

PRIMERGY TX2540 M1

System configurator and order-information guide

Contents

Instructions
Configuration diagram
Configurator

I Basic unit

II Processor

III Memory

IV Graphics

V Accessible drives

VI Hard disk drives

VII External SAS or SCSI Disk Array

VIII Internal Disk Array

IX Fiberchannel

X Communication/Network

XI System Management Products (RemoteView)

XII Miscellaneous

XIII Country specific power cord



Change report

PRIMERGY Server

Instructions

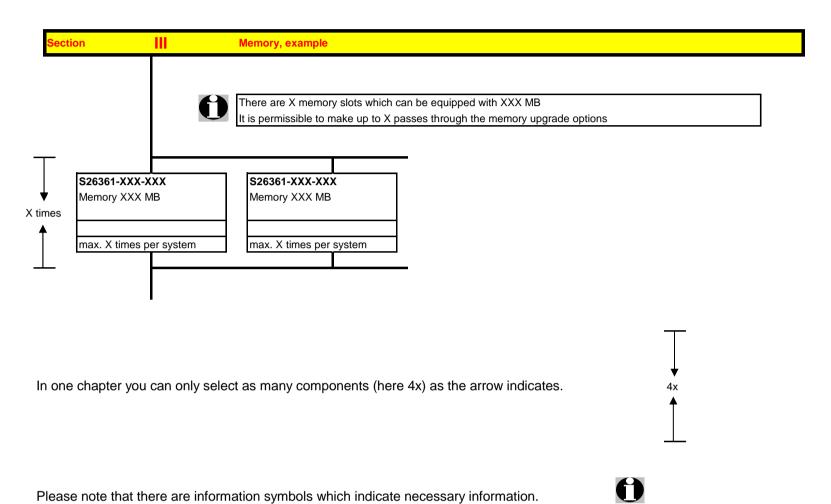
This document contains basic product and configuration information that will enable you to configure your system via PC-/System-Architect

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.



Further information in the internet see:

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

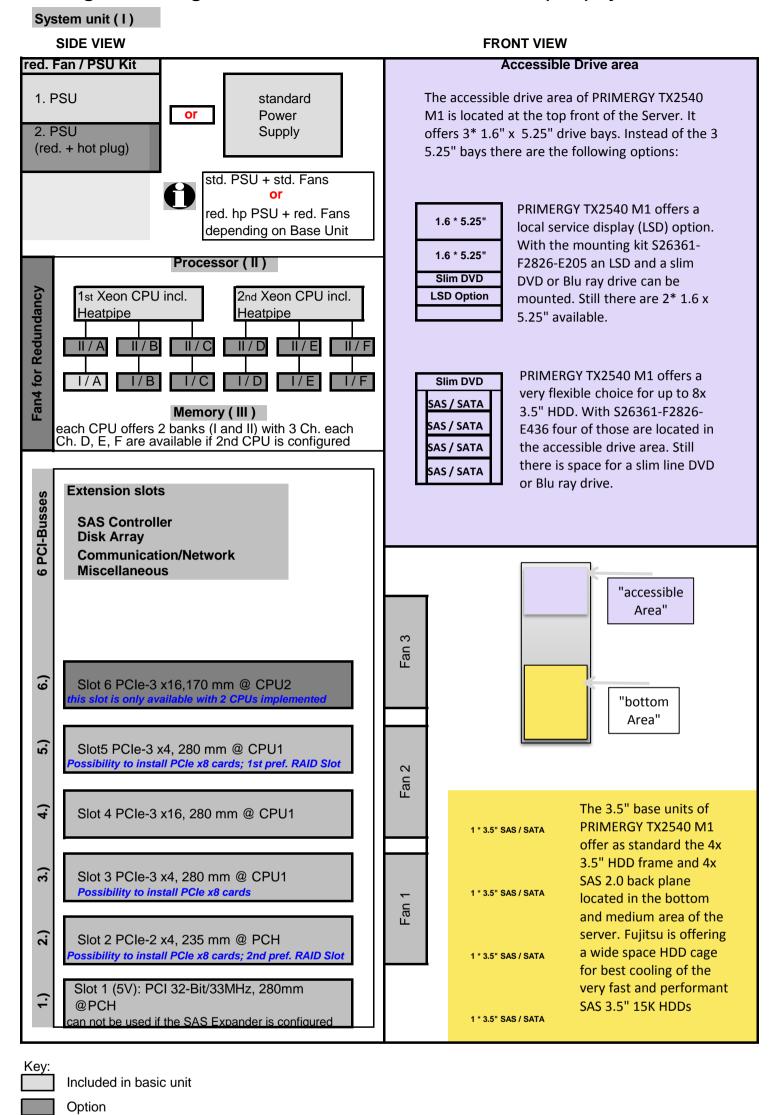
https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/Pages/default.aspx

(extranet)

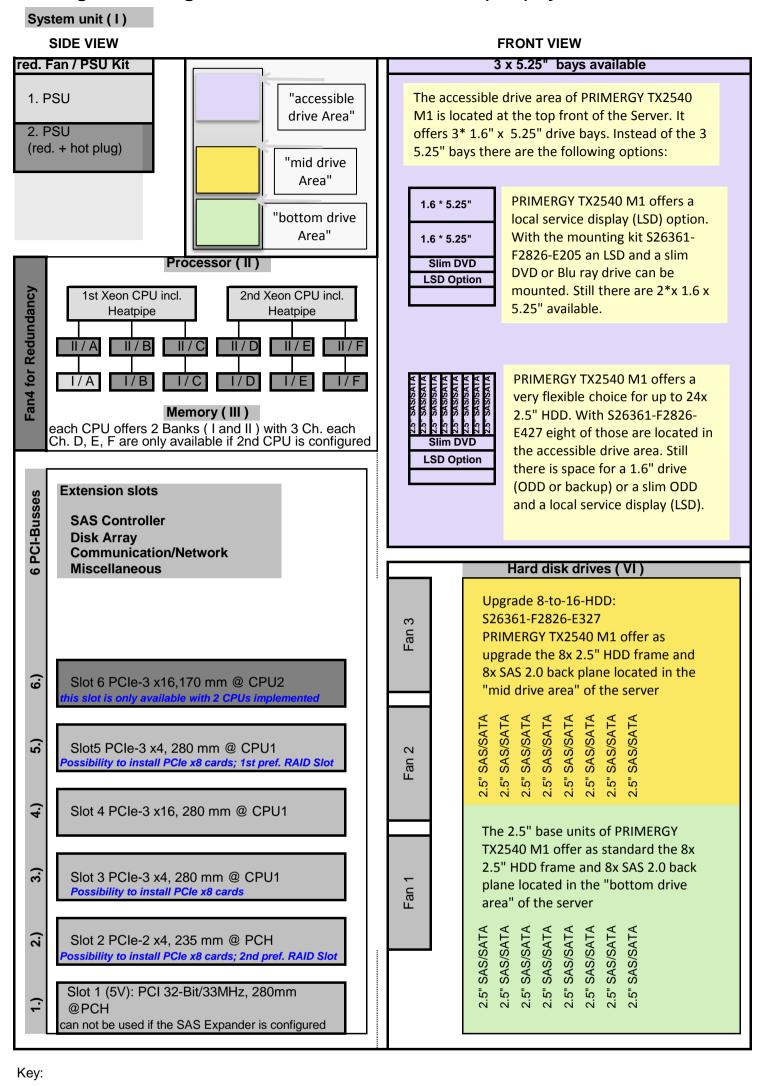
Prices and availability see price list and PC-/System-Architect. Subject to change and errors excepted.

cnfgTX2540M1.xlsx / Instructions 2 of 22

Configuration diagram PRIMERGY TX2540 M1 SATA LFF (3.5") System Unit



Configuration diagram PRIMERGY TX2540 M1 SFF (2.5") System Unit



Included in basic unit

Option

Edition 03th of April 2017 PRIMERGY TX2540 M1

Start PRIMERGY TX2540 M1

Section I -- Base unit

Tower or Rack Server base unit including:

Systemboard D3099-B

Intel® C600 Series Platform Controller Hub (codename Patsburg)

supports up to two Xeon E5-2400 v2 series (up to 10 cores, socket LGA1356) with 1 serial QPI link (Quick Path Interconnect)

12 DIMM sockets supporting up to 192GB DDR3 (up to 1600MHz) (Chipset can support up to 768GB, release pending)

iRMC S4 (integrated Remote Management Controller) on-board server management controller with dedicated 10/100/1000 Service LAN-port (with Realtek Phy 8211E) and integrated graphics controller (max. Resolution: 1920 x 1080 at 16 bpp)

The Service LAN-port can be switched alternatively on standard Gbit LAN port

6 PCIe slots

- 1x PCIe-3 *16 (only with CPU2)
- 1x PCle-3 *16
- 2x PCIe-3 *4 (mechanical *8)
- 1x PCle-2 *4 (mechanical *8)
- 1x PCI 32Bit 33MHz (support for 3.3V and 3.3+5V; ! no support of 5V-only cards)
- 1x RS-232-C (serial, 9pin) (usable for BMC or OS or shared)
- 1x VGA (15 pin)
- 9x USB 2.0 (UHCI) with 480MBit/s (4x external rear, 2x external front, 3x on Board for backup, CCR, UFM)
- 2x LAN RJ45, 1x Service-LAN RJ45

4-port SATA 2.0 controller (SW-RAID 0,1,5, 10) or optional 4 ports for SAS RAID 0/1 (Licence Key required) 2-port SATA 3.0 controller

2x1 Gbit Ethernet LAN on board (Intel i210) supporting iSCSI boot option in System BIOS

two lockable front covers (Tower only)

backplane with 4 (LFF) or 8 (SFF) bays for hot-plug HDs

3 bays 5.25" for accessible drives (half height)

Standard power supply unit (PSU) 800W, up to 90% efficiency ("80-plus")

Modular hot plug power supply unit 450W up to 94% efficiency (platinum)

Modular hot plug power supply unit 800W up to 94% efficiency (platinum) Modular hot plug power supply unit 800W up to 96% efficiency (titanium)

3 x 120mm System fan (No hot-plug, no redundancy) - option for a 4th fan for N+1 redundancy

ServerView Suite DVD Pack incl. Installation SW, Management SW and Serviceability SW

Floorstand System

FF Base Unit standard S26361-K1463-V101

- 3 std fans and std PSU
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HDs incl. cables for connection to the modular or onboard controllers

LFF Base Unit redundant

S26361-K1463-V201

- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HDs incl. cables for connection to the modular or onboard controllers

S26361-K1463-V401 SFF Base Unit redundant

- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HDs incl. cables for connection to the modular RAID controllers

S26361-F3552-E6 TPM Module Trusted Platform Module, Use according to import restrictions max. 1x per system В

Rack System

LFF Base Unit redundant S26361-K1463-V601

- 3 std fans plus 1 std fan for redundancy - 1 hp PSU has to be added
- 4-port SAS backplane for 4x 3.5" hot plug SAS or SATA HDs incl. cables for connection to the modular or onboard controllers

SFF Base Unit redundant S26361-K1463-V801

- 3 std fans plus 1 std fan for redundancy
- 1 hp PSU has to be added
- 8-port SAS backplane for 8x 2.5" hot plug SAS or SATA HDs incl. cables for connection to the modular RAID controllers

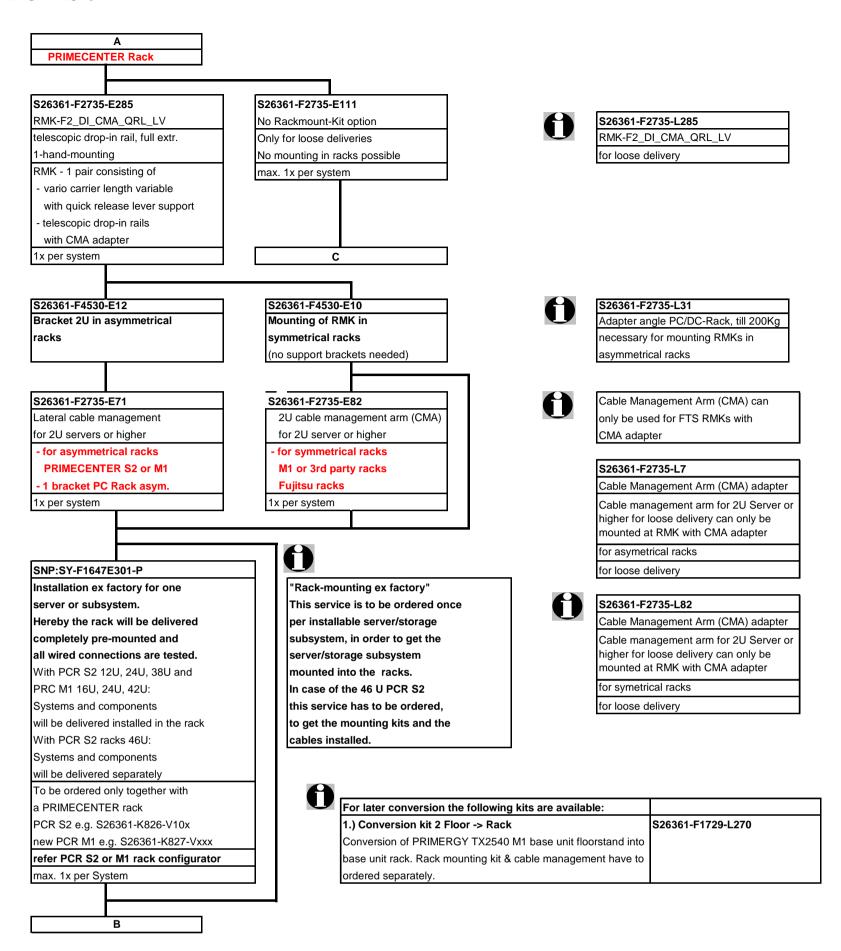
S26361-F3552-E6 TPM Module Trusted Platform Module, Use according to import restrictions max. 1x per system

S26361-F3552-L6

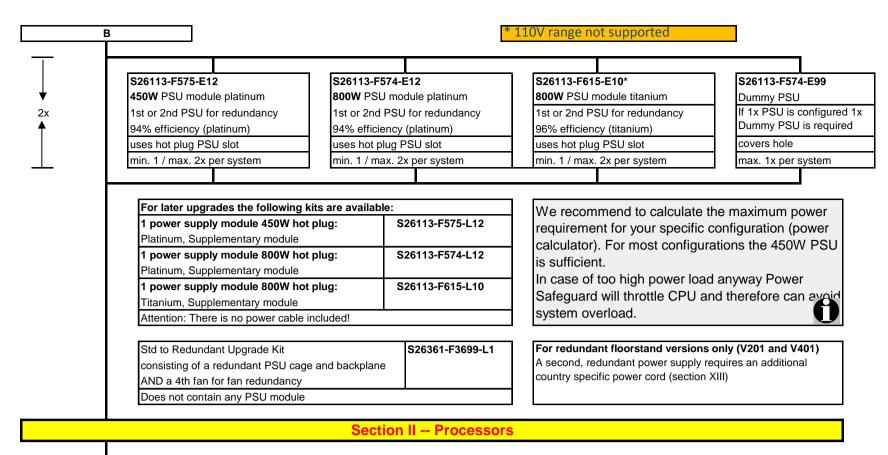
TPM Module

Trusted Platform Module, Use according to import restrictions

max. 1x per system



cnfgTX2540M1.xlsx / Base_PSU_CPU 6 of 22



There are 2 processor sockets available.

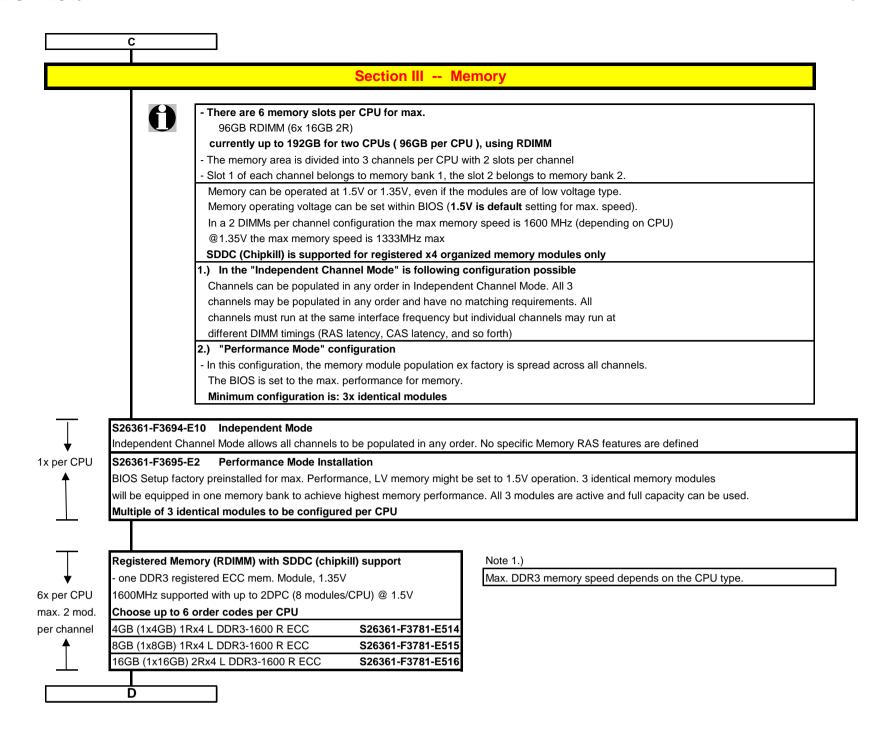
The first socket must always be equipped with the first CPU which can be selected via configurator

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

Max. two CPUs can be selected per basic unit		
One of following CPUs 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	l	
Basic 4C CPUs		
- 1x 64-bit Intel Xeon (10MB shared TLC = Third Level Cache)		
1333 MHz DDR3 Bus, 6,40 GT/s QPI Bus and passive heat sink		
occupies socket for one CPU		
Xeon E5-2403v2 4C/4T 1.80GHz 10MB 6.40GT/s 1333MHz 80W	S26361-F3828-E180	
Xeon E5-2407v2 4C/4T 2.40GHz 10MB 6.40GT/s 1333MHz 80W	S26361-F3828-E240	
Standard Turbo 6/8C CPUs		
1x 64-bit Intel Xeon (15/20MB shared TLC = Third Level Cache); Hyper-Threading (HT);		
1600 MHz DDR3 Bus, 7,20 GT/s QPI Bus and passive heat sink		
occupies socket for one CPU		
Xeon E5-2420v2 6C/12T 2.20GHz 15MB 7.20GT/s 1600MHz 80W S26361-F38		
Xeon E5-2430v2 6C/12T 2.50GHz 15MB 7.20GT/s 1600MHz 80W	S26361-F3829-E250	
Xeon E5-2440v2 8C/16T 1.90GHz 20MB 7.20GT/s 1600MHz 95W	S26361-F3829-E190	
Advanced Turbo+ 8C/10C CPU		
 1x 64-bit Intel Xeon (20MB shared TLC = Third Level Cache); Hy 	per-Threading (HT);	
1600 MHz DDR3 Bus, 8,00 GT/s QPI Bus and passive heat sink		
occupies socket for one CPU		
Xeon E5-2450v2 8C/16T 2.50GHz 20MB 8.00GT/s 1600MHz 95W		
Xeon E5-2470v2 10C/20T 2.40GHz 25MB 8.00GT/s 1600MHz 95V	N S26361-F3830-E240	
Low Power 6C CPU		
 1x 64-bit Intel Xeon (15MB shared TLC = Third Level Cache); Hy 	per-Threading (HT);	
1333 MHz DDR3 Bus, 7,20 GT/s QPI Bus and passive heat sink		
occupies socket for one CPU		
Xeon E5-2430Lv2 6C/12T 2.40GHz 15MB 7.20GT/s 1600MHz 60\	N S26361-F3831-E240	
C		

cnfgTX2540M1.xlsx / Base_PSU_CPU 7 of 22



cnfgTX2540M1.xlsx / Memory 8 of 22

Memory Configuration PRIMERGY TX2540 M1

Each CPU offers 6 Slots for DDR3 Memory Modules organised in 2 Banks and 3 Channels.

If you need more than 6 Slots you have to configure the 2nd CPU.

Depending on the amount of memory configured you can decide between 2 basic modes of operation (see explanation below).

Mode	Configuration	RDIMM	Application
		х4	
SDDC (chipkill) support	any	yes	detect multi-bit errors
Independant Channel Mode	1, 2 or 3 Modules per Bank	yes	offers max. flexibility, upgradeability, capacity use UDIMM modules for lowest cost
Performance Mode	3 identical Modules / Bank	yes	offers maximum performance and capacity

^{*)} For the delivery ex works the system will be prepared with dedicated BIOS setting.

Capacity	Configuration	RDIMM	Notes
Min. Memory per CPU	1 Module / CPU	4GB	with one CPU
Max. Memory per CPU	6 Modules / CPU	96GB	with one CPU
Max. Memory per System	12 Modules / System	192GB	if second CPU is configured

Memory-Speed:

Max. DDR3 memory speed depends on the speed of the CPU

Real maximum memory-bus speed depending on CPU type and voltage setting (BIOS; default is 1.5V)

Mem. Speed provided by CPU		RDIMM 1600MHz		
Voltage setting (BIOS)	1.5V 1.35V		35V	
DIMM per Channel (DPC)	1	2	1	2
CPU with 1600MHz DDR3 Bus	1600	1600	1333	1333
CPU with 1333MHz DDR3 Bus		1333	1333	1333

Configuration hints:

- The memory sockets on the systemboard offer a color coding:

Bank I black sockets blue sockets

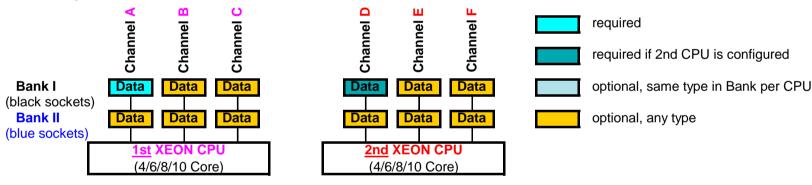
- A so called Bank consits of 1 memory module on every Channel available on one CPU (examples see below)

Bank I on CPU 1/2 up to 3 memory modules connected to Channel A - F on the 1st/2nd CPU

up to 3 memory modules connected to Channel A - F on the 1st/2nd CPU

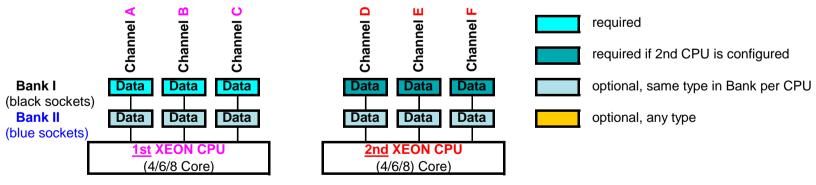
- See below and next page for a detailed descriptions of the memory configuration supported.

1. Independent Channel Mode



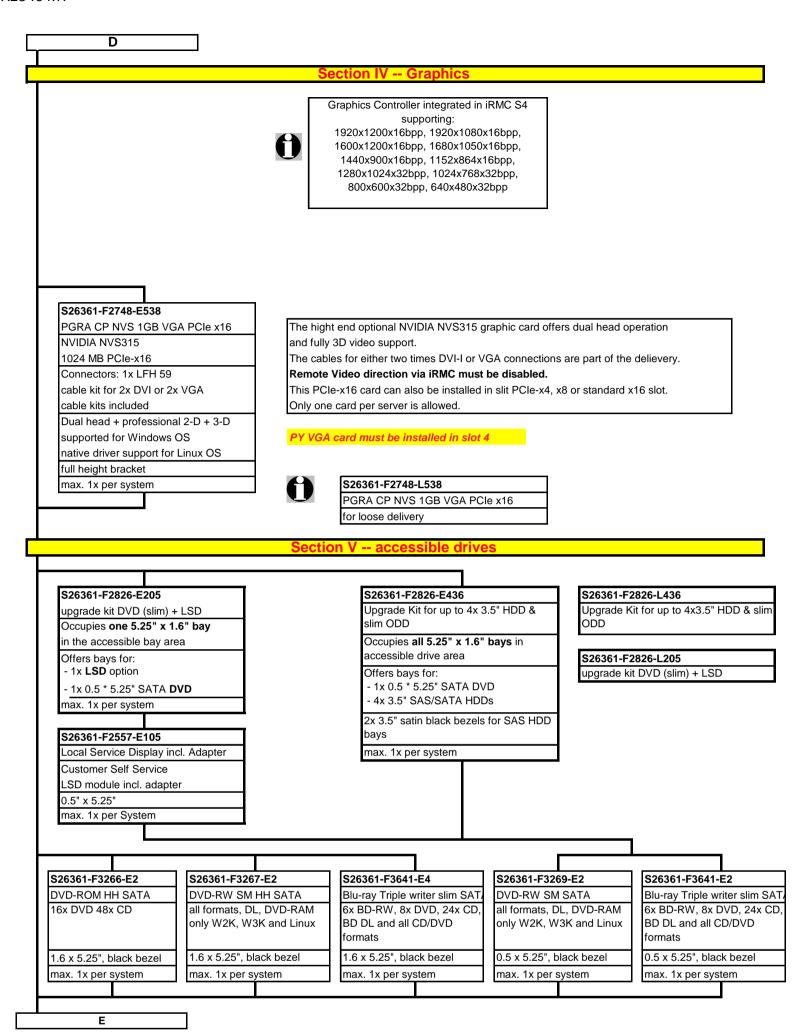
Independent Channel Mode allows all channels to be populated in any order Can run with differently rated DIMMs and use the settings of the slowest DIMM installed in the system

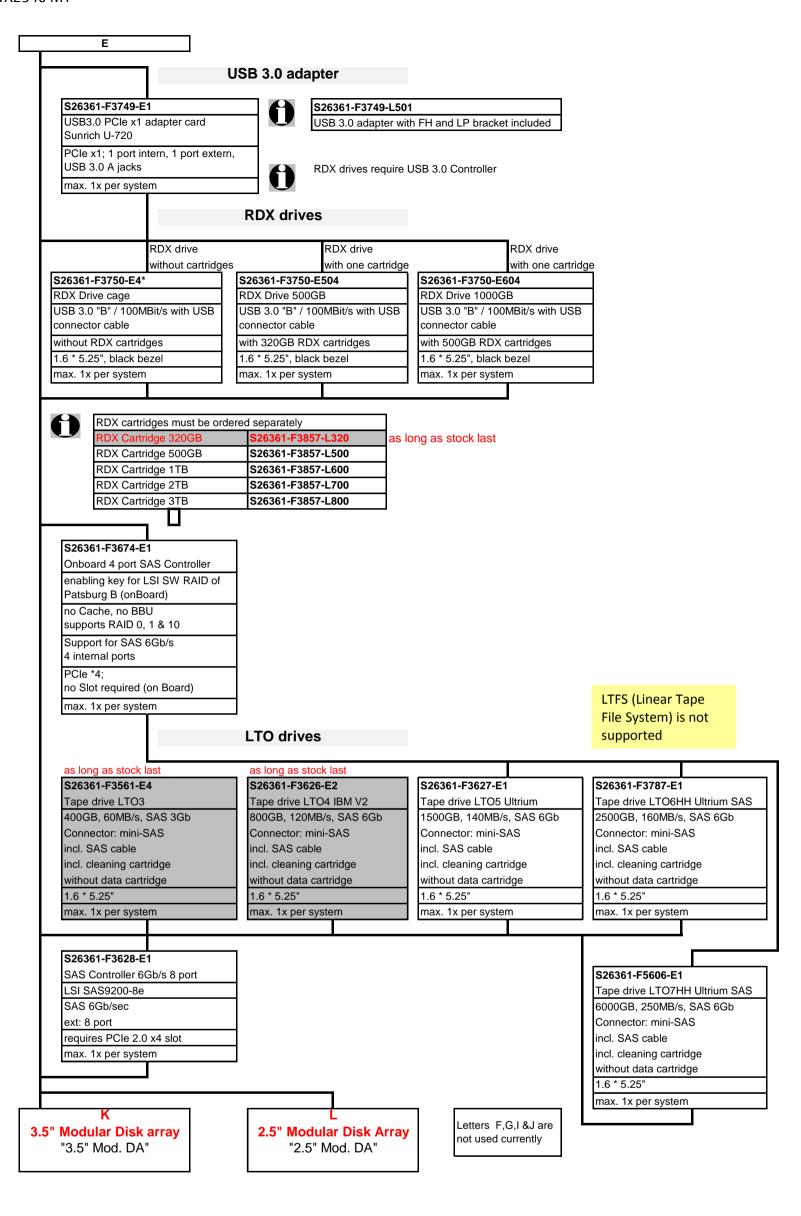
2. Performance Channel Mode

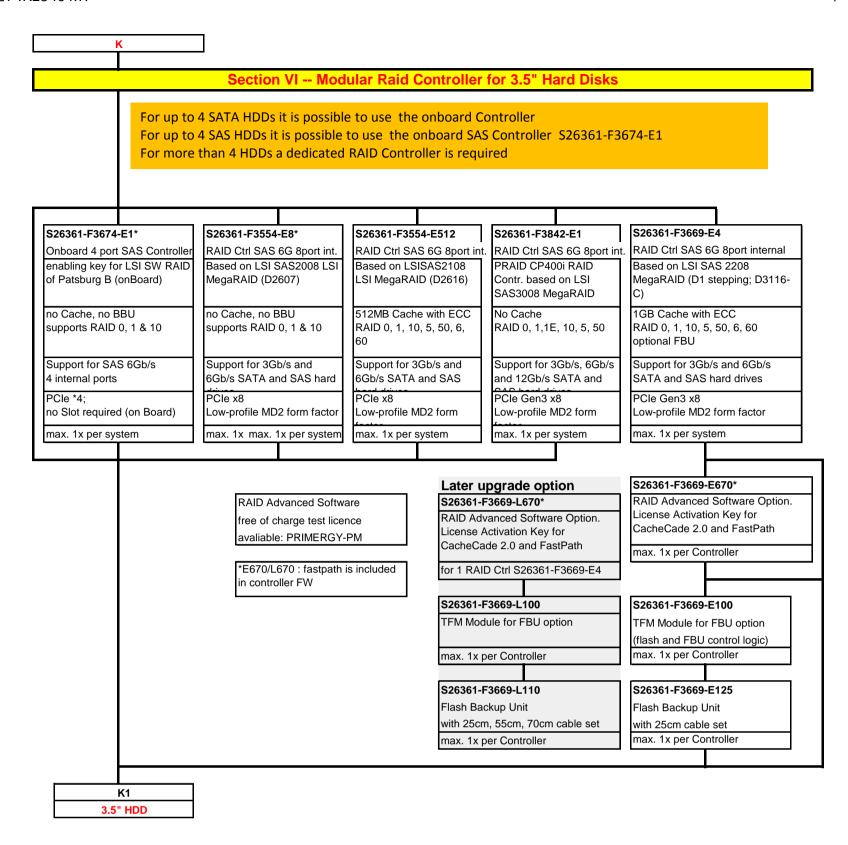


Performance Channel Mode requires identical modules on all channels of each Bank per CPU. If this mode is used, a multiple of 3 identical modules has to be ordered.

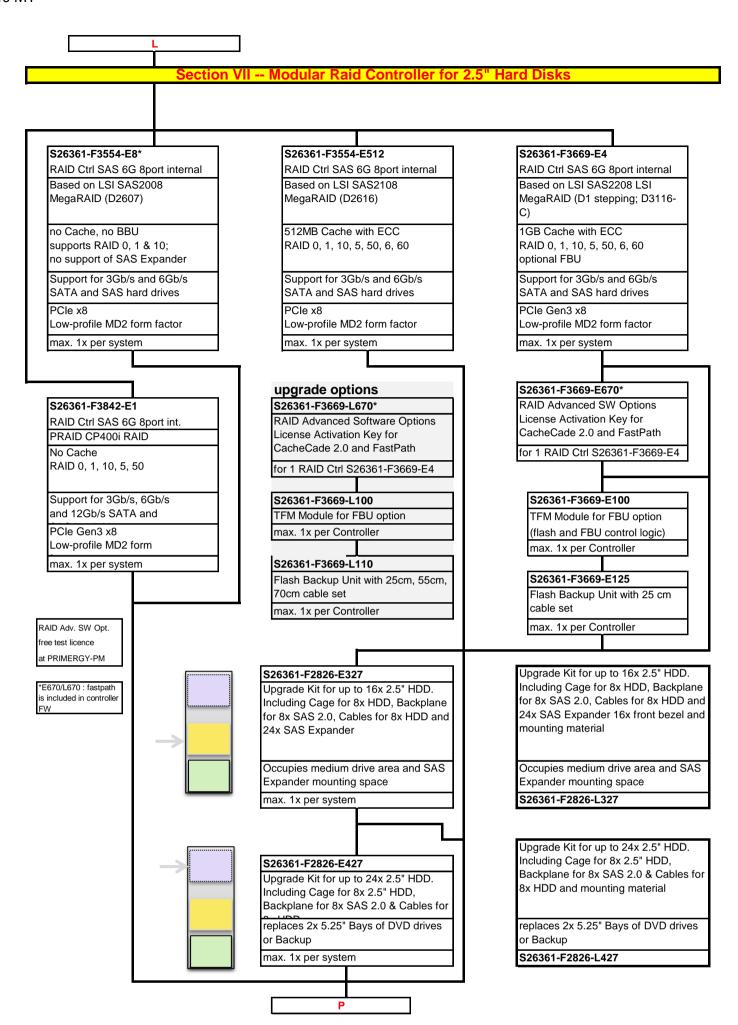
cnfgTX2540M1.xlsx / Memory 9 of 22



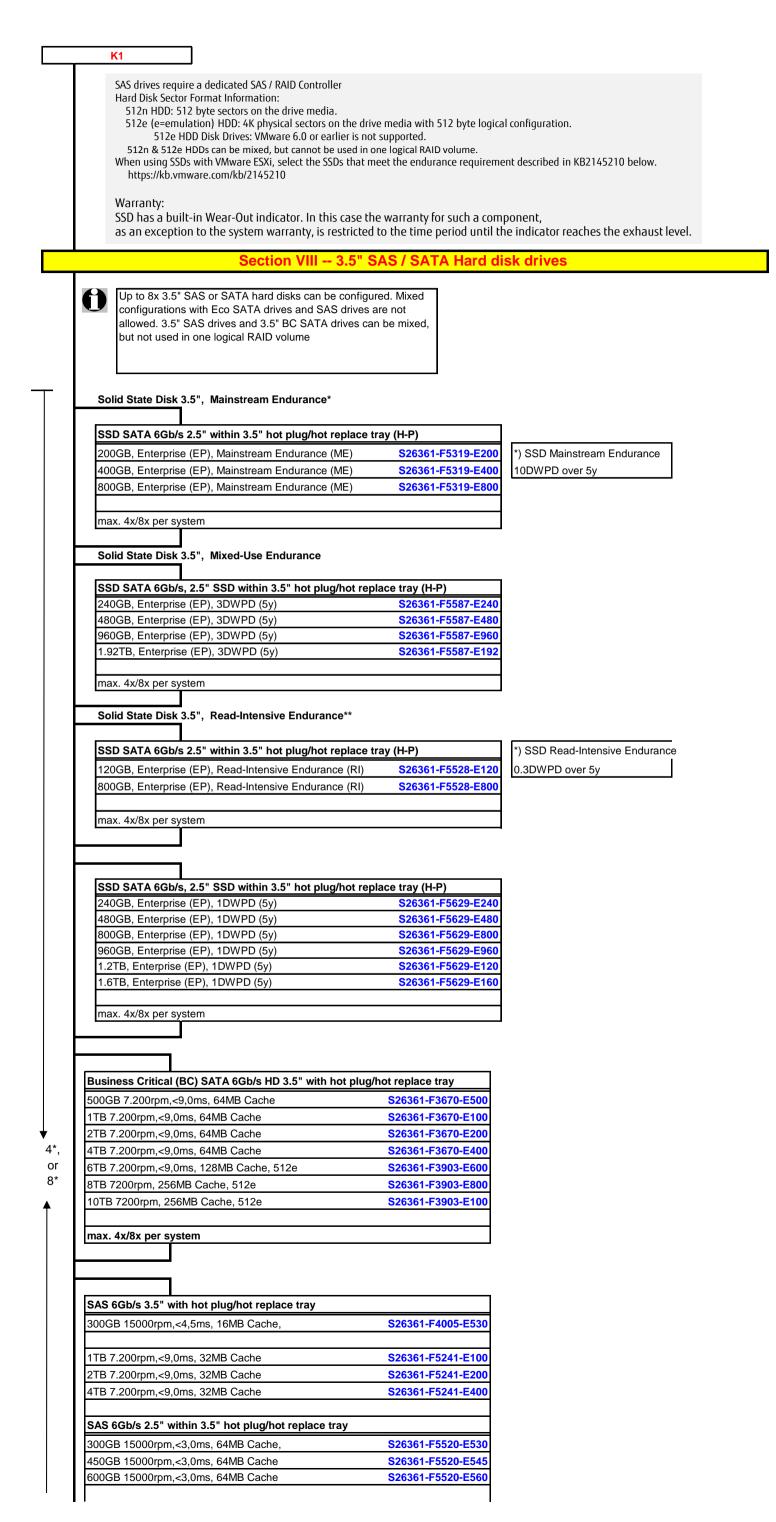




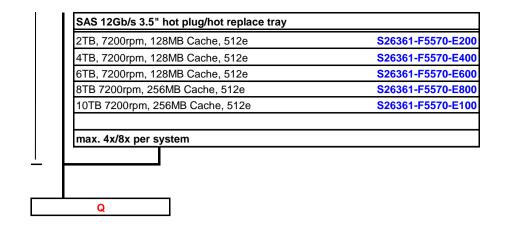
cnfgTX2540M1.xlsx / 3.5" Mod. DA



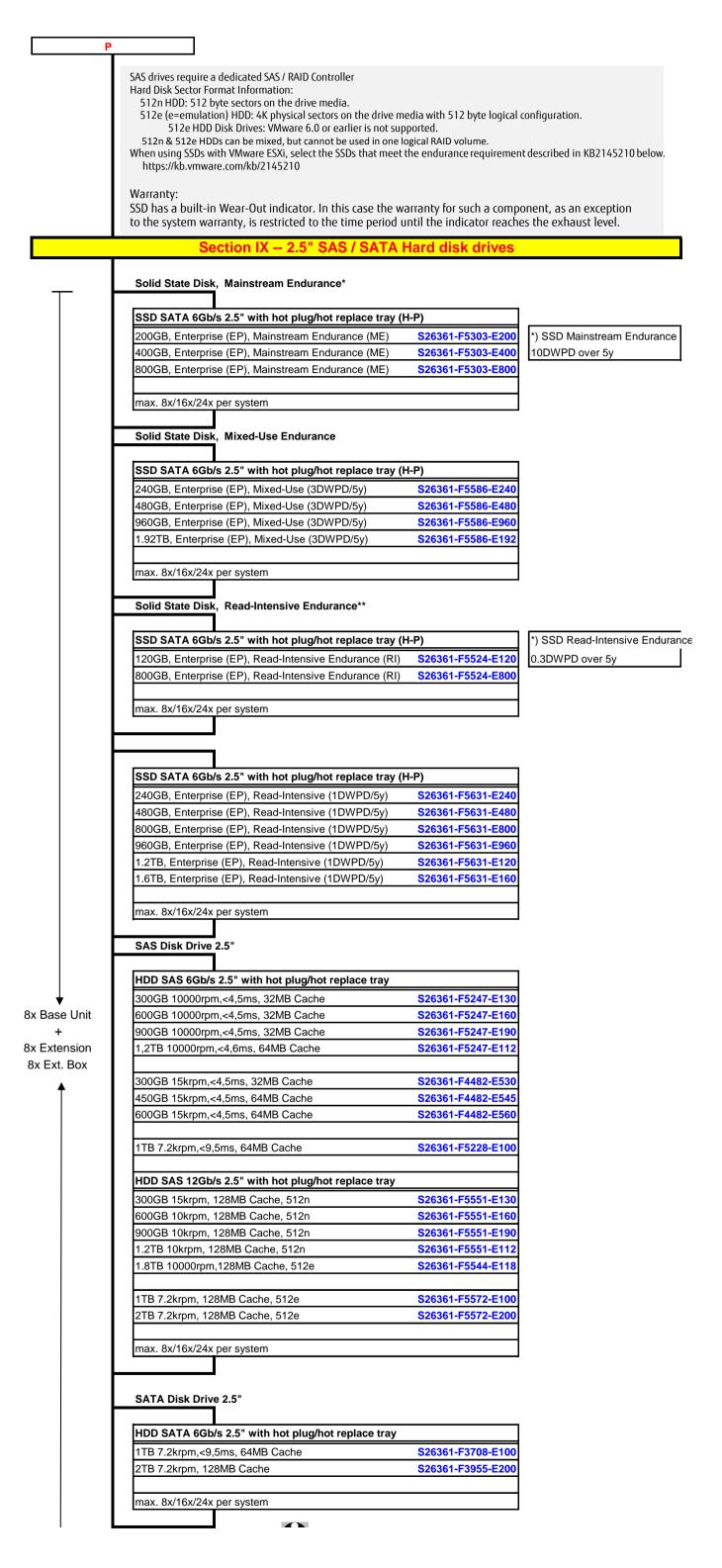
cnfgTX2540M1.xlsx / 2.5" Mod. DA



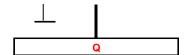
cnfgTX2540M1.xlsx / 3.5" HD & SSD

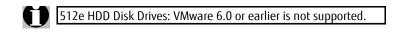


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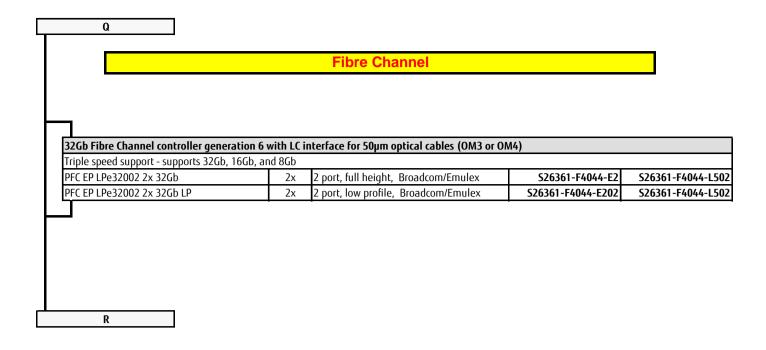


cnfgTX2540M1.xlsx / 2.5" HD & SSD 16 of 22

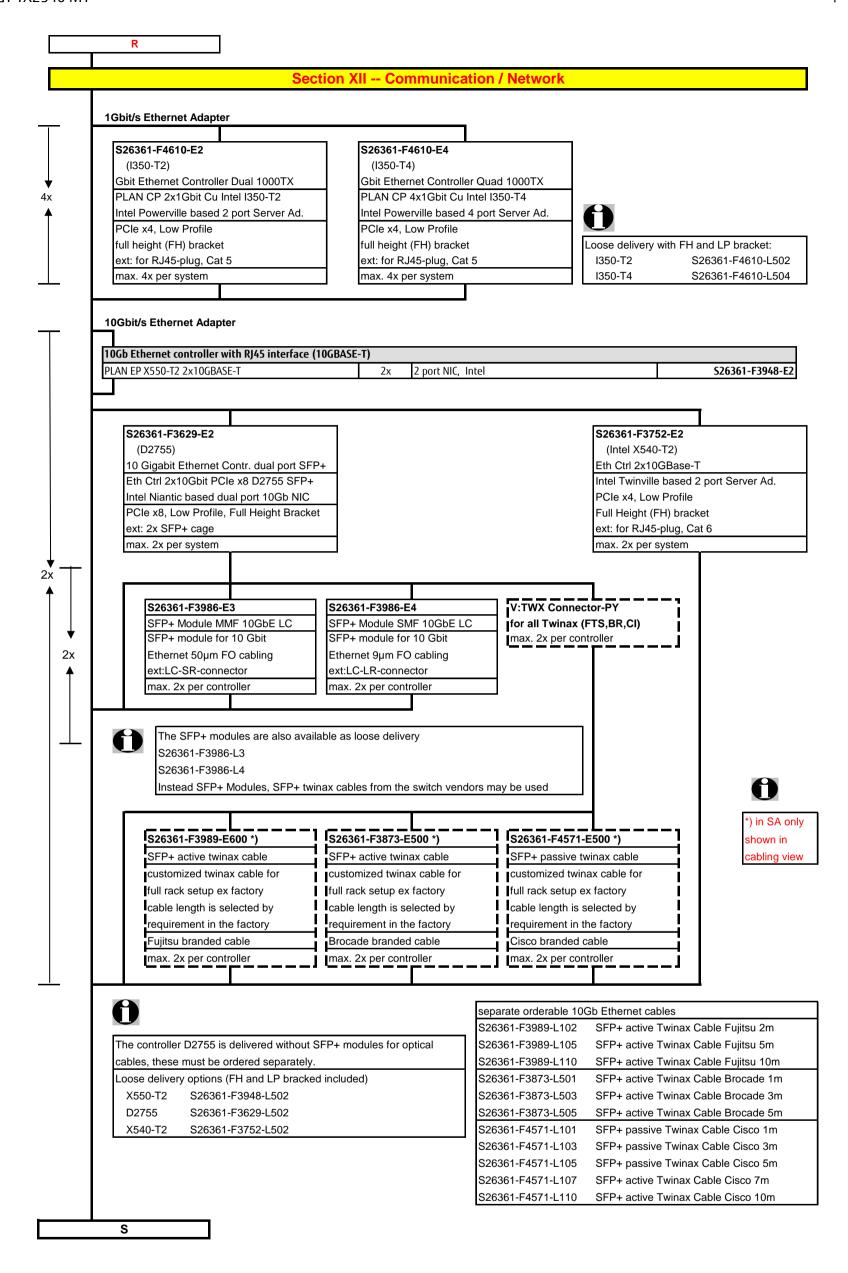


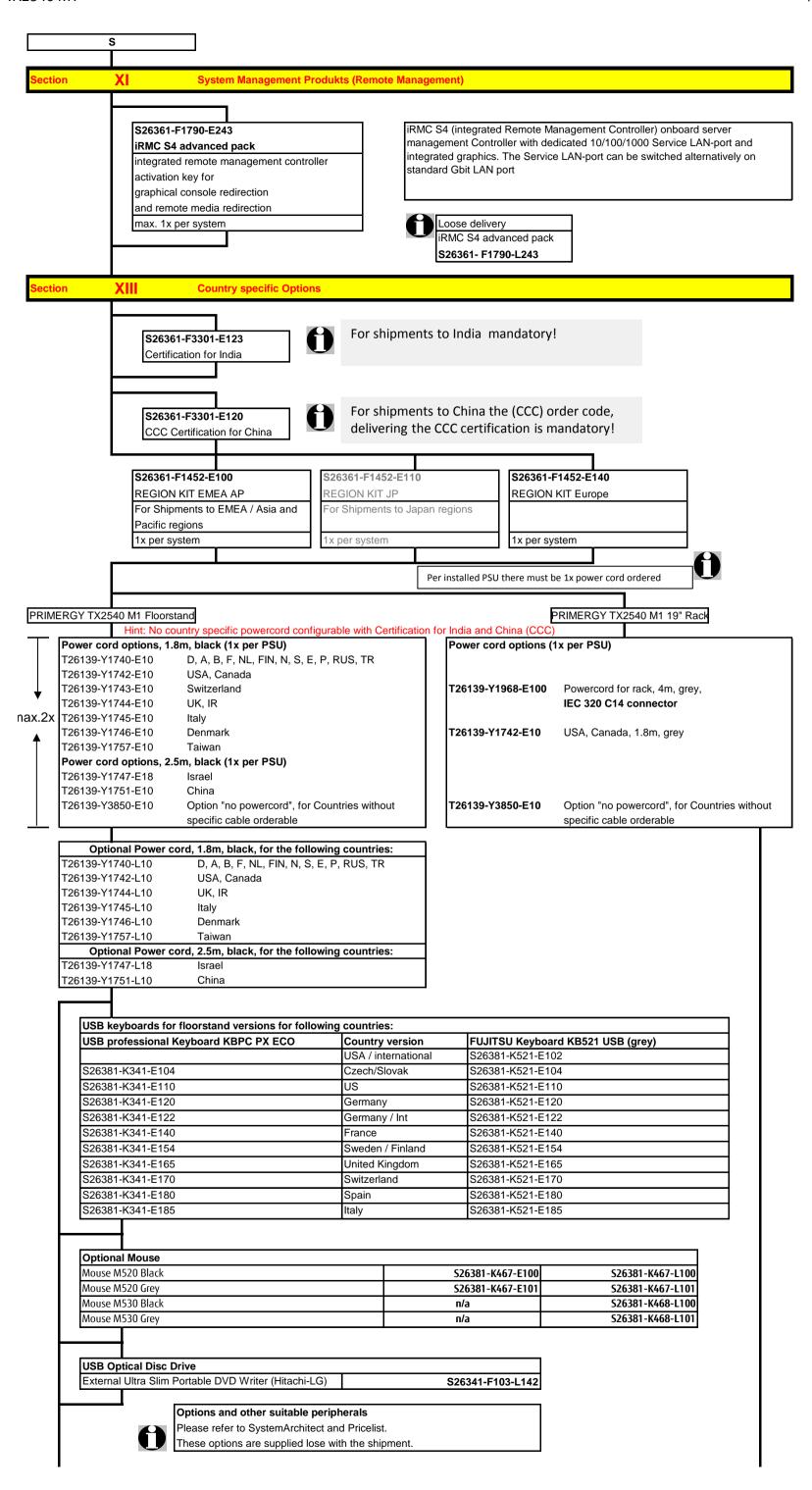


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cnfgTX2540M1.xlsx / FC 18 of 22





End PRIMERGY TX2540 M1

End PRIMERGY TX2540 M1

Change Report

		Changes
•		Changes
06.06.2017	HD & SSD	Note updated, F5586/F5587-E120 / F5524/F5528-E240/E480 removed
	USB Devices	Added external HLDS ODD
27.03.2017	F5303-E100 / F5247-E145 / F5228-E5	removed
27.03.2017	F5319-E100 / F3670/F5241-E300 / F4	removed
15.03.2017	S26361-F3948-E2/L502	added
01.02.2017	S26361-F3561-E4	added comment (pre-removed) LTO3 drives
01.02.2017	S26361-F3626-E2	added comment (pre-removed) LTO4 drives
01.02.2017	S26361-F3857-L800	added RDX 3TB capacity, removed RDX 320GB capacity
2017-01-06	S26361-F5586/F5587-*	added
2016-12-22	S26361-F4482-E514	removed
2016-12-22	S26361-F5629/F5631-*	added
2016-12-22	S26361-F3903/F5570-E800/E100	added
2016-12-13	T26139-Y1747-E18/L18	added power cord for Israel
2016-11-24	FC folder	New Fibre Channel Controller added
2016-11-07	S26341-F103-L140	USB ODD added
2016-09-15	S26361-F5606-E1/L1	LTO7 drive added.
05.08.2016	S26361-F3955-E200	added
10.05.2016	S26361-F3669-E660/L660	removed
05.04.2016	T26139-Y1757-E10	added power cord for Taiwan
21.03.2016	S26361-F1452-E140	added region kit Europe
18.03.2016	S26381-K468-L100	Added M530 mouse black
14.03.2016	T26139-Y1742-E10	changed color to black
08.03.2016	S26361-F3669-E670	added Advanced SW Option CacheCade with FastPath for free
17.12.2015	S26361-F5570-E200/E400/E600	Added 3.5" SAS 12G 7.2K HDD 512e 2TB, 4TB and 6TB
17.12.2015	S26361-F5572-E100/E200	Added 2.5" SAS 12G 7.2K HDD 512e 1TB and 2TB
10.12.2015	USB accessories	S26381-K457-E101/*-L101 mouse option removed (EOL)
	USB accessories	Update of order codes for successor mouse models
21.07.2015	S26361-F5551*	Added 2.5" SAS 12G 10K HDD 512n
	S26361-F2748-E538	EOL of NVS300 End July S26361-F2748-E537 deleted
	S26361-F2826-E436/-L436	Correction of max. amount of slim ODD and 3.5" HDD: from "8x" to "4x".
	T26139-Y1751-E10	China cable added and country specific power cords updated
	S26361-F3842-E1	Added PRAID CP400i
	S26361-F5544-E118	Added 2.5" SAS 12G 10K HDD 512e 1.8TB
	S26361-F5520-E*	Added 2.5" SAS 6G 15K HDD up to 600GB within 3.5" Carrier
	S26361-F3903-E600	Added HD SATA 6G 6TB 7.2K 512e HOT PL 3.5" BC
		Read-Intensive SSDs added
	S26361-F2748-E538	PGRA CP NVS 1GB VGA PCIe x16 added plus EOL dates for predessesor / first delivery
	Acc.drives & HD box	LTO3 - soon available
21.11.2014	Acc.drives & HD box	LTO3 added
07.10.2014	Drive cages	color codes of drive cages adopted to new style (green = bottom drive, orange = mid drive area, violet = accessible drive area)
26.08.2014	KB K521-E110	added
30.07.2014	S26361-F2735-E82	defined as "can"-position to RMK
	Link to configurator	corrected on folder "instructions"
	S26361-F3787-E1	LTO6 drive: LTFS (Linear Tape File System) is not supported
	S26361-F3301-E123 / -E120	Added 3.5" SATA 6G SSDs
	S26361-F5319-E*	added
	PSAS 9200e	pages deleted
	SW 32 bit / SW 64 bit	corrected Order number S26361-F4530-E10 and S26361-F4530-E12
10.04.2014 01.04.2014		Sheet Comm. Network updated First Release
01.07.2014		- Not Netbade