'll find single software configurators and release lists (OS-matrix / system management / security) under following addresses:

for internal users:
for partners:

Continue with PRIMERGY
HW configurator

Section 1 | Basic unit



System unit consisting of:

*** 1U Housing including standard power supply**

- Standard Power Supply Unit

*** Fans**

- Fans for Power Supply and Chassis

*** Drives / Bays**

- 2 bays 3.5" for "easy change" HDDs (hotplug upgrade option available) or
- 1 bay 0.5" height for optional SATA ODD
- 1 bay 0.5" height for optional CSS-modul (Customer Self Service)

Options:

*** 2x 3.5" HD backplane kit for SATA Base Unit**

*** One 0,5" bay can be configured 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 with:

- Mono Processor Board with LGA775 socket (s. section II)
- 2 PCIe x8 slots
- 4 memory slots (s. section III)
- SATA RAID (ICH9R) or SAS RAID (LSI1064) controller on-board (s. section IX)
- 2x 1 Gbit Ethernet LAN BroadCom 5715C on-board plus

- 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 (shared mode)

- 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)

Interfaces:

- 1x RS-232-C (serial, 9 pins) (usable for BMC or OS or shared)
- 1x keyboard (PS/2)
- 1x mouse (PS/2)
- 1x VGA (15 pins)
- 4x USB 2.0 (UHCI) with 480MBit/s (2x external at the rear, 2x external at the frontside)
 1x internal, no USB wakeup)
- 2x LAN RJ45, 1x Service-LAN RJ45

Cables:

1. SATA cable for ODD
2. SATA/SAS cables for up to 4 HDDs
3. Power cable

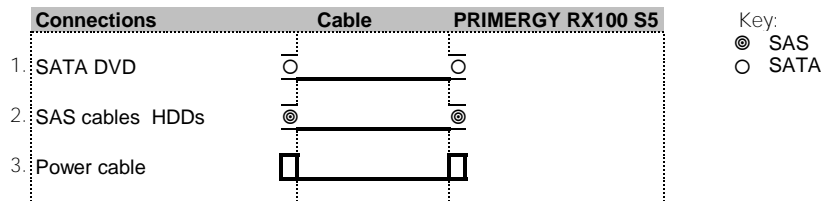
Software:

- ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates
- Documentation engl. (multilingual on CD)

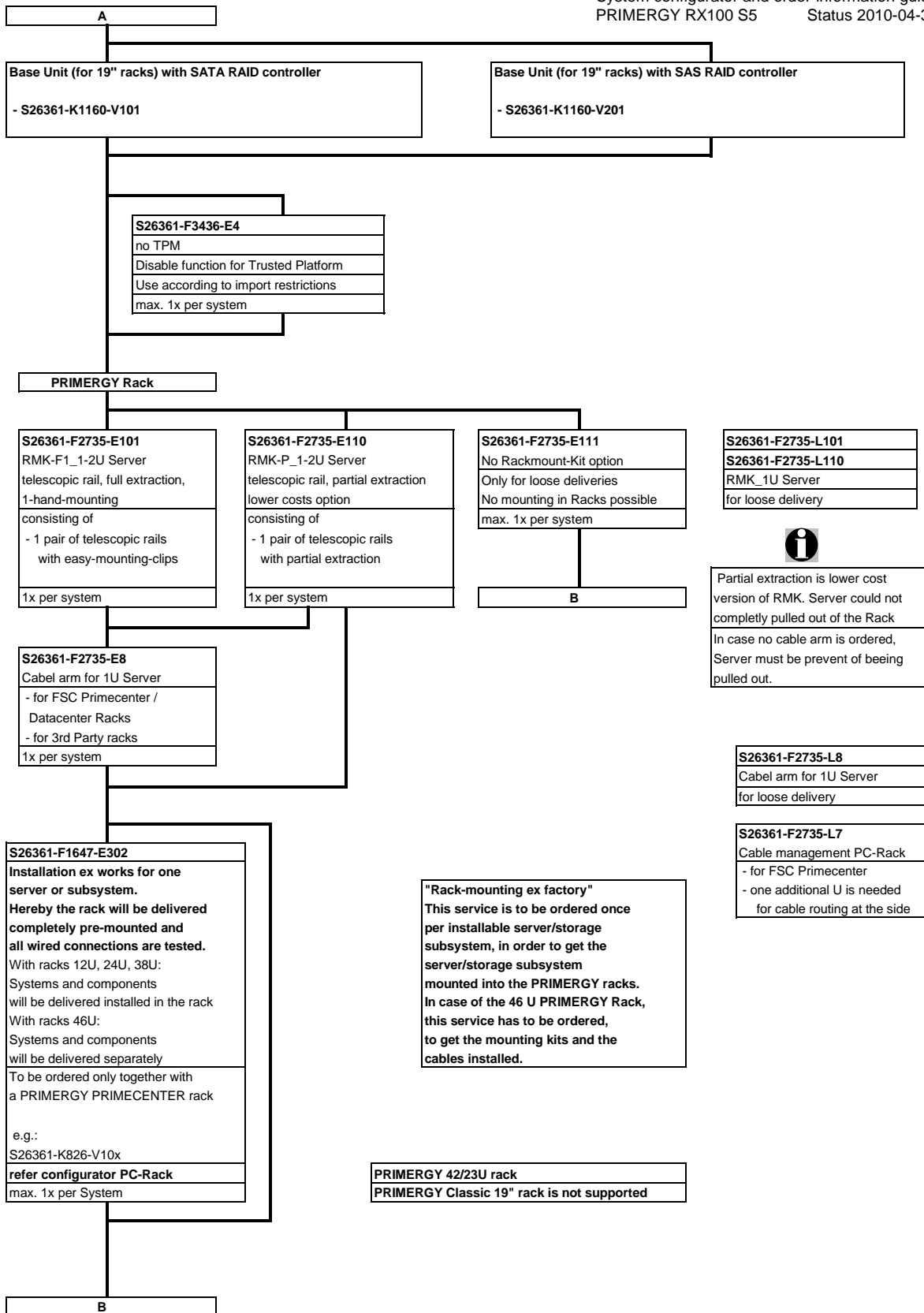


Note: Rack Mounting kit for PRIMERGY RX100 S5 is not included in the basic unit and has to be configured separately

Cables included in basic unit



A



S26361-F3436-E4
 no TPM
 Disable function for Trusted Platform
 Use according to import restrictions
 max. 1x per system

PRIMERGY Rack

S26361-F2735-E101
 RMK-F1_1-2U Server
 telescopic rail, full extraction,
 1-hand-mounting
 consisting of
 - 1 pair of telescopic rails
 with easy-mounting-clips
 1x per system

S26361-F2735-E110
 RMK-P_1-2U Server
 telescopic rail, partial extraction
 lower costs option
 consisting of
 - 1 pair of telescopic rails
 with partial extraction
 1x per system

S26361-F2735-E111
 No Rackmount-Kit option
 Only for loose deliveries
 No mounting in Racks possible
 max. 1x per system

S26361-F2735-L101
S26361-F2735-L110
 RMK_1U Server
 for loose delivery



Partial extraction is lower cost version of RMK. Server could not completely pulled out of the Rack
 In case no cable arm is ordered, Server must be prevent of beeing pulled out.

S26361-F2735-E8
 Cabel arm for 1U Server
 - for FSC Primecenter /
 Datacenter Racks
 - for 3rd Party racks
 1x per system

S26361-F2735-L8
 Cabel arm for 1U Server
 for loose delivery

S26361-F1647-E302
 Installation ex works for one server or subsystem.
 Hereby the rack will be delivered completely pre-mounted and all wired connections are tested.
 With racks 12U, 24U, 38U:
 Systems and components will be delivered installed in the rack
 With racks 46U:
 Systems and components will be delivered separately
 To be ordered only together with a PRIMERGY PRIMECENTER rack
 e.g.:
 S26361-K826-V10x
 refer configurator PC-Rack
 max. 1x per System

"Rack-mounting ex factory"
 This service is to be ordered once per installable server/storage subsystem, in order to get the server/storage subsystem mounted into the PRIMERGY racks.
 In case of the 46 U PRIMERGY Rack, this service has to be ordered, to get the mounting kits and the cables installed.

S26361-F2735-L7
 Cable management PC-Rack
 - for FSC Primecenter
 - one additional U is needed for cable routing at the side

PRIMERGY 42/23U rack
PRIMERGY Classic 19" rack is not supported

B

Section 2 Processor

Note**: The CPU is not included in the base unit and has to be configured separately.

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

Dual-Core CPU's	
- 1x 64-bit Intel Pentium Dual Core E5xxx & E6xxx (2MB SLC) or Core2 Duo E7x00 (3MB SLC) or Xeon E31xx (6MB SLC) and heat pipe occupies socket for one CPU	
Pentium DC E5200 (2.5GHz/2M/800) 65W	S26361-F3476-E520
Pentium DC E6300 (2.8GHz/2M/1066) 65W	S26361-F3476-E630
Core2 Duo E7400 (2.80GHz/3M/1066) / 65W	S26361-F3476-E740
Core2 Duo E7600 (3.06GHz/3M/1066) / 65W	S26361-F3476-E760
Xeon UP E3110 (3.00GHz/6M/1333) / 65W	S26361-F3476-E311
Xeon UP E3120 (3.16GHz/6M/1333) / 65W	S26361-F3476-E312
Low Voltage Dual-Core CPU's	
- 1x 64-bit Intel Xeon LV UP (6MB SLC) and heat pipe occupies socket for one CPU	
Xeon LV UP E3110 (3.00GHz/6M/1333) / 45W	S26361-F3476-E310
Quad-Core CPU's	
- 1x 64-bit Intel Xeon UP (8/12MB SLC) and heat pipe occupies socket for one CPU	
Xeon UP X3220 (2.40GHz/8M/1066) / 95W	S26361-F3476-E322
Xeon UP X3360 (2.83GHz/12M/1333) / 95W	S26361-F3476-E336
Xeon UP X3370 (3.00GHz/12M/1333) / 95W	S26361-F3476-E337

Section 3 Memory

i 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 1GB, 2GB or 4GB)
Note: Memory is not included in the base unit and has to be configured separately, min 1x.**

** see note above

4x ↑ ↓	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	on special release only S26361-F3870-E516 Main memory 4GB DDR2 800/PC2-6400 ub ECC consisting of one module occupies one slot max. 4x per system	i 4GB modules are available on special release only No Mix with 1/2GB possible
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Section 4 Riser Card

i Included in basic unit

Section 5 Graphics

i 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-F2748-E633 PY VGA LP card 256MB PCI-e x1 NVIDIA NVS290 256 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 low profile bracket max. 1x per system

i The high end optional NVIDIA NVS290 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 2

S26361-F2748-L633 PY VGA LP card 256MB PCI-e x1 for loose delivery

C

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Section 6 VI Accessible drives



Setup PRIMERGY RX100 S5 by ServerStart is supported with following configurations:
no DVD, no CD:
 remote installation only (PXE service & DHCP server required)
built in DVD or USB DVD:
 UNC Network share reachable or USB Floppy or MemoryBird connected



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 SM / Blu-Ray	
External SuperMulti Drive (as soon as released)	S26341-F103-L82
External Blu-Ray Drive (as soon as released)	S26341-F103-L83
2) USB Keyboard: KBPC PX D, professional keyboard	S26381-K340-V120
3) USB Mouse: Optical Wheel Mouse Tilt USB/PS2	S26381-K415-L100
4) USB Memorybird:	
Memorybird P 4GB, SLC flash	S26391-F6047-L104
MyUSBS A910 8GB, MLC Flash	S26391-F6048-L208

S26361-F3269-E1
DVD-RW supermulti slim SATA
all formats, DUAL/DL, DVD-RAM
only W2K, W3K and Linux
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

D

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Section 7 VII Hard disk drives

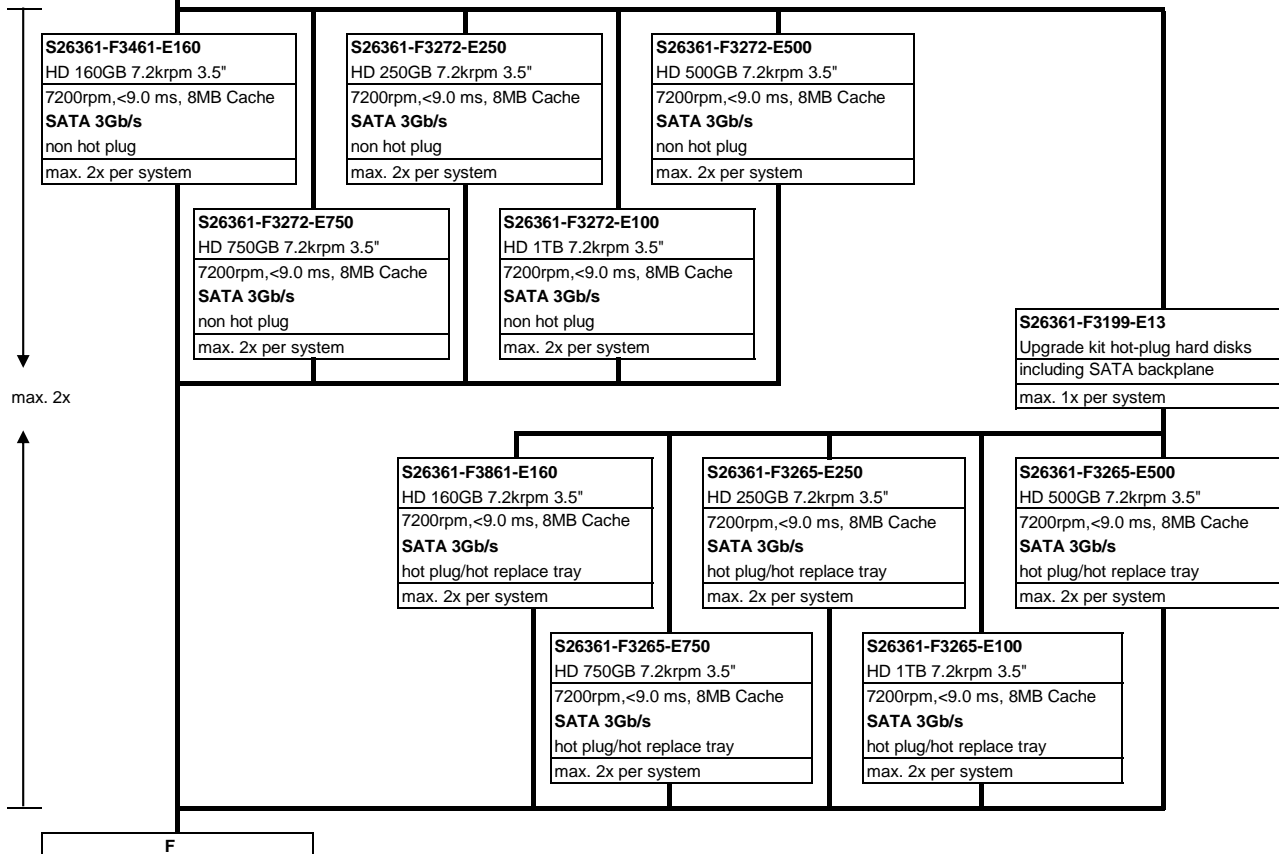
base unit with **SATA RAID controller**

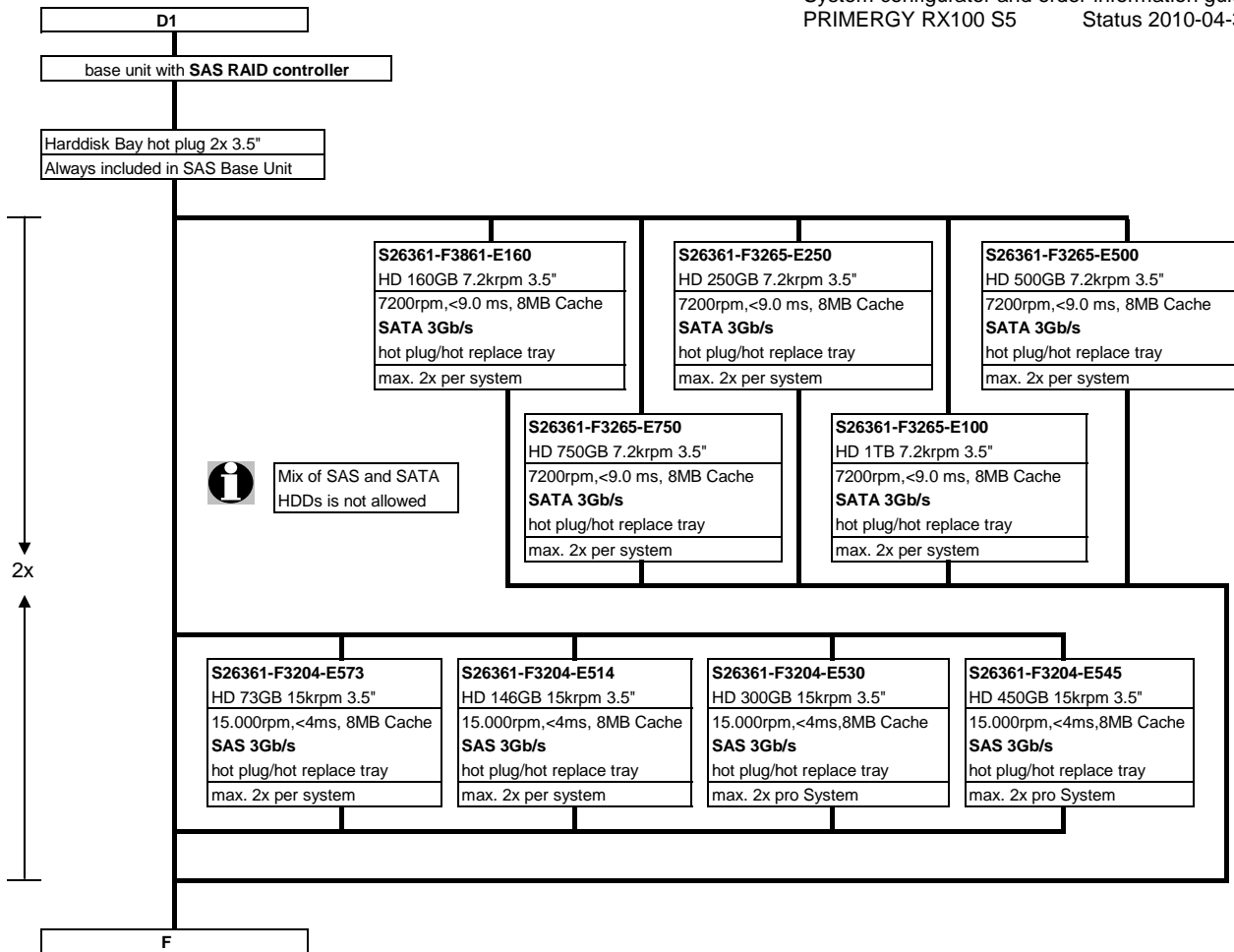
base unit with **SAS RAID controller**



Every SATA base unit is prepared for easy change SATA standard hard disks.
 An option for hot plug hard disks is possible to order.

D1





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Section 8 VIII SCSI/SAS-Controller SCSI/SAS-Controller Low Profile

Slot suitable for
 Standard/Low Profile
 PCIe
 only 1x per System

2 slots PCIe x8 (wired x8) available

SCSI-controller for external drives and peripheral devices



Only released for FibreCAT TXF
 All controllers for the connection of external storage systems are delivered without cables. For the configuration of external cabling see the configurator for external storage systems.

S26361-F3270-E201
SCSI U320 Controller
Adaptec SCSI Card 29320LPE
PCIe x1, Low Profile
int: LVD HD68
ext: VHDCI 68pin
max. 1x per system

SAS controller for external backup drives

S26361-F3271-E201
SAS Controller 3Gb/s 8 port LP
LSI SAS3442E-R Low Profile
PCIe x4,
int: 4 port
ext: 4 port
max. 2x per system

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Sections 9 IX Disk Array

base unit with **SATA RAID controller**

base unit with **SAS RAID controller**

**On board Hot Plug / Easy Change
 SATA RAID Controller
 RAID 0, 1**

Intel ICH9-R
2-channel SATA 300 RAID Controller max. 300MB/s, with cable 1 HD per channel max.
int.: 2 x SATA 300
SW:

The system is equipped with a 4-ch SAS on-board controller and embedded "IME".
 IME (Integrated Mirroring Enhanced) offers the RAID levels 0, 1, 1E without any additional costs.
 IME is a RAID 0, 1 implementation, whereby RAID 1 can operate with an odd number of hard disks.
 Up to 6 hard disks including one hot spare HD are possible (limited by HHD slots in system). Administration of IME is possible with the FSC tool ServerView RAID and the LSI Global Array Manager (GAM).
 Windows2000/2003 as well as SUSE and RedHat Linux are supported (Restrictions refer to Software Configurator)
No additional components required.
 1x per server

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Section # X Communication / Network

Dual Gigabit Ethernet Contr.
 onboard
 Broadcom BDC5715C
 ext: 2x RJ 45 connector



Teaming: Failover, Load Balancing
 The Intel LAN Controllers 1000GT, 1000MF, 1000PT, 1000PF can be used with the on-board controller in Teaming Mode

2 slots PCIe x8 (wired x8) available



C) PCI-Express Adapter 1000TX/SX

S26361-F3241-E201 (Glyndon)
 Gigabit Ethernet Contr. 1000TX
 Eth Ctrl 1x1Gbit PCIe Pro/1000PT Cu LP
 Intel PRO/1000 PT Server Adaptor
 PCIe x1
 ext: for RJ45-connector, Cat 5
 max.2x per system

S26361-F3242-E201 (Sheepshead Bay)
 Gigabit Ethernet Contr. 1000SX
 Eth Ctrl 1x1Gbit PCIe Pro/1000PF LC LP
 Intel PRO/1000 PF Server Adaptor
 PCIe x4
 ext:LC-connector
 max.2x per system

S26361-F3228-E201 (Redwater)
 Gigabit Ethernet Controller Dual 1000TX
 Eth. Ctrl 2x1Gbit PCIe PRO/1000PT Cu LP
 Intel Pro/1000PT dual Server Adaptor
 PCIe x4
 ext: for RJ45-plug, Cat 5
 max.2x per system

max 2

D) Quad Port PCIe Adapter 1000TX

S26361-F3462-E201 (Kirkwood 2)
 Gigabit Ethernet Controller Quad 1000TX
 Eth. Ctrl 4x1Gbit PCIe PRO/1000PT Cu LP
 Intel Pro/1000PT quad Server Adaptor
 PCIe x4
 ext: for RJ45-plug, Cat 5
 max. 2x per system

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Section # XI 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


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


Section # XII Miscellaneous

 **USB Input devices available:**
 1) USB Keyboard: S26381-K340-V120
 KBPC PX D, professional keyboard
 2) USB Mouse: S26381-K403-L100
 Optical Wheel Mouse

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

Section # XIII Country specific power cord

 **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)**

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

End PRIMERGY RX100 S5

Change Report

Date	Order number	Changes
2009-09-30	S26361-F3870-E516	4GB Memory available on special release
2009-07-31	S26361-F3476-E760	Core2 Duo E7600 - now available
2009-07-31	S26361-F3476-E630	Core2 Duo E6300 - now available
2009-03-31	S26361-F3268-E1	CD-RW / DVD ROM drive - no longer available
2009-01-27	S26361-F3476-E110	Xeon LV UP L3110 3.00GHz 6MB 1333MHz now available
2008-12-17	S26361-F1790-E221	RemoteView Software V5.0 - no longer available
2008-12-05	S26361-F3476-E440	Celeron 440 2.0GHz 512kB 800MHz FSB - no longer available
2008-11-25	S26361-F3476-E335	Xeon UP X3350 (2.66GHz/12M/1333) / 95W no longer available
2008-11-25	S26361-F3476-E216	Pentium Dual Core E2160 (1.8GHz/1M/800) 65W no longer available
2008-09-30	S26361-F3476-E306	Xeon UP 3065 (2.33GHz/4M/1333) / 65W no longer available
2008-09-30	S26361-F3476-E460	Core2 Duo E4600 (2.4GHz/2M/800) / 65W no longer available
2008-09-30	S26361-F3476-E312	New Xeon UP E3120 CPU - now available
2008-09-30	S26361-F3272-E100	HD SATA 3Gb/s 1TB 7.2k non hot plug 3.5" - as soon as available
2008-09-30	S26361-F3265-E100	HD SATA 3Gb/s 1TB 7.2k hot plug 3.5" - as soon as available
2008-09-01	S26361-F3531-E1	Blu-ray Combo drive HH SATA Low Profile now available
2008-09-01	S26361-F3476-E220	Pentium Dual Core E2200 (2.2GHz/1M/800) / 65W now available
2008-09-01	S26361-F3476-E336	Pentium Quad Core Xeon UP X3360 (2.83GHz/12M/1333) / 95W now available
2008-07-14	S26361-F3204-E545	HD 450GB 15krpm 3.5" - as soon as available
2008-07-08	S26361-F3239-E720	Core2 Duo E7200 (2.53GHz/3M/1066) / 65W now available
2008-06-05	S26361-F3476-E450	Core2 Duo E4500 (2.2GHz/2M/800) / 65W no longer available
2008-04-17	S26361-F3271-E201	new SAS Controller 3Gb/s 8 port
2008-04-30	S26361-F3476-E214	Pentium DC E2160 no longer available
2008-03-17	S26361-F3476-E460	Core2 Duo E4500 (2.4GHz/2M/800) / 65W now available
2008-03-17	S26361-F3476-E216	Pentium Dual Core E2160 (1.8GHz/1M/800) / 65W now available
2008-02-27	S26361-F3476-E335	New CPU
2008-01-01		First release