

PRIMERGY BX600 System Units

System configurator and order-information guide

January 2009

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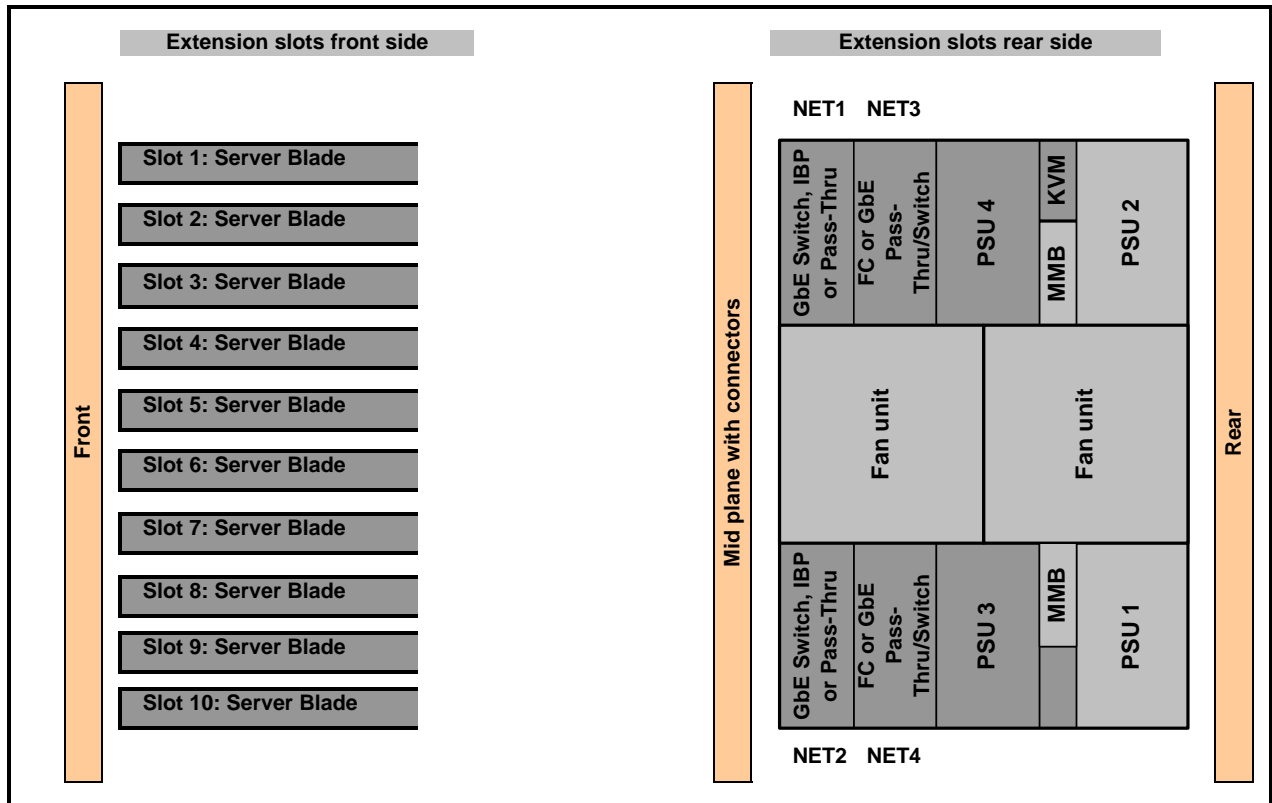
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Change report

PRIMERGY Server

Configuration diagram BX600 S3 System Unit

System Unit (1)



Key:

Included in basic unit Option

Server Blade Mix and Compatibility Matrix for BX600 S3 System Unit

BX600 S3	BX620 S3	BX620 S4	BX630	BX630 S2
BX620 S3	x	x	x	x
BX620 S4	x	x	x	x
BX630 S2 Dual	x	x	x	x
BX630 S2 Quad	x	x	x	x

Switch, IBP and Pass-Thru Blades released for BX600 S3 System Units

EOL (Status 65)

BX600 S2/S3	Downlink ports	Uplink ports	Order number	installable in
1GbE Pass-Thru	10x 1Gbit	10x 1Gbit RJ45	S26361-F3112-E1	NET1/2/3/4
1GbE Switch	10x 1Gbit	6x 1Gbit RJ45	S26361-F3206-E6	NET1/2/3/4
1/10GbE Switch	10x 1Gbit	6x 1Gbit RJ45, 2x 10Gbit XFP	S26361-F3206-E8	NET1/2/3/4
1GbE Switch Cisco	10x 1Gbit	2x 1Gbit RJ45, 4x 1Gbit SFP	S26361-K1234-V200	NET1/2/3/4
1GbE IBP 10/6	10x 1Gbit	6x 1Gbit RJ45	S26361-F3860-E1	NET1/2/3/4
1GbE Switch 30/12	30x 1Gbit	12x 1Gbit RJ45	S26361-F3467-E1	NET1/2/3/4
1GbE IBP 30/12	30x 1Gbit	12x 1Gbit RJ45	S26361-F3859-E1	NET1/2/3/4
10GbE Switch	10x 1Gbit	2x 10Gbit X2	S26361-F3309-E1	NET3/4
2Gb FC Pass-Thru	10x 2Gbit	10x 2Gbit SFP	S26361-F3024-E1	NET3/4
2/4Gb FC Switch	10x 2Gbit	6x 4Gbit SFP	S26361-F3144-E6	NET3/4
2/4Gb FC Switch	10x 2Gbit	4x 4Gbit SFP	S26361-F3144-E4	NET3/4
4Gb FC Pass-Thru	10x 4Gbit	10x 4Gbit SFP	S26361-F3024-E10	NET3/4
4/4Gb FC Switch	10x 4Gbit	6x 4Gbit SFP	S26361-F3144-E16	NET3/4
4/4Gb FC Switch	10x 4Gbit	4x 4Gbit SFP	S26361-F3144-E14	NET3/4

Section I System Units BX600 S3



The System Units BX600 S3 consists of:

- * 7U chassis including
- * Rack mounting kit suitable for
 - PRIMERGY 19" PRIMECENTER Rack, FJ new rack and 3rd party racks (e.g. Rittal)
 - 1 pair of carrier rails and 1 bracket for DC-Rack
- * 2 hot-plug power supplies 2100W at 230V
- * 2 power cords 16A IEC320 C19 -> 16A IEC320 C20, 3.5m length
- * All redundant hot-plug fans at the rear side
 - 2 fan modules each with 2 fans (2+2 redundancy) and 3 fans in every power supply
- * Drives / bays / slots
 - 10 empty slots for 10 hot-plug dual, or 5 quad, or 2 octal Server Blades at front side.
 - 4 empty slots for up to 4x Gbit Ethernet Switch or Pass-Thru Blades at rear side
 - 2 empty slots for two Fibre Channel Switch or Pass-Thru Blades at rear side
 - 2 empty slots for additional hot-plug power supplies at rear side
- * 2 redundant hot-plug Management Blades

External Interfaces:

- 1x RS-232-C (serial, 9 pin) per Management Blade (2 total)
- 1x LAN RJ45 per Management Blade (2 total)
- 1x keyboard (PS/2), 1x mouse (PS/2), 1x VGA (15pin) on the KVM switch, via special cable
- 1x VGA and 2x USB 1.1 at front side of each Server Blade via special cable

For external interfaces of the different Switch and Pass-Thru Blades see sections II and V.

Cables (shipped with each System Unit):

- 1x special cable with 2x USB for external CD/FD and 1x VGA for Server Blade front side connection.
- 1x special cable with 2x PS/2 and 1x VGA for KVM switch

Software:

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

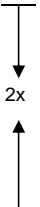


Dual, 4-way and the 8-way Server Blades can be used in mixed configuration within one system unit.
Note: Server Blades can also be ordered for further extension later!
But at least one Server Blade must be integrated in the System Unit ex works.

S26361-K1156-V302
BX600 S3 System Unit
for 19" Racks, with
2x Management Blade S3
2x PSU with power cords
Needs 7 height units (U)



The System Unit includes 2 PSUs and 2 power cords!
(S26361-F3151-E300: 16A IEC320 C19 -> 16A IEC320 C20)
Different power cords can be optional ordered as L-Numbers.
(S26361-F3151-L100 or-L200 or -L300 or -L500).
The included power cords can be used for the socket strips S26361-F2262-E132 (1x3 16A IEC320)
or S26361-F2262-E332 (3x3 16A IEC320) and to different PRIMERGY UPS systems.
Note: UPS must provide at least one 16A IEC320 C20 socket and it must support min. 2100W.
For further details, see PRIMERGY UPS configurator sheets.
For connections out of the rack, there are 3 power cords available (S26361-F3151-L100 or-L200 or -L500).



S26113-F603-E1
Hot plug
power supply module (PSU)
for redundancy (2100W)
inclusive power cord
max. 2x per system unit



The additional PSU is shipped inclusive a power cord!
(S26361-F3151-E300: 16A IEC320 C19 -> 16A IEC320 C20)
It is the same power cord as for the PSUs shipped with the system unit.
Different power cords can be optional ordered as L-Numbers.
(S26361-F3151-L100 or-L200 or -L300 or -L500).



S26361-F3888-L1
Upgrade Kit for BX600 S3
with MMB S2 (-V301/-V303).
To replace MMB S2 by MMB S3.
Contains 2x MMB S3 plus FCB
max. 1x per system unit

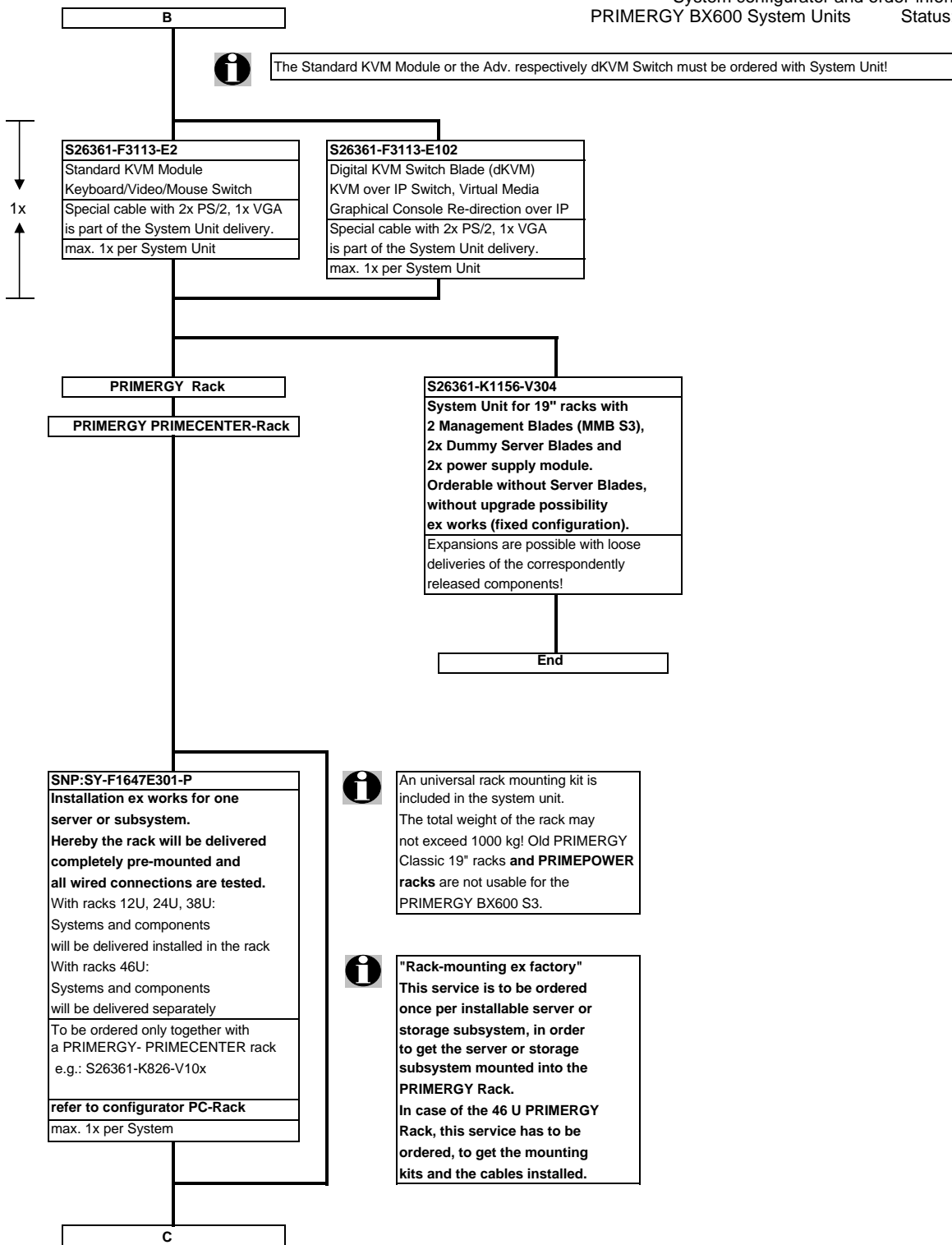


Overview of Power Supply (PSU) redundancy

Number of PSU	Max. number of dual / 4-way server blades, with PSU redundance	Max. number of dual / 4-way server blades, without PSU redundance
2	redundancy can not be defined	10* / 5* = no redundancy
3	10* / 5* = 2+1 redundancy	10 / 5 = no redundancy
4	10* / 5* = 2+2 redundancy	10 / 5 = no redundancy
4	10 / 5 = 3+1 redundancy	10 / 5 = no redundancy

*) depending on server blade configuration

B



For more configuration information see the separate Server Blade configurator at:
<http://extranet.fujitsu-siemens.com/vil/pc/vil/konfiguratoren/prim-konf/xls/cnfgbx600-serverblades.xls>

C

Section II Server Blades in System Unit BX600 S3



All described Server Blades can be mixed in on System Unit with the explained exceptions.
For more configuration information see the separate Server Blade configurator at:
<http://docs.fujitsu-siemens.com/dl.aspx?id=87b67d00-1751-453e-8a77-cc112afd6497>

BX630 S2 Dual Socket Server Blade
AMD Opteron 23xx/83xx Processors
based dual socket Server Blade.
max. 10x per system unit

BX630 S2 Quad Socket Server Blade
AMD Opteron 83xx Processor
based quad socket Server Blade.
max. 5x per system unit

BX620 S4
Intel Xeon DP Processor
based dual socket Server Blade.
max. 10x per system unit

SX650
BX600 Storage Blade
Connected to BX620 S4
max. 5x per system unit



In case of max. configuration with 120W CPUs for all 10 Server Blades, the 10th Server Blade can not be powered on in the chassis, in case of 2+2 PSU redundancy mode. Via MMB a 3+1 PSU redundancy mode can be setup to power on all server blades!

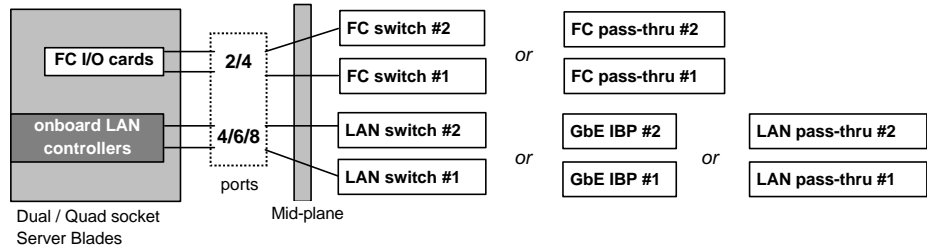
W or Y

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Section IV on-board LAN Controllers plus Fibre Channel I/O card



Each PRIMERGY BX600 Server Blade comes with onboard Gigabit Ethernet LAN channels and special daughter card connectors for the optional FC I/O modules.

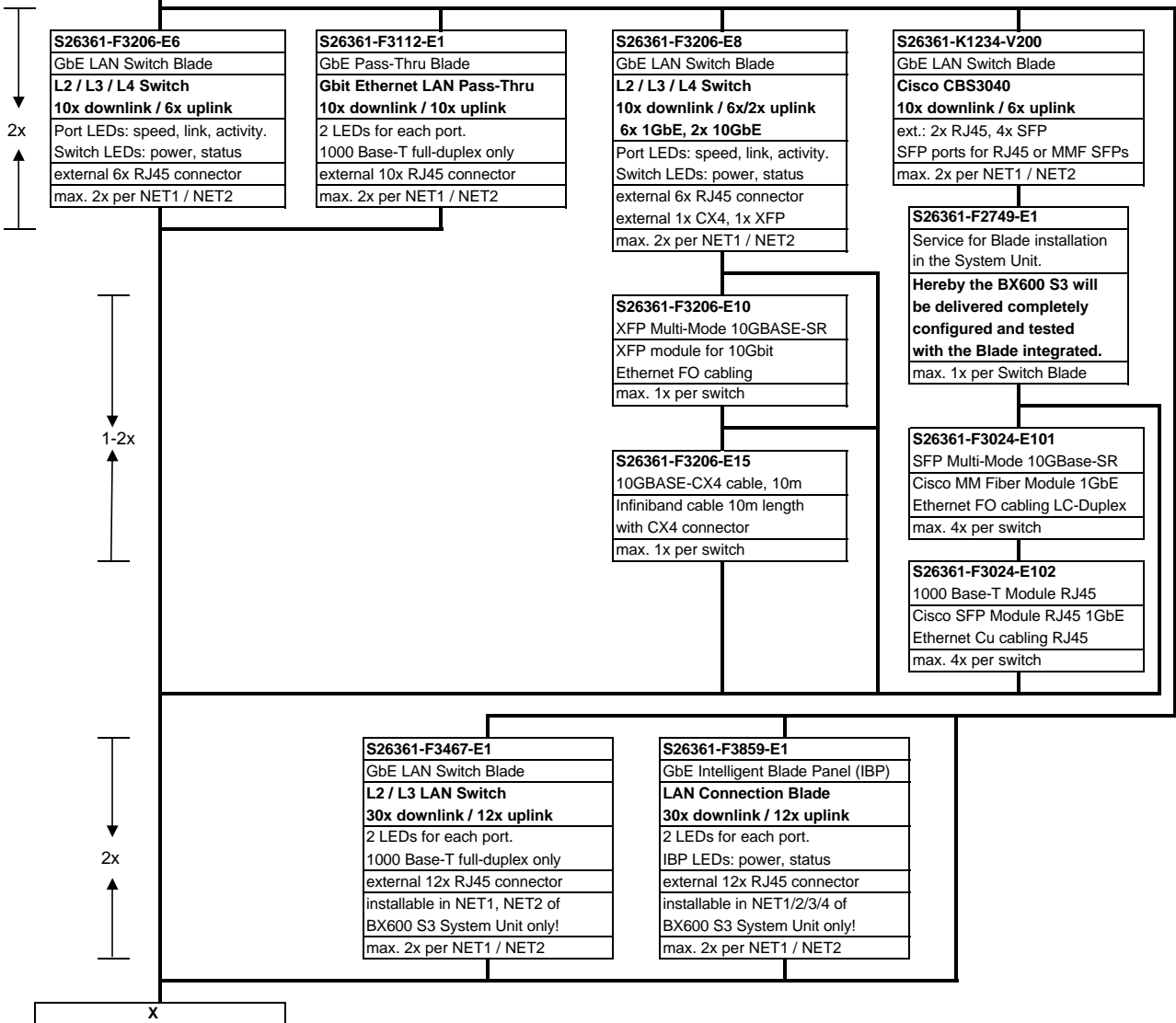


2-channel onboard LAN controller: BX620 S4: 3x controllers, 6x channels BX630 S2 Dual: 2x controllers, 4x channels BX630 S2 Quad: 4x controllers, 8x channels	2-channel FC controller (daughter card option) BX620 S4: 1x controller, 2x channels BX630 S2 Dual: 1x controller, 2x channels BX630 S2 Quad: 2x controllers, 4x channels
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Section V GbE Switch or GbE IBP or GbE Pass-Thru Blade in NET1 / NET2 for on-board LAN Controllers



There is no Switch, IBP or Pass-Thru Blade included in the System Unit. With that System Unit 2x GbE Switch or 2x GbE IBP or 2x GbE Pass-Thru blades must be configured alternatively. The onboard LAN channels of all Server Blades are connected to two Switch / Pass-Thru / IBP blades.

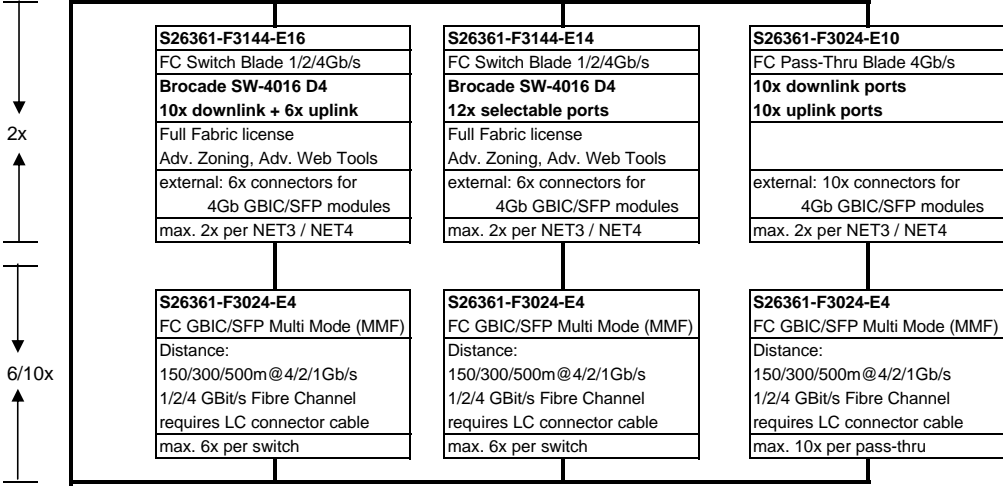


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Section VI Fibre Channel Switch or Pass-Thru Blade in NET3 / NET4 for FC I/O modules

i The following 4Gbit Fibre Channel Switch and Pass-Thru blades are released only in combination with the 4Gbit FC I/O module S26361-F3306-E601 and only for the BX600 S3 System Unit!
 The FC I/O module channels of all Server Blades are connected to two Switch / Pass-Thru blades.



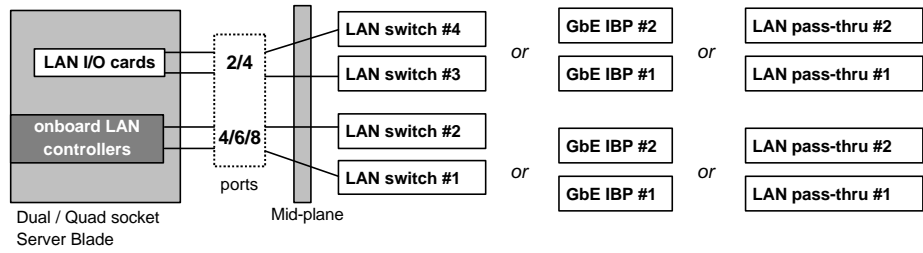
i FC switch/pass-thru can only be used in fabric 2 (NET3/4) of the System Unit.
 Mixing of FC Switch and FC Pass-Thru blades in one System Unit is not allowed.

End

Y

Section VII on-board LAN Controller plus LAN I/O card

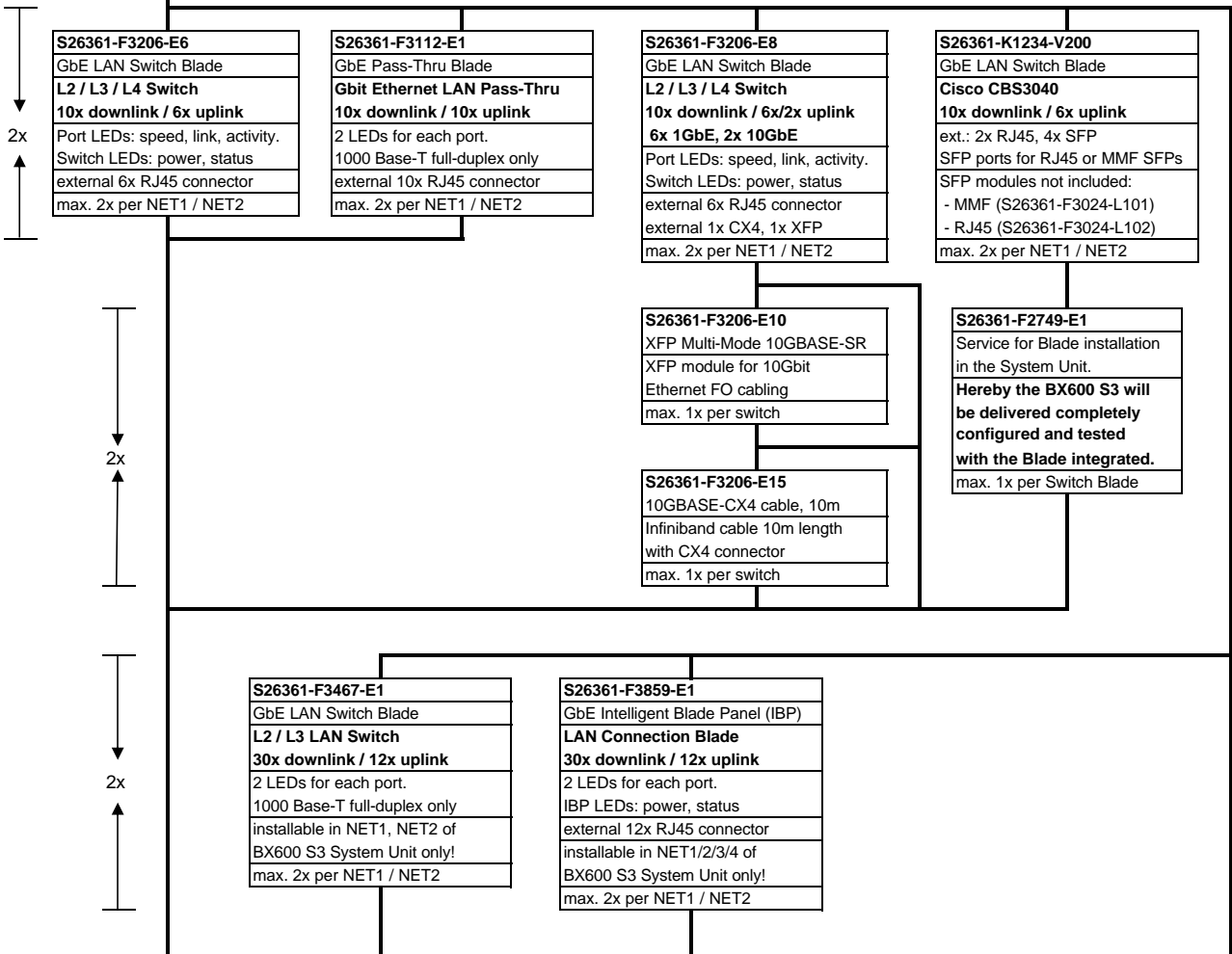
i Each PRIMERGY BX600 Server Blade comes with onboard Gigabit Ethernet LAN channels and special daughter card connectors for the optional LAN I/O modules.



2-channel onboard LAN controller: BX620 S4: 3x controllers, 6x channels BX630 S2 Dual: 2x controllers, 4x channels BX630 S2 Quad: 4x controllers, 8x channels	2-channel Gbit LAN controller (daughter card option) BX620 S4: 1x controller, 2x channels BX630 S2 Dual: 1x controller, 2x channels BX630 S2 Quad: 2x controllers, 4x channels
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Section VIII GbE Switch or GbE IBP or GbE Pass-Thru Blade in NET1 / NET2 for on-board LAN Controllers

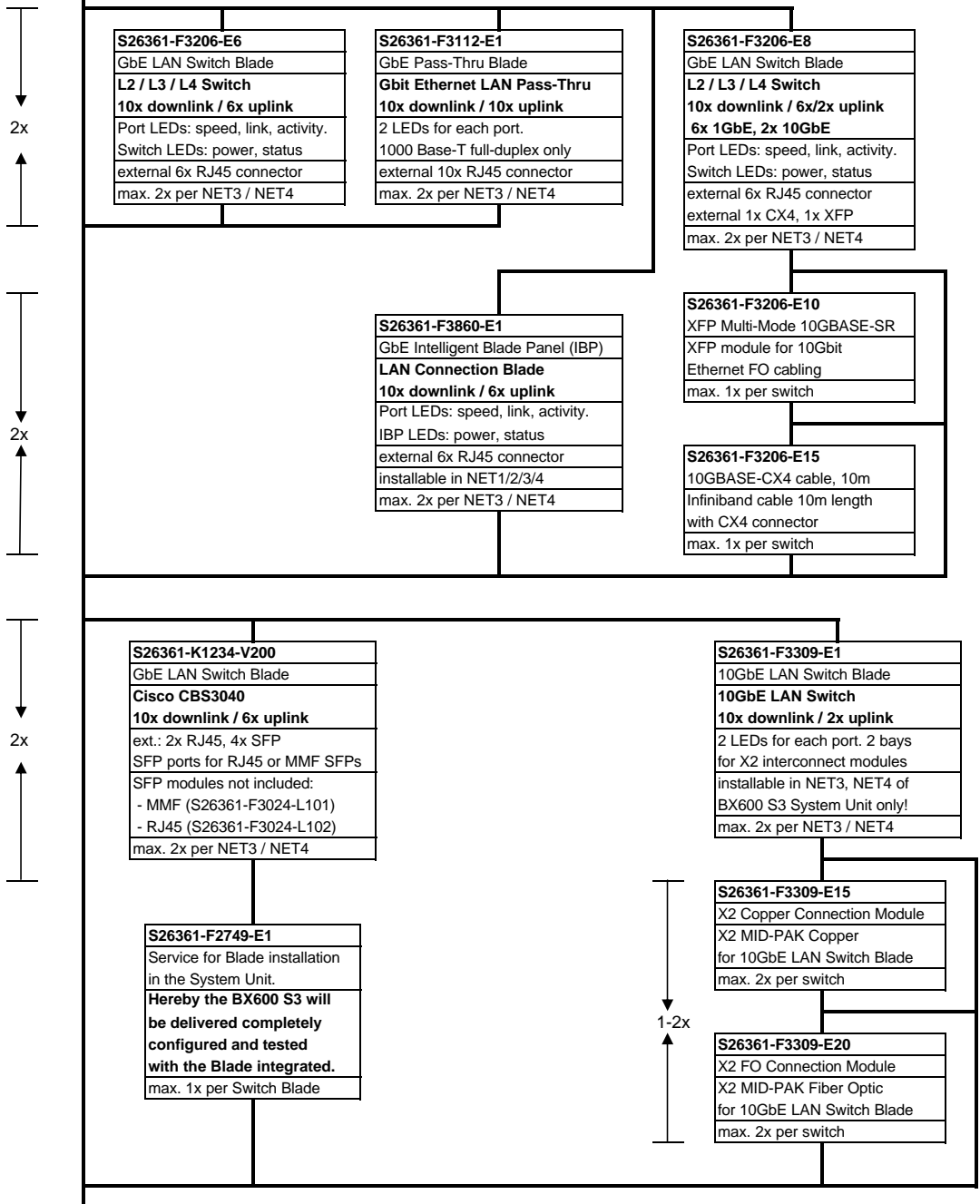
i There is no Switch, IBP or Pass-Thru Blade included in the System Unit. With that System Unit 2x GbE Switch or 2x GbE IBP or 2x GbE Pass-Thru blades must be configured alternatively. The onboard LAN channels of all Server Blades are connected to two Switch / Pass-Thru / IBP blades.



Z

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Section IX GbE Switch or GbE IBP or GbE Pass-Thru Blade in NET3 / NET4 for optional LAN I/O modules



End

i The system unit can have up to 2x GbE LAN Switch / IBP / Pass-Thru blades. If for one of the Server Blades the GbE LAN I/O module is configured, the system unit can have 4 GbE Switch / IBP / Pass-Thru blades. (see pictures above)

Change Report

Date	Order number	Changes
2008-12-12	S26361-F3860-E1	IBP 10/6 GbE meaningful in fabric 2 only
2008-12-12	S26361-F3859-E1	IBP 30/12 GbE meaningful in fabric 1 only
2008-12-12	S26361-K1156-V301/303	delete of BX600 S3 with MMB S2
2008-10-20	-severals-	delete of BX600 S3 Infrastructure for ServerView PAN Manager
2008-04-28	-severals-	new BX600 S3 Infrastructure for ServerView PAN Manager
2008-04-16	S26361-F3888-L1	Upgrade kit for BX600 S3 with MMB S2, to replace MMB S2 by MMB S3.
2008-03-26	S26361-F3309-E20	X2 FO Connection Module - as soon as available
2008-03-26	S26361-F3309-E15	X2 Copper Connection Module - as soon as available
2008-03-26	S26361-F3309-E1	10GbE LAN Switch Blade - as soon as available
2008-03-20	S26361-F3113-E1	Adv. KVM Switch Blade no longer available
2008-02-22	S26361-K1234-V200	New order number for Switch Blade CBS3040
2008-02-14	S26361-F3309-E20	New Interconnect modules for 10GbE LAN Switch Blade - as soon as available
2008-02-14	S26361-F3309-E15	New Interconnect modules for 10GbE LAN Switch Blade - as soon as available
2008-02-14	S26361-F3309-E1	New 10GbE LAN Switch Blade for BX600 S3 - as soon as available
2008-02-14	S26361-F3024-E10	New 4Gb FC Pass-Thru for BX600 S3
2008-01-31	S26361-K920-V201	EOL for System Unit BX600 S2
2007-11-19		EOL for BX620 S3
2007-09-13	S26361-F3860-E1 S26361-F3859-E1	new IBP products