

# PRIMERGY TX120 S2

## *System configurator and order-information guide*

June 2009

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## PRIMERGY Server

# Instructions

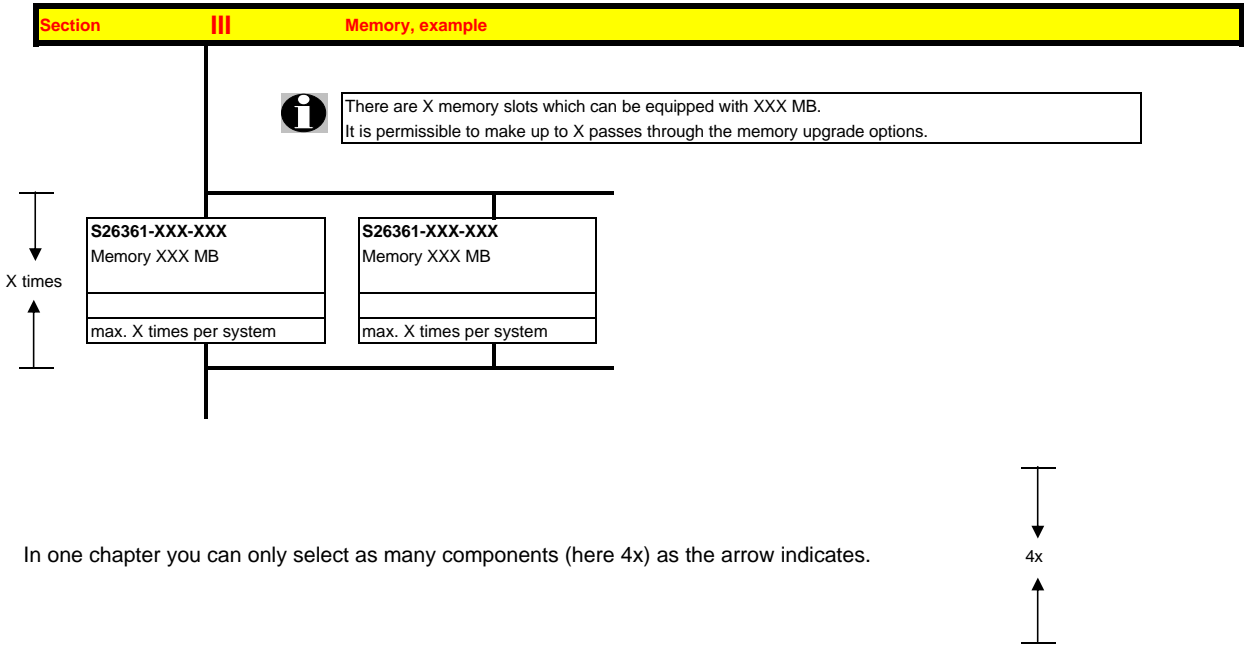
This document contains basic product and configuration information that will enable you to configure your system via PC-/ System-Architect.

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](http://ts.fujitsu.com/products/standard_servers/inc) (internet)
- [https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy\\_config/current/Pages/default.aspx](https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx) (extranet)

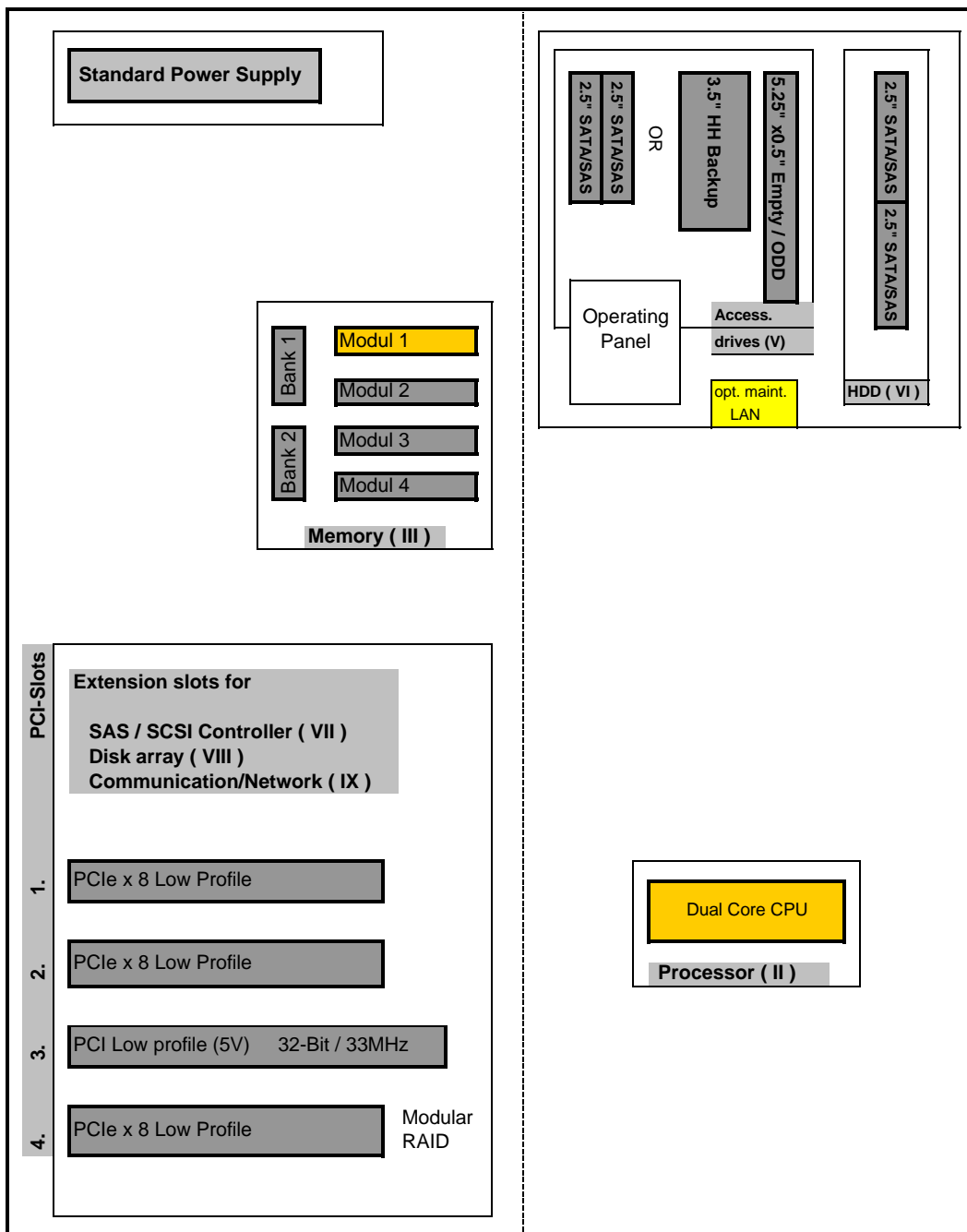
Prices and availability see price list and PC-/ System-Architect  
 Subject to change and errors excepted

## Configuration diagram PRIMERGY TX120 S2

### System unit ( I )

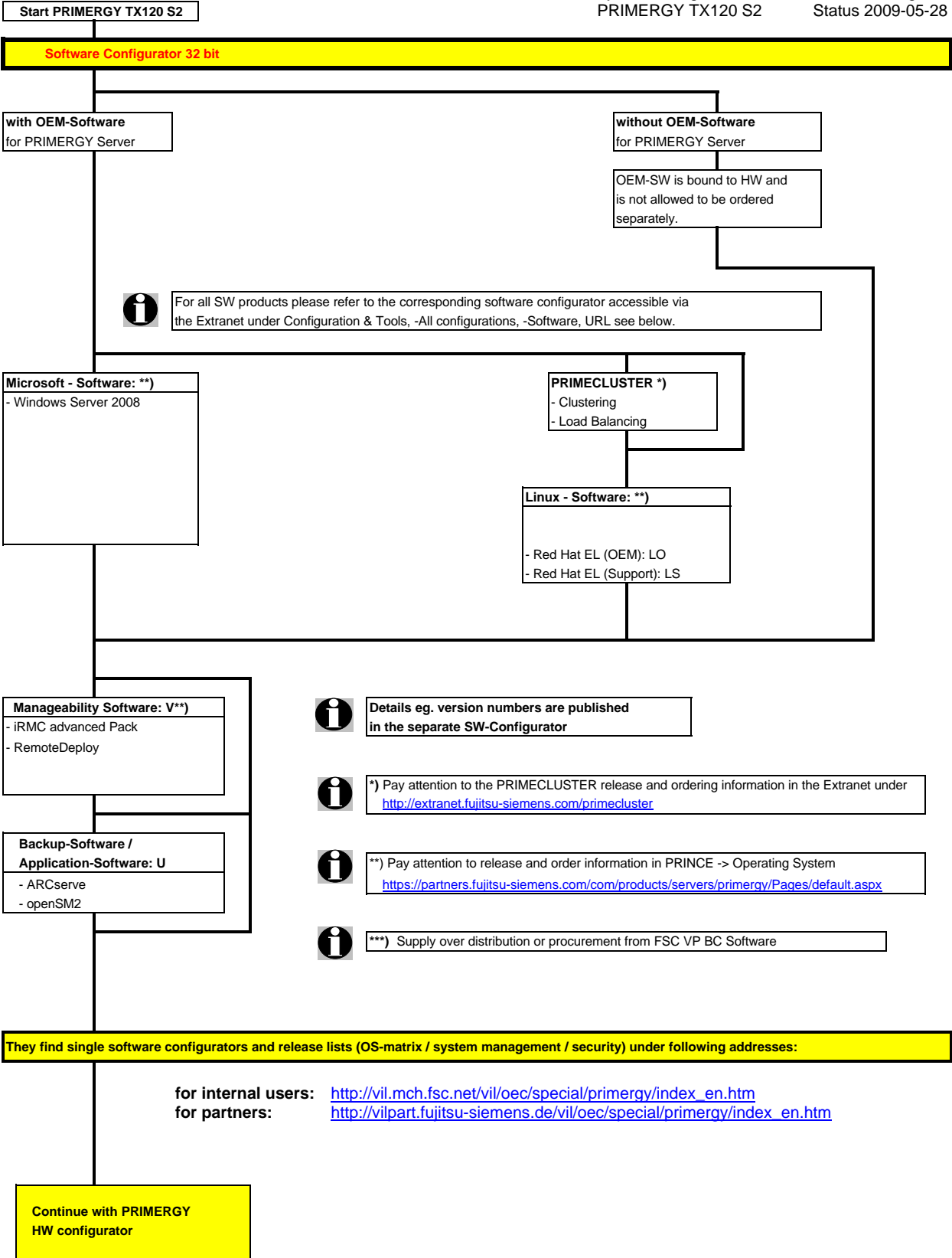
#### SIDE VIEW

#### FRONT VIEW



Key:

- Included in basic unit
- Option
- One CPU ( first CPU ) and one memory ( first memory ) has to be selected for an orderable basic unit.



Start PRIMERGY TX120 S2

**Software Configurator 64 bit**

with OEM-Software  
for PRIMERGY Server

without OEM-Software  
for PRIMERGY 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.

only EM64T	<b>Microsoft - Software: W</b>
	- Windows Server 2008

only EM64T	<b>Linux - Software *) **</b>
	- Red Hat EL (OEM): LO - Red Hat EL (Support): LS

<b>Manageability Software: V**)</b>
- iRMC advanced Pack
- RemoteDeploy
- RemoteView SW



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



\*) Pay attention to the PRIMECLUSTER release and ordering information in the Extranet under <http://extranet.fujitsu-siemens.com/primecluster>



\*\*\*) Pay attention to release and order information in PRINCE -> Operating System [http://vil.mch.fsc.net/vil/pc/vil/primergy/overview/prince/index\\_en.htm](http://vil.mch.fsc.net/vil/pc/vil/primergy/overview/prince/index_en.htm)



\*\*\*\*) 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://vil.mch.fsc.net/vil/oc/special/primergy/index\\_en.htm](http://vil.mch.fsc.net/vil/oc/special/primergy/index_en.htm)  
 for partners: [http://vilpart.fujitsu-siemens.de/vil/oc/special/primergy/index\\_en.htm](http://vilpart.fujitsu-siemens.de/vil/oc/special/primergy/index_en.htm)

**Continue with PRIMERGY  
HW configurator**

## Section

## Basic unit

**System unit consisting of:**

- \* **Housing including standard power supply (no redundancy)**
- \* **Lockable front Cover**  
Door for hot plug HDD bays and accessible drives, operating panel
- \* **System fan ( non hot-plug, no redundancy )**

**Options**

- \* **HDD Extension Box for two additional 2x 2.5" HDDs (no Backup drive configurable)**
- \* **For SAS HDD's usage of SAS RAID Controller is mandatory. Following options are available:**
  - **Modular RAID 0/1/1e controller with IME (Integrated Mirroring Enhanced) support based on LSI 1064 chipset or as alternative**
  - **Modular RAID 5 controller based on LSI 1078 chipset**

**Systemboard with:**

- \* **4 PCI slots:**
  - 3x PCIe x 8 (one for internal use of modular RAID only)
  - 1x PCI Low Profile 32Bit / 33MHz (5V)
- \* **4 memory slots for up to 16GB (PC2-5300) registered DDR2 RAM (ECC), max. 4GB modul per slot**
- \* **2 bays for accessible drives: 1x 3.5" + 1x 5.25" (occupied by optical drive)**
- \* **2 (4) bays 1" for hot-plug SATA/SAS HDD**
- \* **Intel Boazman 82567-LM4 10/100/1000 Mb/s on-board**
- \* **6-port SATA controller on-board included in Intel Southbridge ICH9R**
  - 4 ports are used for up to 4x SATA HDD's with Raid0/1
  - 1 port for DVD
- \* **iRMC S2 (integrated Remote Management Controller) on-board server management and graphics controller**  
Resolution: 1280 x 1024 at 8bpp or 1024 x 768 at 16 bpp
- \* **iRMC S2 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100 Service LAN-port and integrated graphics controller.**
- \* **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)

**USB mouse****ServerView Suite Software package incl. ServerStart, ServerBooks, Management Software and Updates****Interfaces:**

- 1x RS-232-C (serial, 9 pins)
- 8x USB 2.0 (5x external at the rear, 2x external at the frontside,  
1x internal USB Interface with connector type B for backup devices - cable is delivered with Backup device)
- 1x LAN RJ45 + 1 x Service LAN + 1 x optional maintenance LAN on Front Panel

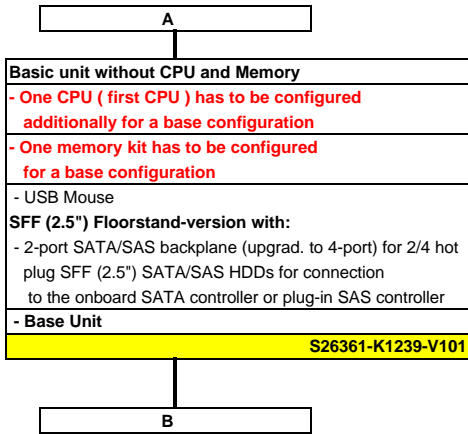
**Cables:**

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)

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**Section II Processor**

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

\*\* see note above

One of following CPU's has to be selected for an orderable basic unit	
<b>Dual-Core CPU's</b> - 1x 64-bit Intel CPU and heat pipe occupies socket for one CPU	
Core2 Duo P8400 (2.26GHz/3M/1066) / 25W	S26361-F3282-E840
Core2 Duo T9400 (2.53GHz/6M/1066) / 35W	S26361-F3282-E940

<b>S26361-F3301-E4</b>
Energy Star 4.0 compliance
Limits configuration in accordance with Energy Star requirements
max. 1x per system



**Be aware of configuration Limits for Energy Star Configuration**  
 SAS Configuration:  
 max P8400, 1GB RAM, 2x SAS HDD  
 SATA Configuration:  
 max. T9400, 8GB RAM, 2x SATA HDD + 2 SATA/Backup, 2x LAN  
**Energy Star configuration only possible for Countries with 230V**

<b>S26361-F3552-E1</b>
TPM Module
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system



**Be aware of import restrictions!**  
 Only 1 TPM per system.  
 Loose delivery for later integration possible for customer.

<b>S26361-F3552-L1</b>
TPM Module add-on kit
for later integration (loose delivery)
Trusted Platform Module on Motherboard
Use according to import restrictions
max. 1x per system

**Section III Memory**



There are 2 memory banks with 2 DIMM slots each.  
**Single channel memory configuration allow maximum flexibility:**  
 Additional memory can be configured as single memory modules.  
**Dual channel memory configurations for maximum performance:**  
 For optimum performance memory has to be configured in pairs of memory modules with identical size.  
**Note\*\*:** Memory is not included in the base unit and has to be configured separately, min 1x.

\*\* see note above

4x

<b>S26361-F3283-E514</b>
Main memory <b>1GB</b>
DDR2 667/PC2-5300 reg. ECC
consisting of one module
occupies one slot
max. 4x per system

<b>S26361-F3283-E515</b>
Main memory <b>2GB</b>
DDR2 667/PC2-5300 reg. ECC
consisting of one module
occupies one slot
max. 4x per system

<b>S26361-F3283-E516</b>
Main memory <b>4GB</b>
DDR2 667/PC2-5300 reg. ECC
consisting of one module
occupies one slot
max. 4x per system

**Section IV Graphics**



Graphics Controller integrated in iRMC with 32 MB attached Memory with following resolution:  
 - 16 bit color with maximum resolution of 1600 x 1200  
 - 24 bit color with maximum resolution of 1280 x 1024  
 - 32 bit color with maximum resolution of 1152 x 864  
 This resolution is also available via iRMC advance video redirection.  
**NOTE: Only VESA-compliant graphics modes are supported**

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**Section V Accessible drives**

**i** There are 2x 5.25" bays for accessible drives:  
 - 1x 5.25" bay is occupied by a 0.5" DVD respectively a DVD-RW drive  
 - 1 x 3.5" bay remaining, can be occupied by 1x 1.6" backup drive or 2x 2.5" HDD

**i** Setup of PRIMERGY TX120 S2 by ServerStart is supported with following configurations:  
**no DVD:**  
 remote installation only ( PXE service & DHCP server required)  
**built in DVD:**  
 UNC Network share reachable or USB Floppy or MemoryBird connected

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

Following USB Components are available	
1) USB DVD+-RW: Super Multi DVD slim drive	S26391-F7119-L100 (USB cable included)
2) FDD USB (external): external USB FDD	S26391-F264-L226 (USB cable included)
3) USB Keyboard: KBPC PX D, professional keyboard	S26381-K340-V120
4) USB Mouse: Optical Wheel Mouse Tilt USB/PS2	S26381-K415-L100
5) USB Memorybird: Memorybird 4GB	S26391-F6047-L104

**S26361-F3269-E2**  
 DVD-RW supermulti slim SATA  
 all formats, DUAL/DL, DVD-RAM  
 only W2K, W3K and Linux  
 0.5 x 5.25", black bezel  
 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", black bezel  
 max. 1x per system

**S26361-F3324-E2**  
 Tape drive DDS Gen5 USB 3.5"  
 36GB, 3MB/s, USB 2.0  
 Connector: USB "B"  
 with USB cable  
 incl. description (Ger/US)  
 data and cleaning cartridge  
 1.6 x 3.5", anthracite/black bezel  
 max. 1x per system

**i** **S26361-F3324-L2**  
 Loose delivery of  
 Tape drive DDS Gen5 USB 3.5"

**S26361-F3857-E2**  
 RDX drive USB 3.5" internal  
 80-320GB, 25MB/s, USB 2.0  
 Connector: USB "B"  
 with USB cable  
 incl. description (Ger/US)  
 without RDX cartridges  
 1.6 x 3.5", anthracite/black bezel  
 max. 1x per system

**i** **S26361-F3857-E2**  
 Loose delivery of  
 Tape drive DDS Gen5 USB 3.5"

**i** RDX cartridges must be ordered separately  
 RDX 80GB = S26361-F3857-L80  
 RDX 160GB = S26361-F3857-L160  
 RDX 320GB = S26361-F3857-L320

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<b>S26361-F2826-E130</b>
<b>HDD Extension for 2x hot plug</b>
Occupies <b>one 3.5" x 1.6" bay</b>
in the accessible bay area
- 2x 2.5" SAS/SATA HD's
max. 1 per system



HDD extension box allows configuration of 2 additional HDDs instead of Backup Device
4 HDD Configuration w/o additional RAID controller allows usage of SATA HDD's only - RAID 0,1
Configuration of SAS HDD's requires an optional SAS RAID Controller - LSI 1064 (RAID 0,1,1E) or LSI 1078 (RAID 0, 1, 10, 5, 50, 6, 60)

**Section VI Hard Disk Drives**

2x/4x

	as soon	as available	as soon	as available
<b>S26361-F3515-E120</b> HD 120GB 5.4krpm 2.5" 5.400rpm,<10,5ms, 8MB Cache <b>SATA</b> hot plug/hot replace tray max. 2x or 4x per base unit	<b>S26361-F3515-E160</b> HD 160GB 5.4krpm 2.5" 5.400rpm,<10,5ms, 8MB Cache <b>SATA</b> hot plug/hot replace tray max. 2x or 4x per base unit	<b>S26361-F3515-E320</b> HD 320GB 5.4krpm 2.5" 5.400rpm,<10,5ms, 8MB Cache <b>SATA</b> hot plug/hot replace tray max. 2x or 4x per base unit		

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configuration requires **SAS RAID controller**

2x/4x

		as soon	as available
<b>S26361-F3208-E173</b> HD 73GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache <b>SAS 3Gb/s</b> hot plug/hot replace tray max. 2x or 4x per base unit	<b>S26361-F3208-E114</b> HD 146GB 10krpm 2.5" 10000rpm,<4,5ms, 8MB Cache <b>SAS 3Gb/s</b> hot plug/hot replace tray max. 2x or 4x per base unit	<b>S26361-F3208-E130</b> HD 300GB 10krpm 2.5" 5.400rpm,<10,5ms, 8MB Cache <b>SAS 3Gb/s</b> hot plug/hot replace tray max. 2x or 4x per base unit	

<b>S26361-F3208-E573</b> HD 73GB 15krpm 2.5" 15000rpm,<4,5ms, 8MB Cache <b>SAS 3Gb/s</b> hot plug/hot replace tray max. 2x or 4x per base unit
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**Section 8 VII SCSI/SAS-Controller SCSI/SAS-Controller Low Profile**

Slot suitable for  
 Low Profile PCIe  
 only 1x per System

2 slots PCIe x8 ( wired x8 ) available

SCSI / SAS controller for  
 external drives and peripheral devices



Only released for SX10 / 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.

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

<b>S26361-F3271-E201</b>
SAS Controller 3Gb/s 8 port LP
LSI SAS3442E-R Low Profile
PCIe x4,
int: 4 port
ext: 4 port
max. 1x per system

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**Section VIII Disk Array**

**SATA Configuration**

<b>On board Hot Plug SATA RAID Controller RAID 0, 1</b>
MegaSR integrated into Intel ICH9-R
4-channel SATA RAID Controller
max. 300MB/s, with cable
1 HD per channel max.
int.: 4 x SATA 300

**SAS or SATA Configuration**



you can choose between two types of SAS controller for the Base Unit:

- LSI 1064e based Modular RAID 0,1 (IME)
- LSI 1078 based Modular RAID 5,6

If you want to use SAS harddisks one Controller is required.  
**Operation of SATA HDD's is not possible with SAS Controller**  
**Mix of SATA / SAS HDDs is not possible**

Controller for 1 to 4 SFF (2.5") HDD; mandatory for SAS HDD's

<b>S26361-F3257-E4</b>
4 port SAS RAID Controller
LSI
MegaRAID SAS 1064
no Cache, no BBU
RAID 0, 1 & 1E
SAS 3Gb/sec
4 internal ports
PCIe x4, 160mm
max. 1x per system

<b>S26361-F3257-E256</b>
8 port SAS RAID Controller
LSI
MegaRAID SAS 1078
256MB Cache with ECC
RAID 0, 1, 10, 5, 50, 6, 60
optional BBU
SAS 3Gb/sec
8 internal ports
PCIe x4, 160mm
max. 1x per system

<b>S26361-F3257-E116</b>
Cache Battery Backup Unit
with 16cm cable set
max. 1x per Controller



<b>S26361-F3257-L110</b>
Loose delivery
Cache Battery Backup Unit
with 16cm cable set
max. 1x per Controller

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**Section IX Communication / Network**

Gigabit Ethernet Contr. on-board
82567LM (Boazman)
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.

**iSCSI boot**  
 Onboard LAN Controller supports iSCSI boot (also diskless) by system BIOS and native iSCSI initiators

**Single Port PCI-Express Adapter 1000TX/SX**

<b>S26361-F3516-E201 (Shelter Island)</b>
Gigabit Ethernet Controller LP
Eth Ctrl 1x1Gbit Low Cost
Intel
PCIe x1, Low Profile
ext: for RJ45-connector, Cat 5
max. 2x per system

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

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

max 2x

**Dual Port PCIe Adapter 1000TX**

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

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**Section X System management options**

**S26361-F1790-E240**  
**iRMC S2 advanced pack**  
integrated remote management controller  
activation key for  
graphical console redirection  
and remote media redirection  
max. 1x per system

**S26361-F2571-E17**  
**Maintenance LAN**  
Front management LAN Port  
In combination with iRMC adv. pack  
For local maintenance / console redirection,  
Integrated in front (operating panel)  
max. 1x per system

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**Section XI Country specific power cords**

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

max. 1 x

**Power cord for following countries:**  
 1,8 m, grey

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

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

**Power cord for optional monitor connection for the following countries:**  
 1.8m, grey

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

**i** **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.

**USB keyboards for floorstand versions for following countries:**

S26381-K340-E110	USA / international
S26381-K340-E120	Germany
S26381-K340-E140	France
S26381-K340-E155	Sweden / Finland
S26381-K340-E165	United Kingdom
S26381-K340-E180	Spain
S26381-K340-E185	Italy

End PRIMERGY TX120 S2

