

PRIMERGY TX1320 M1

System configurator and order-information guide

October 2014

Contents

Instructions

Configuration diagram

Configurator

Software Configurator EM64T

I Basic unit

II Processor

III Memory

IV Graphics

V Accessible drives

VI Hard disk drives

VII SAS-Controller

VIII Disk array

IX Communication/Network

X Energy Star restrictions

XI System management options

XII Miscellaneous

XIII Country specific power cords

Change report



PRIMERGY Server

Instructions

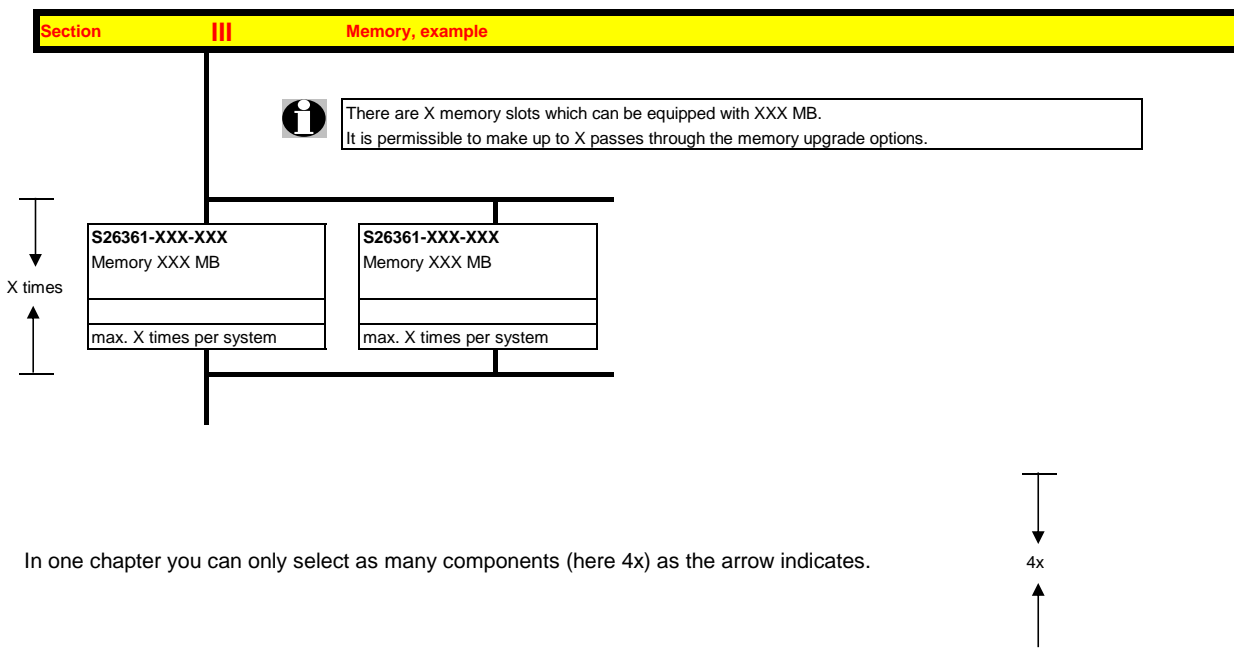
This document contains basic product and configuration information that will enable you to configure your system via PC-/ System-Architect.

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:

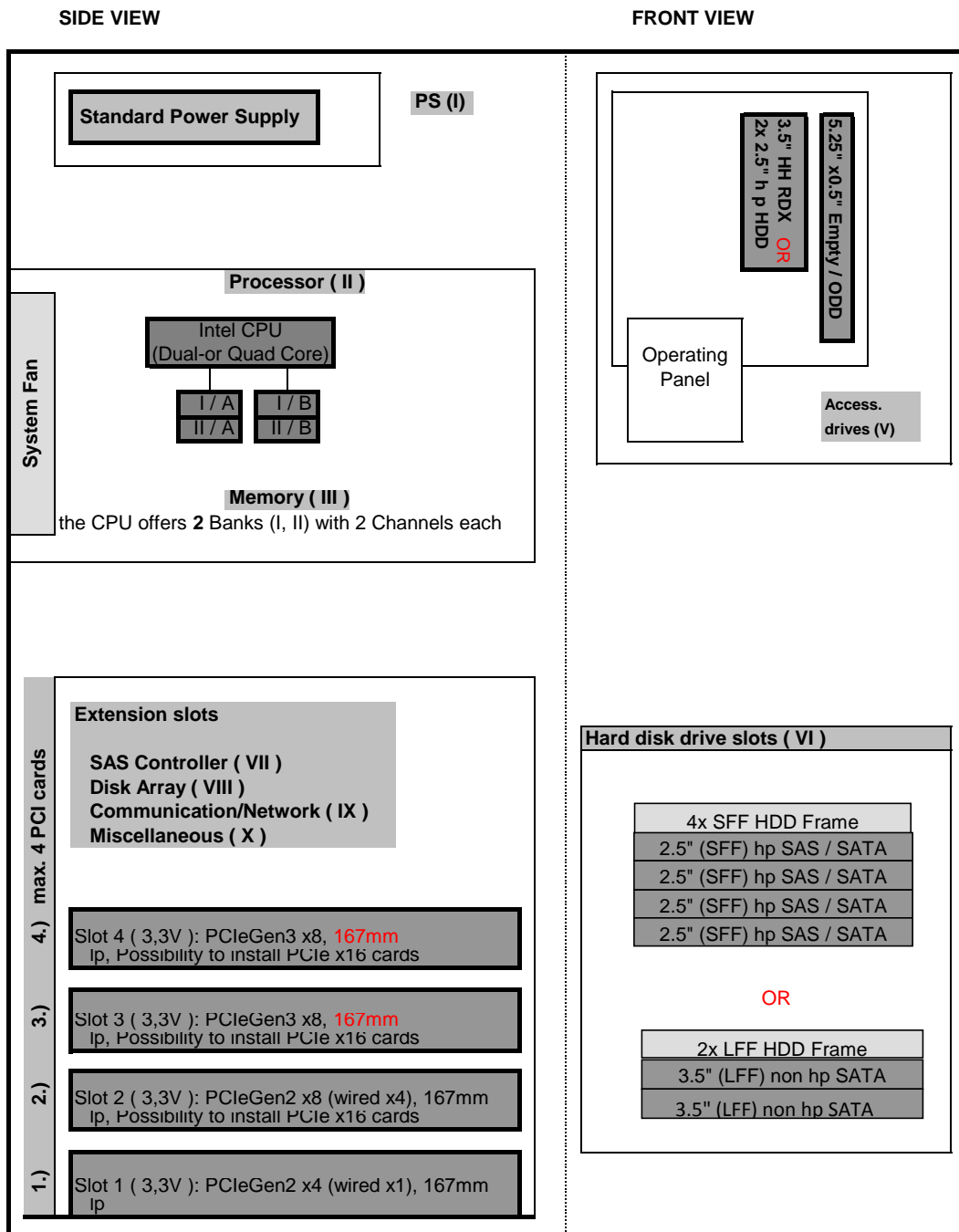
http://ts.fujitsu.com/products/standard_servers/inc (internet)

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

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

Configuration diagram PRIMERGY TX1320 M1

System unit (I)



Key:

Included in basic unit

Option

CPU and one memory (first memory) has to be selected for an orderable basic unit.

System unit Floorstand including:

- * **Two lockable front covers**
 - Door #1 for accessible drive bays
 - Door #2 for hot plug HDD bays (Type 1 base unit only)
 - Both doors may be locked or door #1 may be left open while door #2 is still locked
- * **HD type depending on base unit:**
 - Type 1: 4x hot plug SFF (2.5") SAS or SATA HDD optionally extensible to 6x hot plug SFF (2.5")
 - Type 2: 2x non hot plug LFF (3.5") SATA HDD
- * **1 power supply (Standard PSU with 250W)**
- * **Two System fans (No Hot-plug, No redundancy)**
- * **1 bay 5.25" for accessible drives (slim line)**
- * **1 bay 3.5" (HH) for RDX backup or 2x hot plug SFF (2.5") extension box (SFF base unit only)**
- Systemboard D3239 with:
 - * heat pipe for the CPU
 - * Chipset Intel® C224 (codenamed Denlow Lynx Point Standard)
 - * 4 PCI slots:
 - 1 x PCIe x16 Gen2 (lp)
 - 1 x PCIe x4 (x8 connected) Gen2 (lp)
 - 1 x PCIe x1 (x4 connected) Gen2 (lp)
 - * 4 memory slots 1 x 32Bit / PCI 33MHz-5V, (lp)
 - Memory is divided into 4 DIMMs (2 channels with 2 slots per channel)
 - First Memory (one module) has to be selected for an orderable basic unit
 - Memory upgrade is possible module wise
 - SDDC (Chipkill) is not supported
 - * SATA-Controller on board (supporting RAID 0/1/10)
 - * 2x1 Gbit Ethernet LAN on board (Intel Springville and Intel Clarkville) with ToE;
 - and iSCSI boot integrated in System BIOS as selectable option
 - * iRMC S4 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100/1000 Management LAN-port and integrated graphics controller (max. Resolution: 1600 x 1200 at 16 bpp)
- Interfaces:**
 - * 1x RS-232-C (9-pin) (usable for BMC or OS or shared)
 - * 1x VGA (15 pin)
 - * 6x USB 2.0 (UHCI) with 480MBit/s (4x external at the rear, 1x external at the front, 1x internal for UFM, no USB wakeup)
 - * 4x USB 3.0 (UHCI) with 5 GBit/s (2x external at the rear, 1x external at the frontside, 1x internal for backup device)
 - * 2x LAN RJ45, 1x Service-LAN RJ45 switchable
- ***Internal Cables:**
 - 1. SATA cable for BD/DVD.
 - 2. HDD Backplane cable (Type 1 base unit only) or SATA cable for up to 2 HDDs (Type 2 base unit only)
- * **ServerView Suite Software Paket inkl. ServerView Installation Manager and Server Management Software**
- * **Documentation engl. (multilingual on CD)**

A

Floorstand-version	
Basic unit without CPU and Memory	
- One CPU has to be configured additionally for a base configuration	
- One memory kit has to be configured for a base configuration	
SFF (2.5") Base Unit (Type 1)	S26361-K1536-V101
LFF (3.5") Base Unit (Type 2)	S26361-K1536-V201

S26361-F3552-E1
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.

S26361-F3552-L1
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 II Processor

One of following CPU's has to be selected for an orderable basic unit	
Dual-Core CPU's	
- 1x 64-bit Intel Pentium (3MB SLC) or Core-i3 (3MB TLC) occupies socket for one CPU	
Celeron	
Celeron G1820 2.7GHz 2C/2T 2MB 1333MHz (54W)	S26361-F3581-E182 on special release
Pentium	
Pentium G3420 3.2GHz 2C/2T 3MB 1600MHz (54W)	S26361-F3581-E232
Core i3	
Core i3-4330 3.5GHz 2C/4T 4MB 1600MHz (54W)	S26361-F3581-E243
Quad-Core XEON CPU's	
- 1x 64-bit Intel Xeon UP (8MB shared TLC = Third Level Cache) Hyper-Threading; 1600 MHz DDR3 Bus and heat pipe occupies socket for one CPU	
Xeon E3-1220v3 3.1GHz 4C/4T 8MB 1600MHz Turbo (80W)	S26361-F3581-E322
Xeon E3-1231v3 3.3GHz 4C/8T 8MB 1600MHz Turbo (80W)	S26361-F3581-E423
Xeon E3-1241v3 3.4GHz 4C/8T 8MB 1600MHz Turbo (80W)	S26361-F3581-E424 on special release
Xeon E3-1271v3 3.5GHz 4C/8T 8MB 1600MHz Turbo (80W)	S26361-F3581-E427
Xeon E3-1281v3 3.6GHz 4C/8T 8MB 1600MHz Turbo (82W)	S26361-F3581-E428 on special release
Xeon E3-12xxL Power Optimized	
- 1x 64-bit Intel Xeon LV UP (8MB shared TLC = Third Level Cache) Hyper-Threading (HT); 1600 MHz DDR3 Bus and heat pipe occupies socket for one CPU	
Xeon E3-1240Lv3 2.0GHz 4C/8T 8MB 1600MHz Turbo (25W)	S26361-F3581-E414
Xeon E3-1275Lv3 2.7GHz 4C/8T 8MB 1600MHz Turbo (45W)	S26361-F3581-E417

B

B

Section III Memory



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

Minimum one memory module or order code = first memory

Unbuffered (ub) UDIMMs

▼
4x
▲

- One DDR3- ub ECC memory module, 1.35V	
4GB (1x4GB) 2Rx8 L DDR3-1600 U ECC	S26361-F5312-E514
8GB (1x8GB) 2Rx8 L DDR3-1600 U ECC	S26361-F5312-E518
Choose up to 4 order codes above.	

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



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



S26361-F2748-E637
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
low profile 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 PCIe-x1 card can also be installed in any PCIe-x4, x8 or x16 slot.
 Only one card per server is allowed.

PY VGA card must be installed in slot 2

S26361-F2748-L637
PY VGA LP card 512MB PCI-e x1
for loose delivery

C

C

Section V Accessible drives

i There are 2 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**
 HDD Extension Box for 2 addition hot plug SFF (2.5") drives (SFF base unit only)

i Setup of PRIMERGY TX1320 M1 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

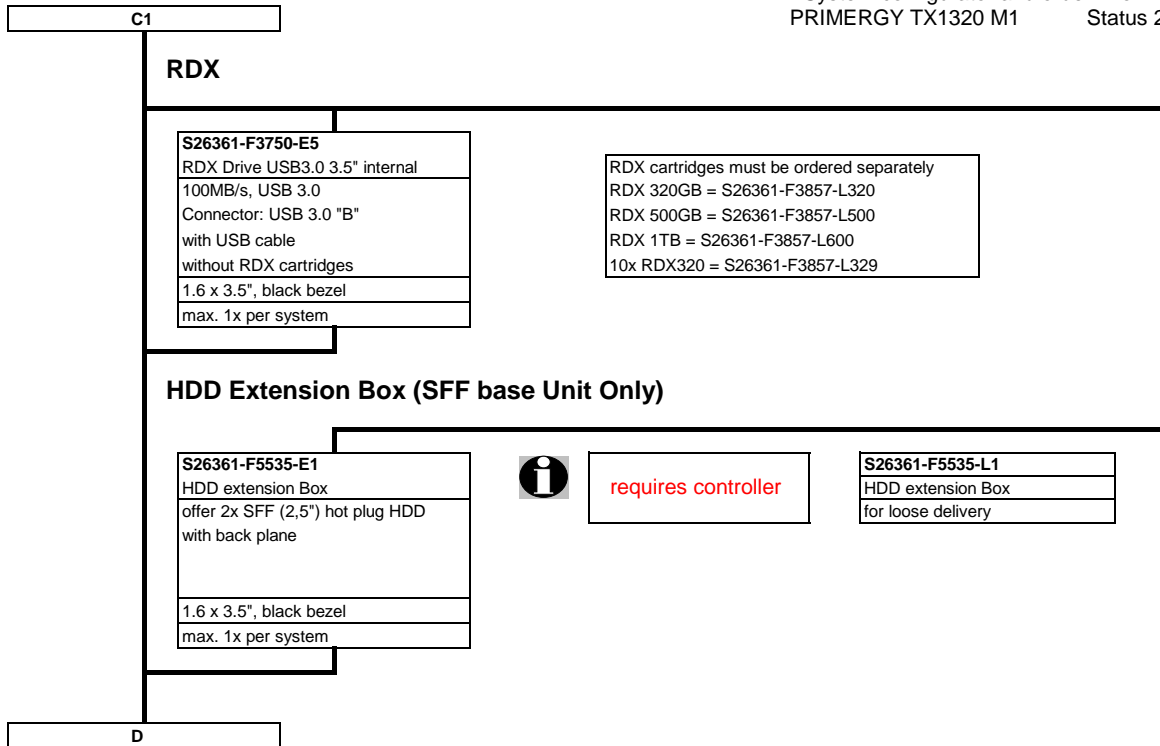
S26361-F3269-E2	S26361-F3641-E2	S26361-F3718-E1 only in JP
DVD-RW supermulti slim SATA all formats, DUAL/DL, DVD-RAM	Blu-ray Triple Writer slim SATA 6x BD-RW, 8x DVD, 24x CD BD DL and all CD/DVD formats	DVD-ROM slim SATA 16x DVD 48x CD
0.5 x 5.25", black bezel	0.5 x 5.25", black bezel	0.5 x 5.25", black bezel
max. 1x per system	max. 1x per system	max. 1x per system

SSD SATADOM SATA 6Gb/s as boot device, non hot-plug	
32GB	S26361-Fxxx-E32
64GB	S26361-Fxxx-E64
128GB	S26361-Fxxx-E128
max. 1x per system, On-board SATA Interface=3Gb/s	

SATADOM connection
to be completed
if SATADOM: no DVD/UFM?

as soon as available
 as soon as available
 as soon as available

C1



D

Section VI a) Hard Disk Drives for Type 1 (SFF/2.5") Base Units



Using Type 1 Base Unit up to 4 SATA or SAS SFF (2.5") hard disks can be configured.
 SAS and BC SATA drives with the same size can be mixed, but not used in one logical RAID volume
 SAS HDD requires SAS Controller
 *) SSD Read-Intensive Endurance=0.3DWPD over 5y
 **) SSD Mainstream Endurance=10DWPD over 5y

4x / 6x

SSD SATA 6Gb/s 2.5" with hot plug/hot replace tray (H-P)	
120GB, Enterprise, Read-Intensive*	S26361-F5524-E120
240GB, Enterprise, Read-Intensive*	S26361-F5524-E240
480GB, Enterprise, Read-Intensive*	S26361-F5524-E480
800GB, Enterprise, Read-Intensive*	S26361-F5524-E800
100GB, Enterprise, Mainstream Endurance**	S26361-F5303-E100
200GB, Enterprise, Mainstream Endurance**	S26361-F5303-E200
max. 4x/6x per system	

as soon as available
 as soon as available
 as soon as available
 as soon as available

Business Critical (BC) SATA 6Gb/s HD 2.5" with hot plug/hot replace tray	
250GB 7.200rpm, <9,5ms, 64MB Cache	S26361-F3708-E250
500GB 7.200rpm, <9,5ms, 64MB Cache	S26361-F3708-E500
1000GB 7.200rpm, <9,5ms, 64MB Cache	S26361-F3708-E1000
max. 4x/6x per system	

SAS 6Gb/s 2.5" with hot plug/hot replace tray	
300GB 10000rpm, <4,5ms, 32MB Cache	S26361-F5247-E130
450GB 10000rpm, <4,5ms, 32MB Cache	S26361-F5247-E145
600GB 10000rpm, <4,5ms, 32MB Cache	S26361-F5247-E160
900GB 10000rpm, <4,5ms, 32MB Cache	S26361-F5247-E190
1,2TB 10000rpm, <4,5ms, 64MB Cache	S26361-F5247-E112
146GB 15krpm, <4,5ms, 32MB Cache	S26361-F4482-E514
300GB 15krpm, <4,5ms, 32MB Cache	S26361-F4482-E530
450GB 15krpm, <3,0ms, 64MB Cache	S26361-F4482-E545
600GB 15krpm, <3,0ms, 64MB Cache	S26361-F4482-E560
max. 4x/6x per system	

as soon as available
 as soon as available

Section VI b) Hard Disk Drives for Type 2 (LFF/3.5") Base Units



Using Type 2 Base Unit up to 2 SATA LFF (3.5") hard disks can be configured.

2x

ECO SATA 6Gb/s HD 3.5" non hot plug	
250GB 7.200rpm, AF, <9,0ms, 16MB Cache	S26361-F3701-E250
500GB 7.200rpm, AF, <9,0ms, 16MB Cache	S26361-F3701-E500
Choose up to 2 order codes above.	

Business Critical (BC) SATA 6Gb/s HD 3.5" non hot plug	
500GB 7.200rpm, <9,0ms, 64MB Cache	S26361-F3671-E500
1000GB 7.200rpm, <9,0ms, 64MB Cache	S26361-F3671-E1000
2000GB 7.200rpm, <9,0ms, 64MB Cache	S26361-F3671-E2000
3000GB 7.200rpm, <9,0ms, 64MB Cache	S26361-F3671-E3000
4000GB 7.200rpm, <9,0ms, 64MB Cache	S26361-F3671-E4000
Choose up to 2 order codes above.	

E

E

Section 8 VII SAS-Controller Low Profile

Section VIII Disk Array

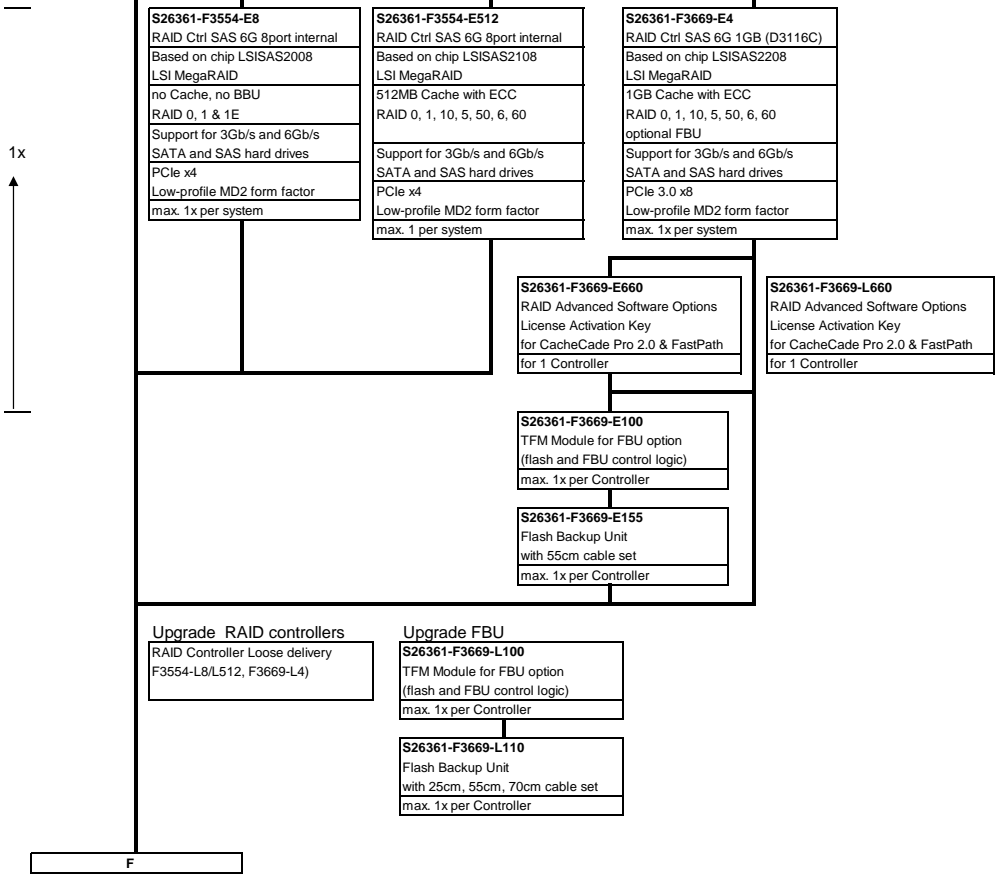
SATA Configuration

On board Hot Plug
 SATA RAID Controller
 RAID 0, 1
 MegaSR integrated into Intel C224
 (Lynx Point Standard)
 4-channel SATA RAID Controller
 max. 600MB/s, with cable
 1 HD per channel max.

SAS or SATA Configuration

- If you want to use SAS harddisks one SAS-Controller is required.
Mix of ECO SATA with SAS HDDs is not possible
- S26361-F3669-E2/E3 does not support
3.5" ECO SATA HDD (S26361-F3701-E250/E500)
- S26361-F3257-E4 4 port SAS RAID Controller - only for SAS HDDs!
up to 2TB support only!
- you can choose between 3 types of 8 port SAS controller for the Base Unit:
 - LSI 2008 based Modular RAID 0,1 (IME)
 - LSI 2108 based Modular RAID 5,6
 - LSI 2208 based Modular RAID 5,6
 if you want to use SAS harddisks or more than 4 harddisks, then one Controller is required
 On special request based on customising projects up to 2 SATA 2.5" SSDs can be configured without a controller
S26361-F3669-E4 does not support 3.5" ECO SATA HDD (S26361-F3700-E250/E500)

Controller for 1 to 4/6 SFF (2.5") HDD; mandatory for SAS HDD's



F

F

Section IX Communication / Network

2x on-board LAN Controller
 Fast Ethernet Controller on-board
 Intel Springville + Clarkville
 ext: 2x RJ 45-connector



Teaming: Failover, Load Balancing
 The Intel LAN server adapter can be used with the on-board controller in Teaming Mode. Two onboard LAN ports can likewise educate a team.



1Gbit/s Ethernet Adapter

max 2

S26361-F4610-E202 (I350-T2) Gbit Ethernet Controller Dual 1000TX LP PLAN CP 2x1Gbit Cu Intel I350-T2 LP Intel Powerville based 2 port Server Ad. PCIe x4, Low Profile low profile (LP) bracket ext: for RJ45-plug, Cat 5 max. 2x per system
--

S26361-F4610-E204 (I350-T4) Gbit Ethernet Controller Quad 1000TX LP PLAN CP 4x1Gbit Cu Intel I350-T4 LP Intel Powerville based 4 port Server Ad. PCIe x4, Low Profile low profile (LP) bracket ext: for RJ45-plug, Cat 5 max. 2x per system
--

S26361-F3516-E201 (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. 2x per system

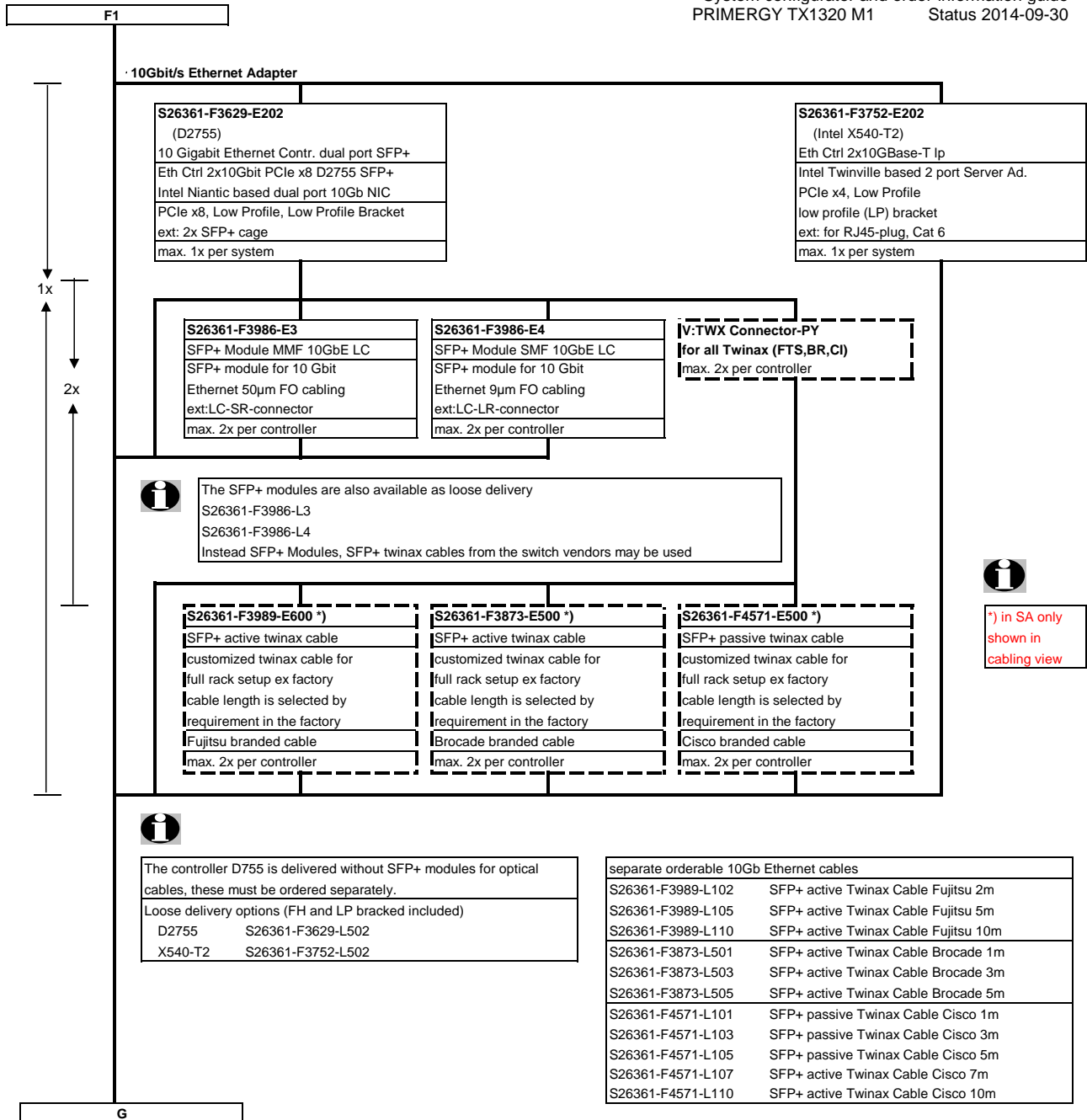


For deliveries to China with CCC label only **S26361-F3516-E1: GE controller 1000TX** is allowed within the configuration. All other controllers can be ordered as loose delivery only!



Loose delivery with FH and LP bracket:
 I350-T2 S26361-F4610-L502
 I350-T4 S26361-F4610-L504
 Loose delivery with LP bracket:
 Shelter Island S26361-F3516-L201


F1



H


Section **XI** System management options

S26361-F1790-E243
iRMC S4 advanced pack
integrated remote management controller activation key for graphical console redirection and remote media redirection max. 1x per system

 iRMC S4 (integrated Remote Management Controller) onboard Server Management Controller with dedicated 10/100/1000 Service LAN-port and integrated graphics.

Section **XII** Miscellaneous

S26361-F1380-L120
Security Cover
to lock all connectors of the I/O-shield including screw lock

 only FJ ,Japan

I

Section XIII Country specific power cords / Kits

S26361-F3301-E120
 CCC certification for China



Since beginning of 2012 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

S26361-F1452-E100
 REGION KIT APAC/EMEA/India
 For Shipments to Asia pacific, EMEA or India regions
 1x per system

S26361-F1452-E110
 REGION KIT JP
 For Shipments to Japan regions
 1x per system

S26361-F1452-E130
 REGION KIT America
 For Shipments to America
 1x per system



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.

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

max.
 1 x



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



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



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



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:

USB standard Keyboard KB521		USB professional Keyboard KBPC PX ECO
S26381-K521-E170	Switzerland	S26381-K341-E170
S26381-K521-E104	Czech/Slovak	S26381-K341-E104
S26381-K521-E120	Germany	S26381-K341-E120
S26381-K521-E180	Spain	S26381-K341-E180
S26381-K521-E140	France	S26381-K341-E140
S26381-K521-E165	United Kingdom	S26381-K341-E165
S26381-K521-E175	Portugal	
S26381-K521-E185	Italy	S26381-K341-E185
S26381-K521-E154	Sweden / Finland	S26381-K341-E154
S26381-K521-E110	USA	S26381-K341-E110

Optional Mouse

S26381-K457-E100	Mouse M510 black
S26381-K457-E101	Mouse M510 grey

Change Report

Date	Order number	Changes
2014-08-27	S26361-F5524-E80	80GB SSD removed.
2014-08-11		added partnumber for S26361-F5535-E/L1 for extention box
2014-08-01		First Release