

PRIMERGY BX400 System Unit

System configurator and order-information guide

April 2013

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Configuration diagram
Configurator



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Change report

PRIMERGY Server

Instructions

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

Only the tool "System-Arcitect" will ensure a fast and proper configuration of your PRIMERGY server or your complete PRIMERGY Rack system.

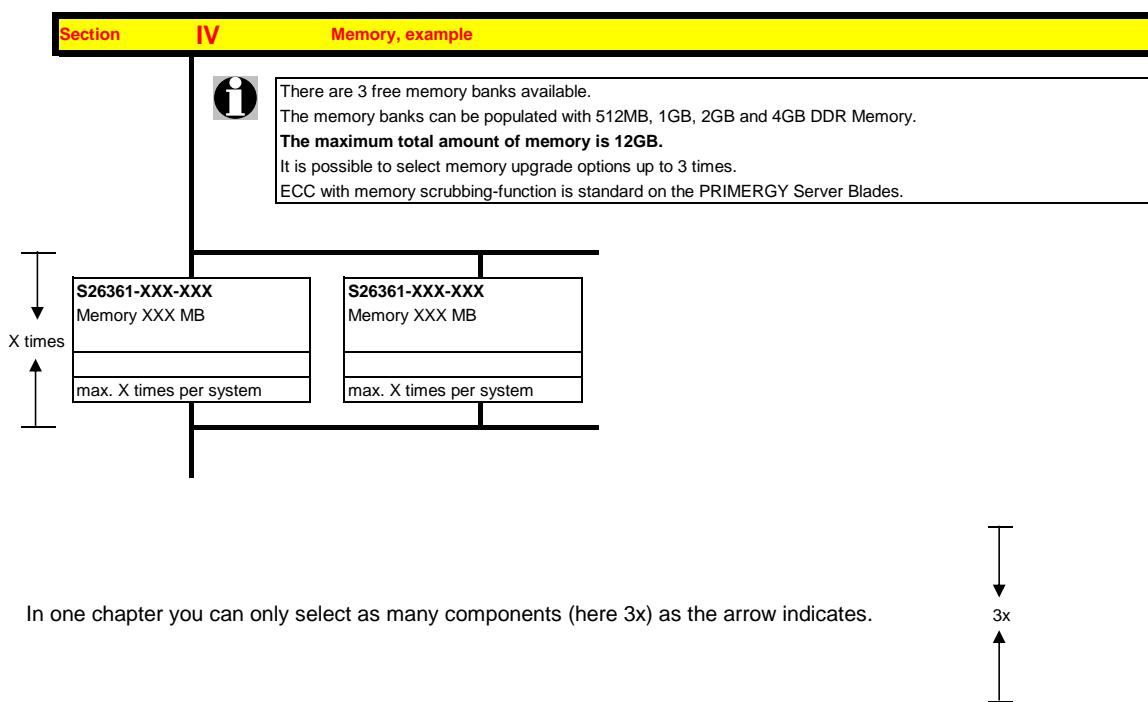
Please pay attention to the naming conventions:

BX400 S1 System unit 1st generation

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.



Please note that there are information symbols which indicate necessary information.



For further information see:

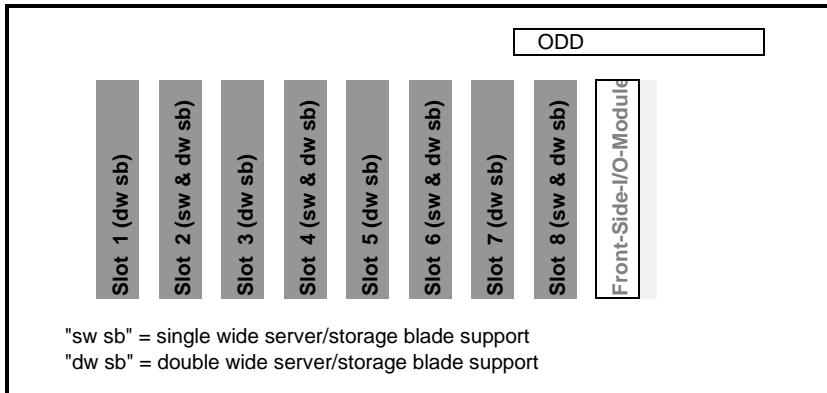
http://ts.fujitsu.com/products/standard_servers/index.html (internet)

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

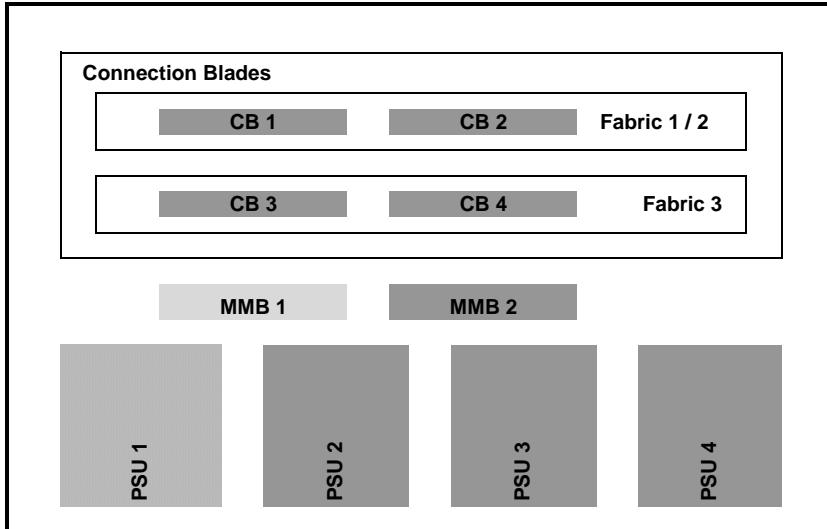
Prices and availability see price list and PC-/ System-Architect
Subject to change and errors excepted

Configuration diagram BX400 S1 System Unit

Extension slots front side



Extension slots front side



Key:

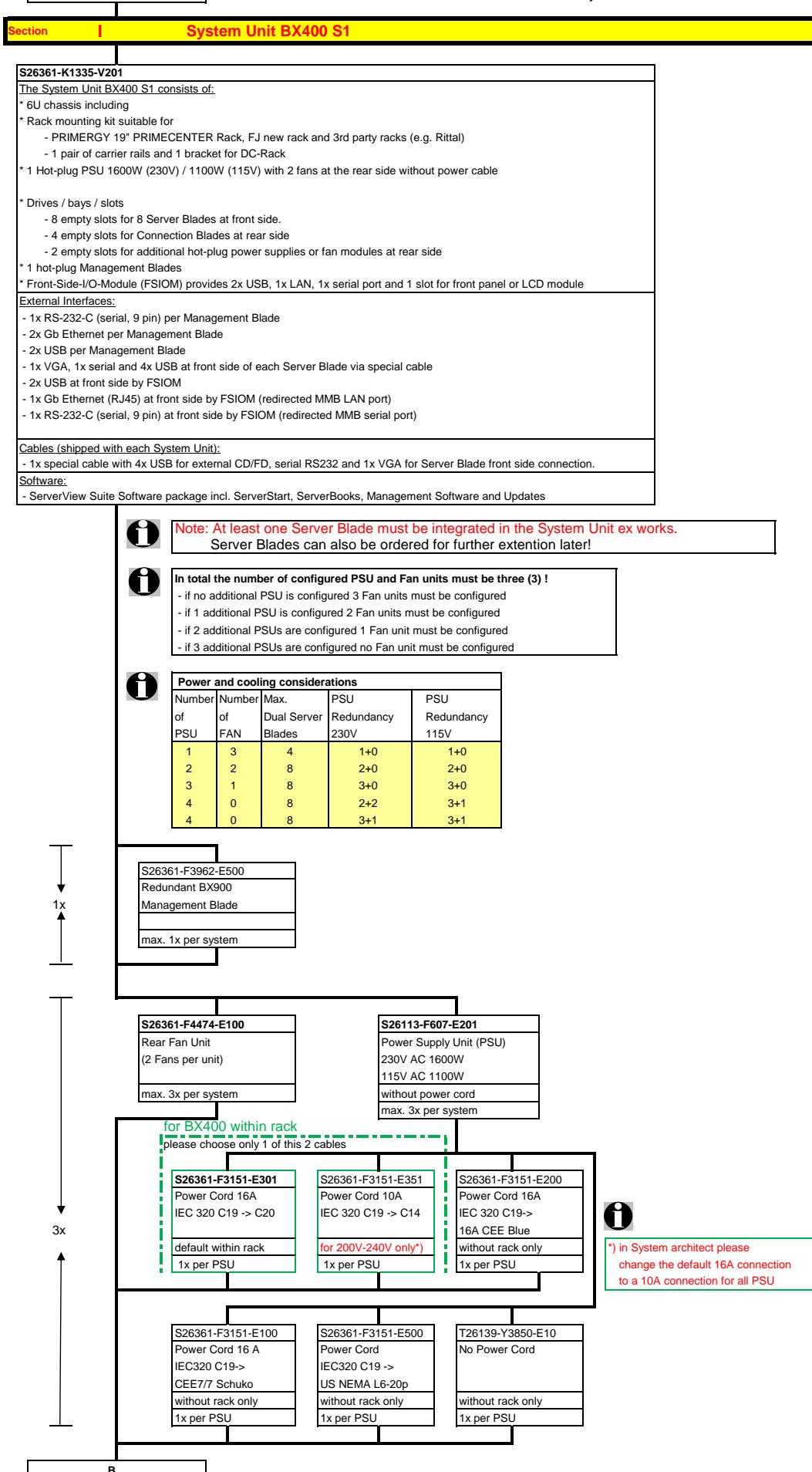


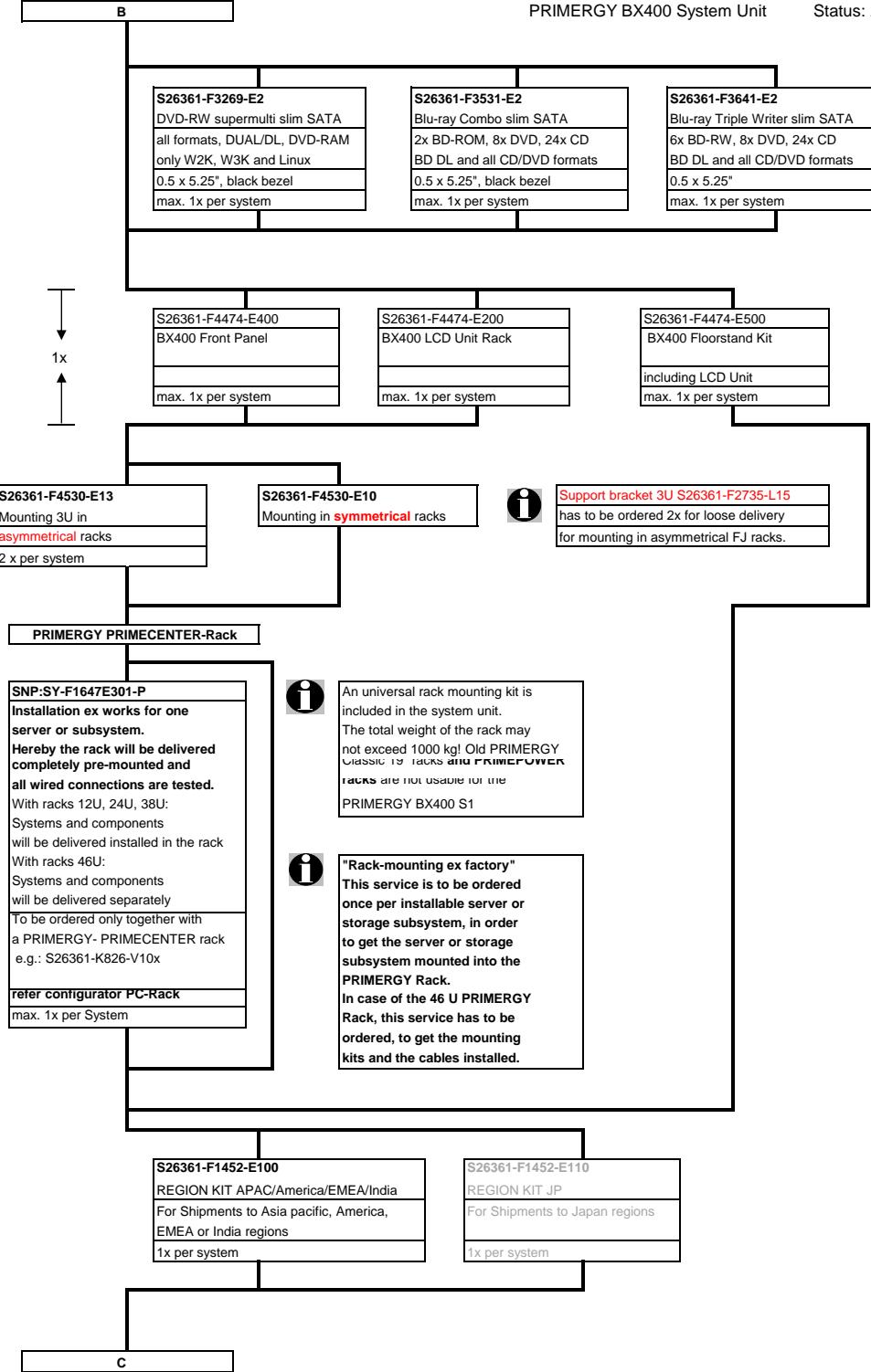
Included in basic unit

PSU slots 2, 3 and 4 can also be equipped with fan modules.
(see next page for details on power and cooling)



Option





i For more configuration information see the separate Server Blade configurator at:
https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx

Section

II

BX900 Server Blades in System Unit BX400 S1

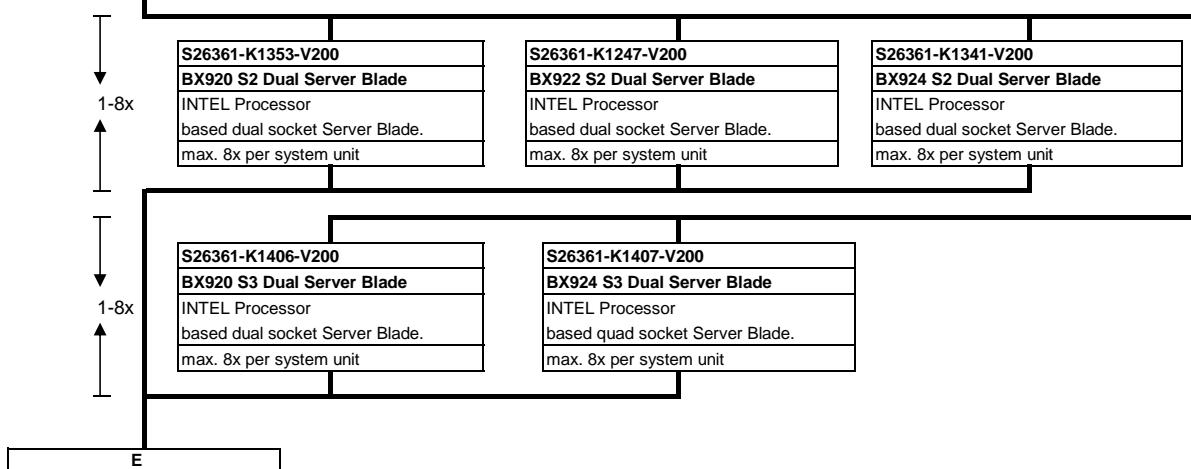


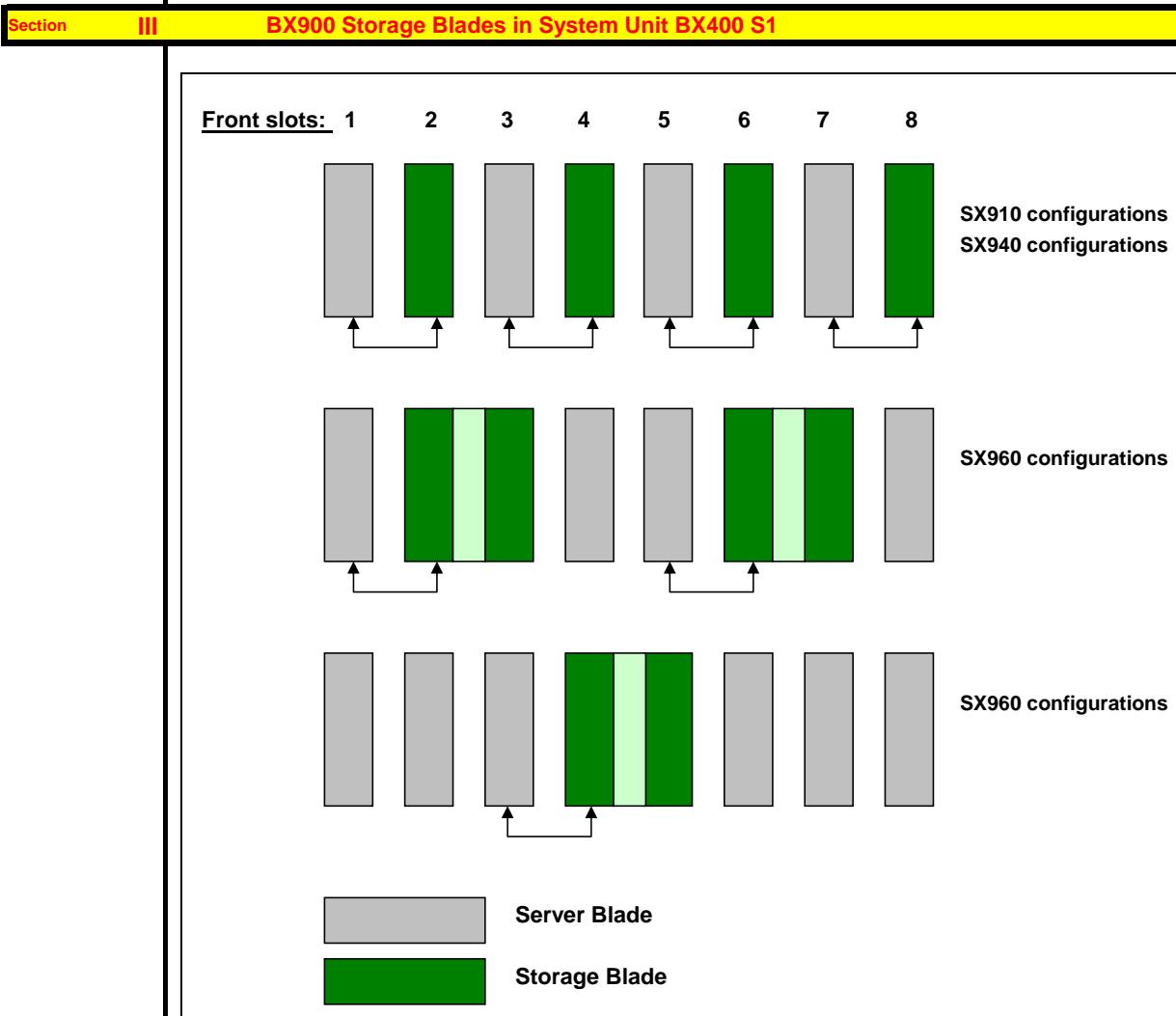
For the BX400 the defined BX900 Server Blades can be used!

All described Server Blades can be mixed in one System Unit with the explained exceptions.

For more configuration information see the separate Server Blade configurator at:

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





All described Storage Blades can be inserted into the designated slots of the System Unit.
For more configuration information see the separate Server Blade configurator at:
https://partners.ts.fujitsu.com/com/order-supply/configurators/primergy_config/current/Pages/default.aspx

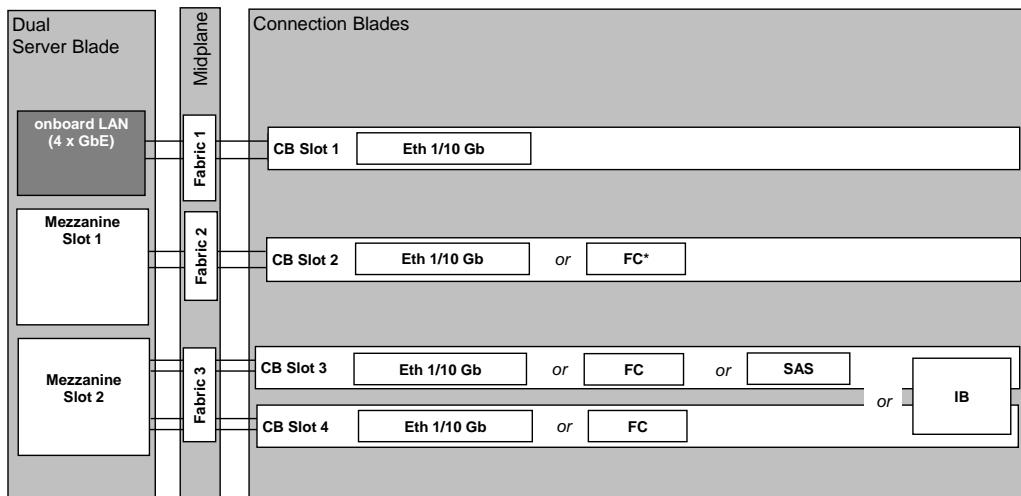
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">S26361-K1292-V200</td></tr> <tr><td style="padding: 2px;">PY SX940 S1 Storage Blade Disk</td></tr> <tr><td style="padding: 2px;">1x or 2x PCIe Controller</td></tr> <tr><td style="padding: 2px;">up to 4x SAS HDD</td></tr> <tr><td style="padding: 2px;">max. 4x per system unit</td></tr> </table>	S26361-K1292-V200	PY SX940 S1 Storage Blade Disk	1x or 2x PCIe Controller	up to 4x SAS HDD	max. 4x per system unit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">S26361-K1290-V200</td></tr> <tr><td style="padding: 2px;">PY SX910 S1 Storage Tape Blade</td></tr> <tr><td style="padding: 2px;">1x PCIe Controller</td></tr> <tr><td style="padding: 2px;">1x SAS LTO Drive</td></tr> <tr><td style="padding: 2px;">max. 4x per system unit</td></tr> </table>	S26361-K1290-V200	PY SX910 S1 Storage Tape Blade	1x PCIe Controller	1x SAS LTO Drive	max. 4x per system unit
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">S26361-K1383-V210</td></tr> <tr><td style="padding: 2px;">PY SX980 S1 JBOD Blade</td></tr> <tr><td style="padding: 2px;">up to 10x SAS HDD/SSD</td></tr> <tr><td style="padding: 2px;">max. 2x per system unit</td></tr> </table>	S26361-K1383-V210	PY SX980 S1 JBOD Blade	up to 10x SAS HDD/SSD	max. 2x per system unit	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr><td style="padding: 2px;">S26361-K1383-V220</td></tr> <tr><td style="padding: 2px;">PY SX980 S2 JBOD Blade</td></tr> <tr><td style="padding: 2px;">up to 10x SAS HDD/SSD</td></tr> <tr><td style="padding: 2px;">redundant SAS paths</td></tr> <tr><td style="padding: 2px;">max. 2x per system unit</td></tr> </table>	S26361-K1383-V220	PY SX980 S2 JBOD Blade	up to 10x SAS HDD/SSD	redundant SAS paths	max. 2x per system unit	
S26361-K1383-V210											
PY SX980 S1 JBOD Blade											
up to 10x SAS HDD/SSD											
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PY SX980 S2 JBOD Blade											
up to 10x SAS HDD/SSD											
redundant SAS paths											
max. 2x per system unit											

Section **IV** Connection Blade Overview



Each PRIMERGY BX9xx Server Blade comes with onboard Ethernet LAN channels and special connectors for the optional mezzanine cards.

Example BX920 S2: 4 x 1GbE onboard and 2 x Mezzanine slots



* not released for PY CB FC Pass Thru 8G 18/18

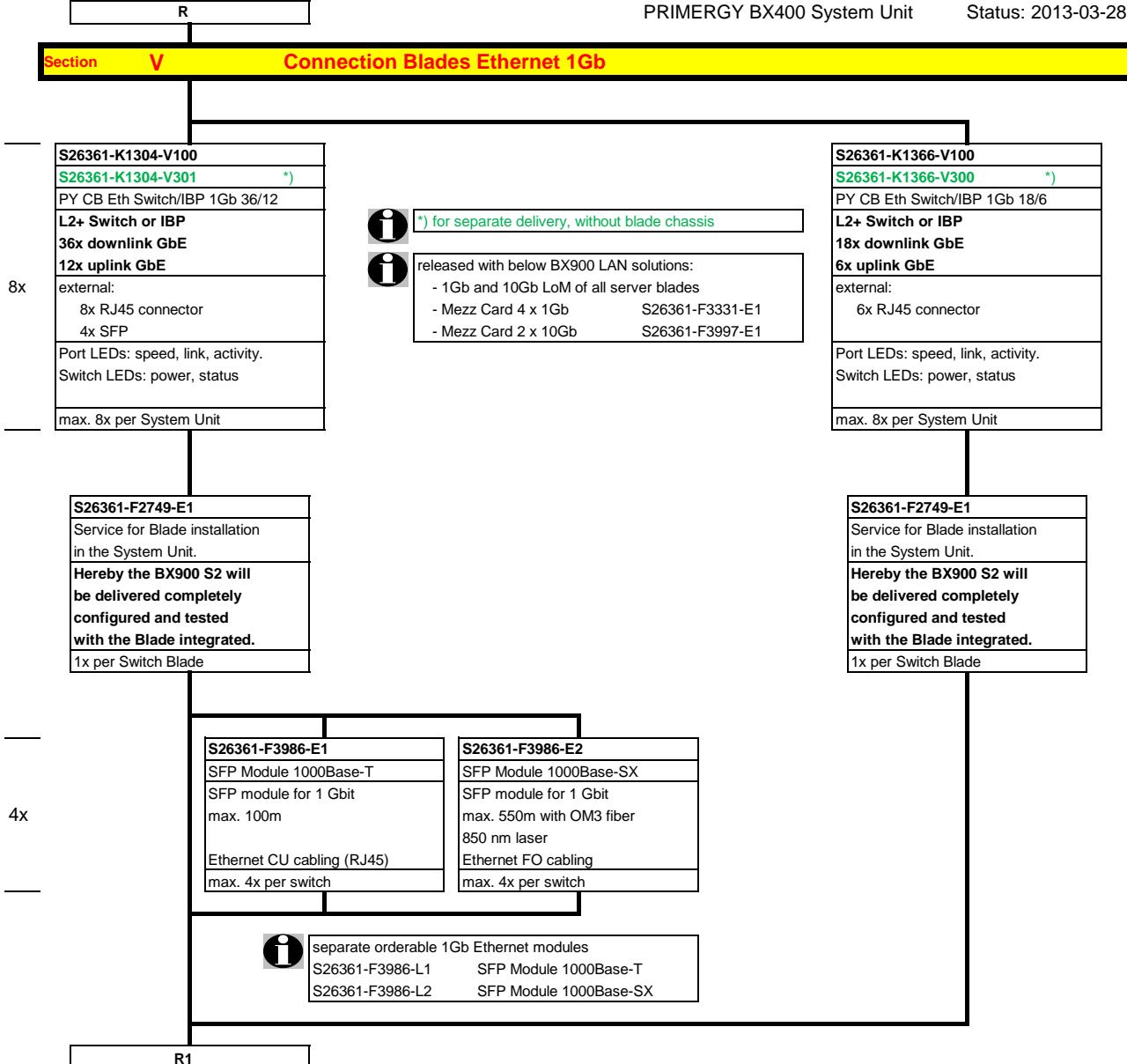
Connection Blades released for BX400 S1 System Unit :

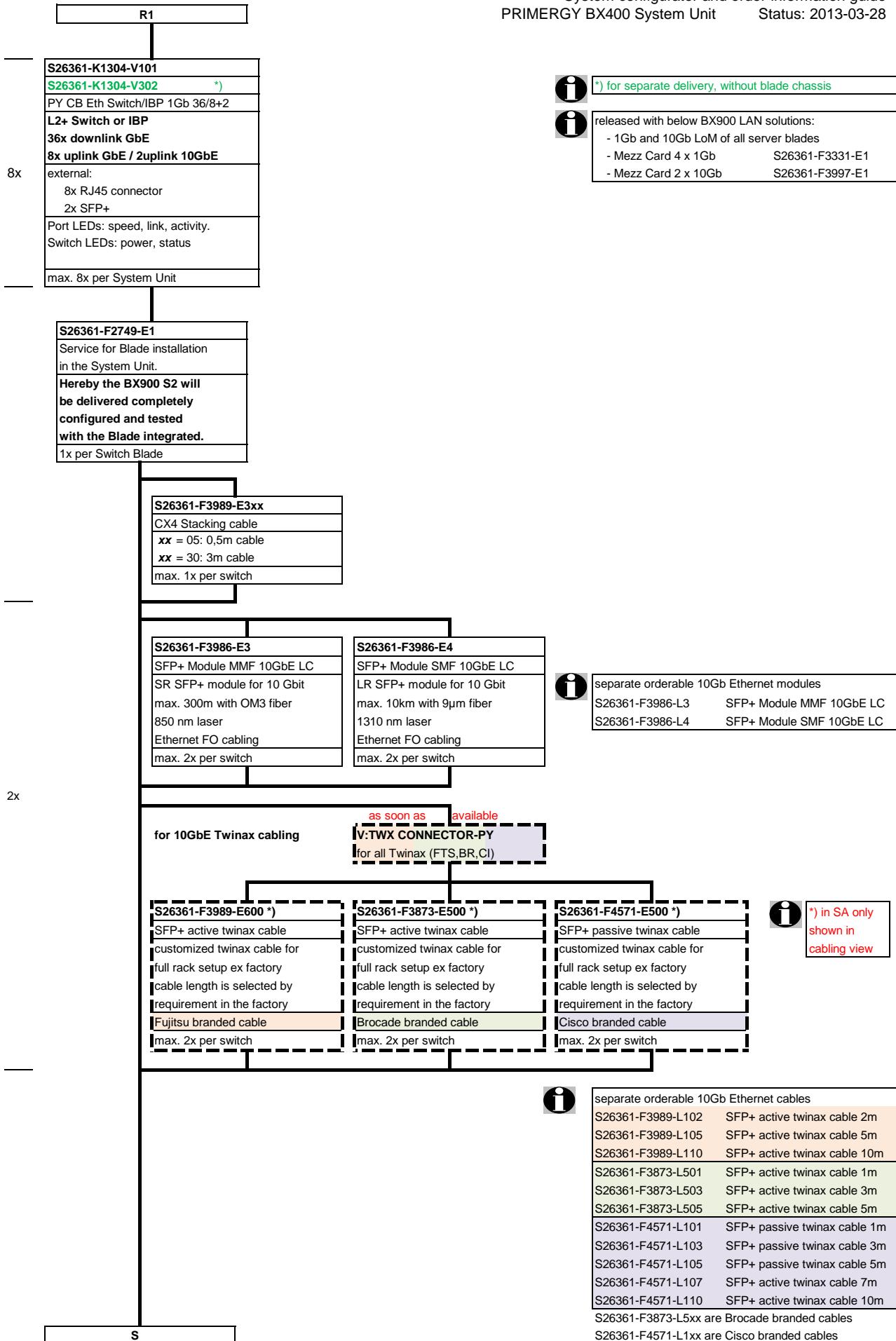
Order number	Connection Blade Type	installable in CB Slot	Downlink ports (internal)	Uplink ports (external)
S26361-K1304-V100	PY CB Eth Switch/IBP 1Gb 36/12	1/2/3/4	36x 1Gb Eth	8x 1Gb Eth (RJ45) 4x 1Gb SFP
S26361-K1304-V101	PY CB Eth Switch/IBP 1Gb 36/8+2	1/2/3/4	36x 1Gb Eth	8x 1Gb Eth (RJ45) 2x 10Gb Eth SFP+
S26361-K1366-V100	PY CB Eth Switch/IBP 1Gb 18/6	1/2/3/4	18x 1Gb Eth	6x 1Gb (RJ45)
S26361-K1304-V200	PY CB Eth Switch/IBP 10Gb 18/8	1/2/3/4	18x 10Gb Eth	8x 10Gb Eth SFP+
S26361-K1429-V100	PY CB DCB Switch 10Gb 18/6 (Brocade)	1/2/3/4	18x 10Gb Eth	6x 10Gb Eth (SFP*) 6x 8Gb FC (SFP+)
S26361-K1429-V200	PY CB DCB SW 10Gb 18/6/6 Enterprise	1/2/3/4	18x 10Gb Eth	6x 10Gb Eth (SFP*) 6x 8Gb FC (SFP+)
S26361-K1440-V100	PY CB FEX B22F 10Gb 16/8 (Cisco)	1/2/3/4	16x 10Gb Eth	8x 10Gb Eth SFP+
S26361-K1440-V110	PY CB FEX B22F FET 10Gb 16/8 (Cisco)	1/2/3/4	16x 10Gb Eth	8x 10Gb Eth SFP+
S26361-K1365-V18	PY CB Eth Pass Thru 1/10Gb 18/18	1/2/3/4	18x 8Gb Eth	18x 1/10Gb Eth SFP+
S26361-K1305-V14	FC Switch 8Gb 18/8 14 Port (Brocade)	2/3/4	18x 8Gb FC	8x 8Gb SFP+
S26361-K1363-V18	PY CB FC Pass Thru 8G 18/18	3/4	18x 8Gb FC	8x 8Gb SFP+
S26361-K1305-V126	FC SW 8G 18/8 26 Perform (Brocade)	2/3/4	18x 8Gb FC	8x 8Gb SFP+
S26361-K1305-V26	FC SW 8G 18/8 26 Port (Brocade)	2/3/4	18x 8Gb FC	8x 8Gb SFP+
S26361-K1336-V200	PY CB IB Switch 40Gb 18/18	3/4	18x 40Gb IB	18x 40Gb IB (QSFP)
S26361-K1423-V200	PY CB IB Switch 56Gb 18/18	3/4	18x 56Gb IB	18x 56Gb IB (QSFP)
S26361-K1391-V300	PY CB SAS Switch 6Gb 18/6	3	18x 6Gb SAS	6x 6Gb SAS (SFF8088)

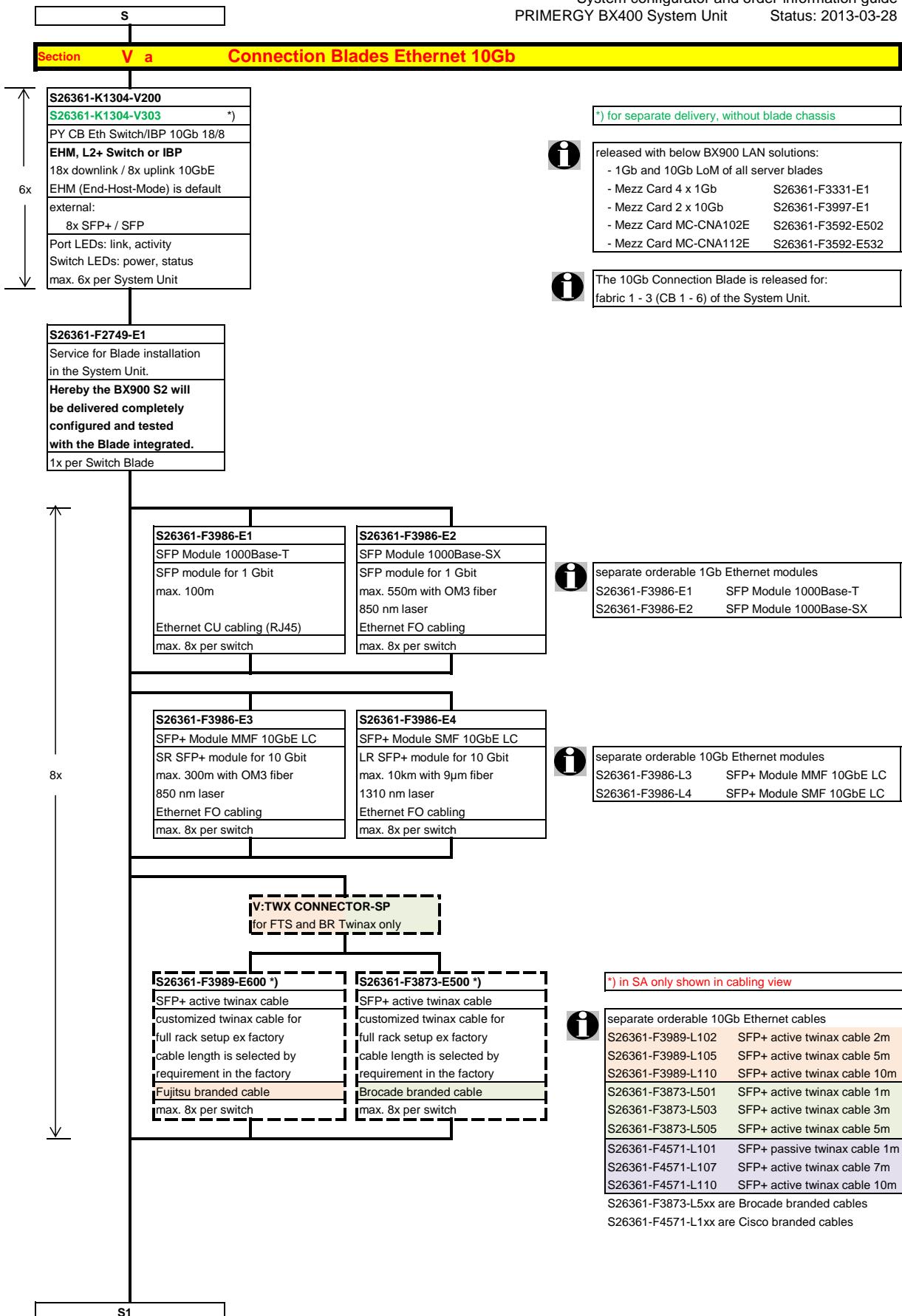


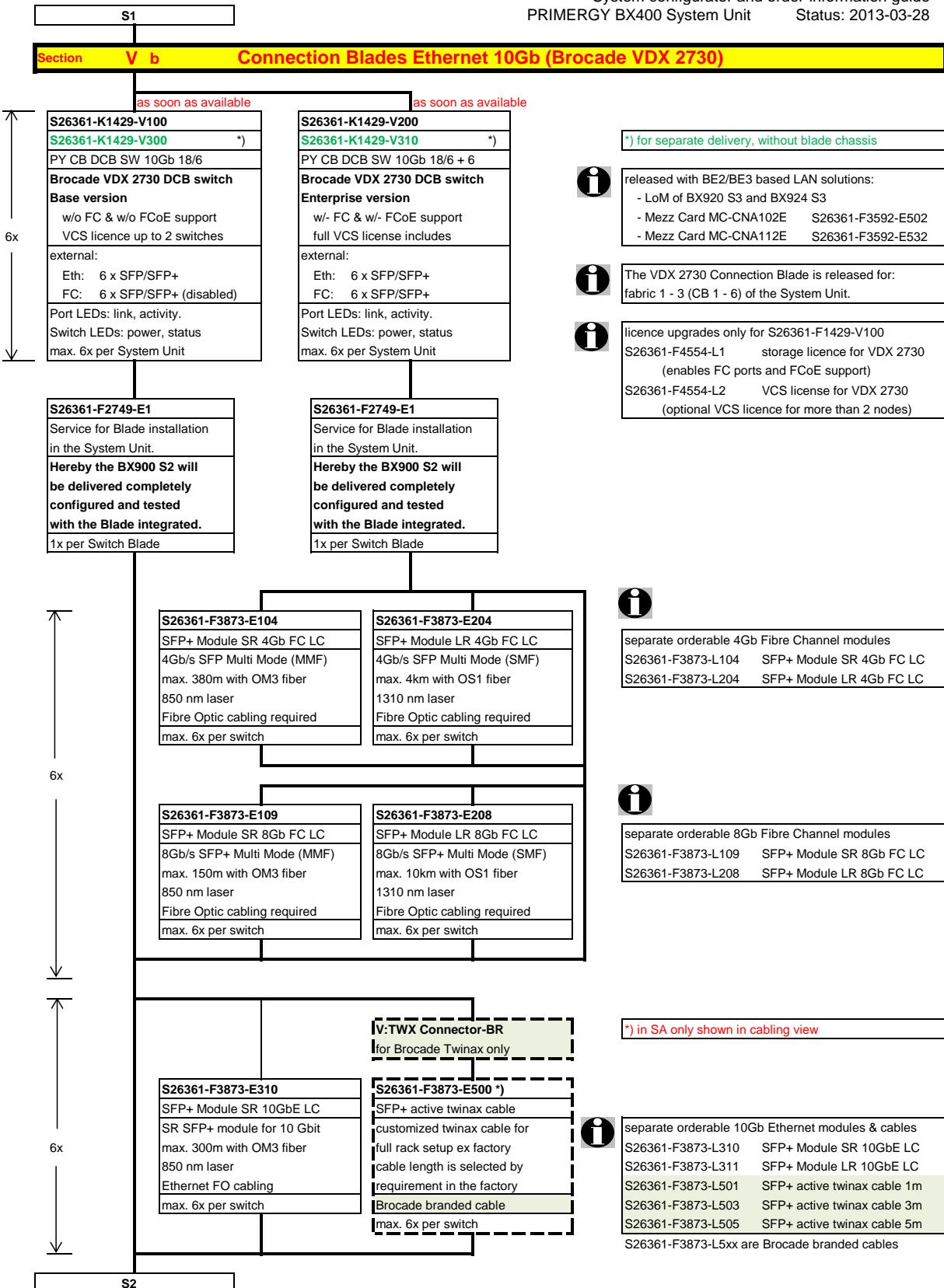
There is no Connection Blade included in the System Unit.

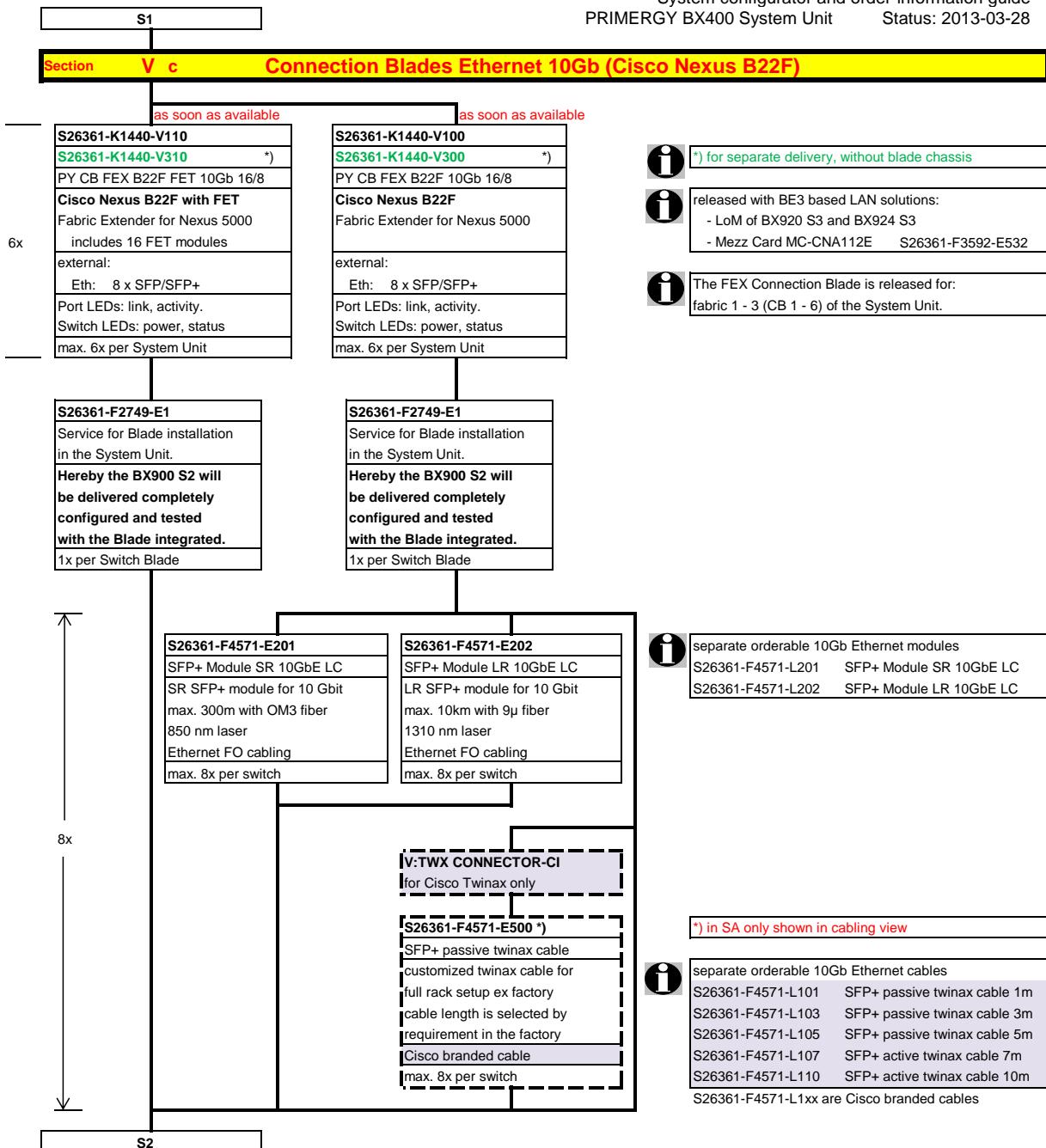
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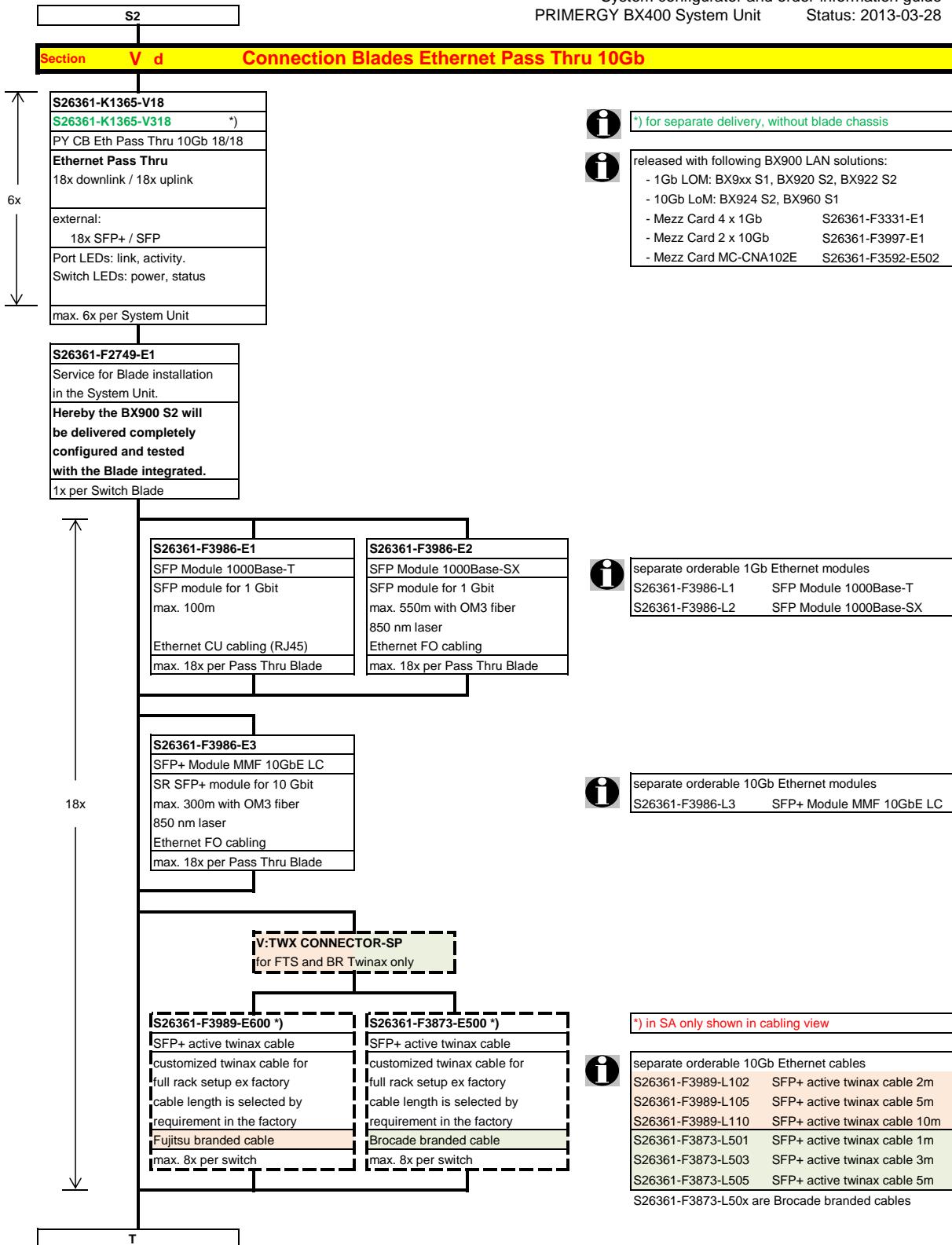








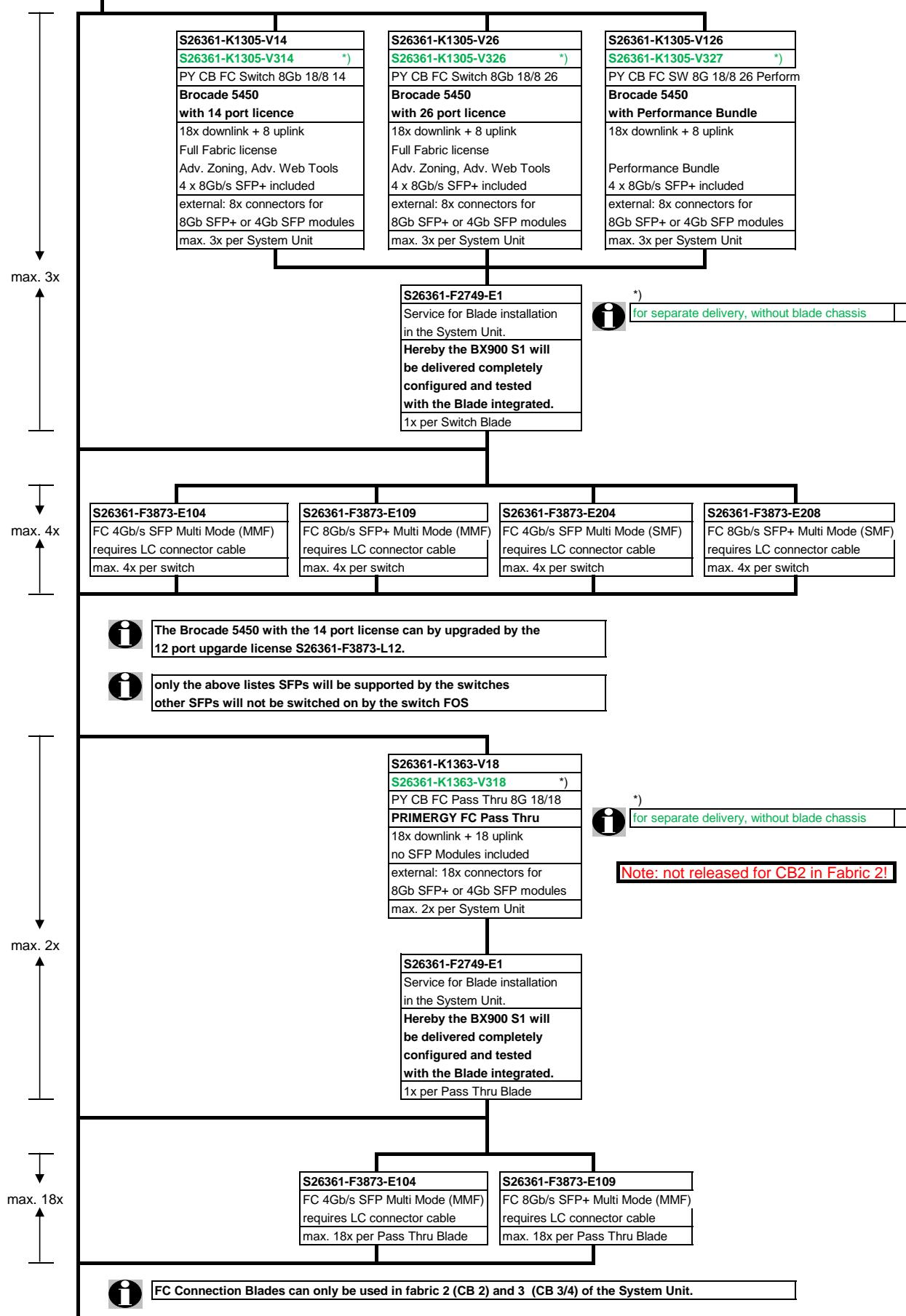




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Section VI

Connection Blades Fibre Channel



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Section VII

Connection Blade InfiniBand

max. 1x

S26361-K1336-V200
S26361-K1336-V300 *)
PY CB IB Switch 40Gb 18/18
InfiniBand Connection Blade
18x downlink + 18x uplink
Double wide- Single height
Non blocking
Quad Data Rate (QDR x4)
18x QSFP modules included
external: 18x QSFP connectors for uplink ports
max. 1x per System Unit



*) for separate delivery, without blade chassis

max. 18x

S26361-F2749-E1
Service for Blade installation in the System Unit.
Hereby the BX900 S1 will be delivered completely configured and tested with the Blade integrated.
1x per Switch Blade



If additional length of copper cable or optical cable are needed, then they must be ordered from the cable vendor directly

Copper cable are also available for loose delivery as
S26361-F3996-L101, QSFP, 40Gb, 1m
S26361-F3996-L103, QSFP, 40Gb, 3m

max. 1x

as soon as available

S26361-K1423-V200
S26361-K1423-V300 *)
PY CB IB Switch 56Gb 18/18
InfiniBand Connection Blade
18x downlink + 18x uplink
Double wide- Single height
Non blocking
Fourteen Data Rate (FDR x4)
18x QSFP modules included
external: 18x QSFP connectors for uplink ports
max. 1x per System Unit



*) for separate delivery, without blade chassis

max. 18x

S26361-F3996-E556
InfiniBand Cu Cable 56Gb
customized
QSFP, 1m and 3m
max. 18x per switch



If additional length of copper cable or optical cable are needed, then they must be ordered from the cable vendor directly

Copper cable are also available for loose delivery as
S26361-F3996-L561, QSFP, 56Gb, 1m
S26361-F3996-L563, QSFP, 56Gb, 3m



IB Connection Blades can only be used in fabric 3 (CB 3/4) of the System Unit.

V

V

Section VIII Connection Blade SAS

max. 1x

S26361-K1391-V300
S26361-K1391-V400
PY CB SAS Switch 6Gb 18/6
SAS Connection Blade
18 ports internal
6 ports external (SFF8088)
Single wide - Single height
1x per SX980 S1

as soon as available

*)

 for separate delivery, without blade chassis



S26361-F2749-E1
Service for Blade installation in the System Unit.
Hereby the BX900 S1 will be delivered completely configured and tested with the Blade integrated.
1x per Switch Blade



SAS Connection Blades can only be used in fabric 3 (CB 3) of the System Unit

End BX900 System Unit

10 GbE Twinax Cabling

TWINAX-Cabling with virtual SFP+ modules

Virtual SFP+ modules	Used in	Supported cables	Comment
V:TWX CONNECTOR-BR (Brocade)	CB VDX 2730 S26361-K1429-Vxxx Ext. Switch Brocade 8000 EVR800 Ext. Switch VDX 6720-60 S26361-K1452-V100 Ext. Switch VDX 6720 for DI-Blocks D:VDX6720-16-R-M	S26361-F3873-E500 EBR800-TWX-1M-L EBR800-TWX-3M-L EBR800-TWX-5M-L	Brocade customized Brocade 1m Brocade 3m Brocade 5m
V:TWX CONNECTOR CI (Cisco)	CB FEX B22F S26361-K1440-V100	S26361-F4571-E500 S26361-F4571-L110	Cisco customized
V:TWX CONNECTOR PY (FTS)	CB SB11 S26361-K1304-V101 / V301 10GB LAN controller D2755 S26361-F3629-E2 / E202 / E702 10Gb CNA OCe10102 S26361-F3592-E2 / E202	S26361-F3989-E600 S26361-F3873-E500 EBR800-TWX-1M-L EBR800-TWX-3M-L EBR800-TWX-5M-L S26361-F4571-E500	FTS customized Brocade customized Brocade 1m Brocade 3m Brocade 5m Cisco customized
V:TWX CONNECTOR SP	CB SBAX2 S26361-K1304-V200 / V300 CB Ethernet Pass Thru S26361-K1365-V18 / V318	S26361-F3989-E600 S26361-F3873-E500 EBR800-TWX-1M-L EBR800-TWX-3M-L EBR800-TWX-5M-L	FTS customized Brocade customized Brocade 1m Brocade 3m Brocade 5m

Product number	Connector	Description
V:TWX CONNECTOR-BR	FC TWX 10G connector BR	Twinax Connector Brocade
V:TWX CONNECTOR CI	FC TWX 10G connector CI	Twinax Connector Cisco
V:TWX CONNECTOR PY	FC TWX 10G connector PY	Twinax Connector Primergy
V:TWX CONNECTOR SP	FC TWX 10G connector SBAX	Twinax Connector SBAX2 und PassThru

Rack-specified Twinax-cable for graphical Cabling within the PRIMECENTER M1 Rack:

S26361-F3873-E500	SFP+ aktiv Twinax Cable Brocade custom	2x FC TWX 10G connector BR
S26361-F3989-E600	SFP+ aktives Twinax Kabel kundenspez.	2x FC TWX 10G connector PY
S26361-F4571-E500	SFP+ passive Twinax Kabel Cisco custom	2x FC TWX 10G connector CI

Twinax-cable for graphical Cabling outside the PRIMECENTER M1 Rack (between racks):

EBR800-TWX-1M-L	SFP+ active Twinax cable BRCD 1m UPG	2x FC TWX 10G connector BR
EBR800-TWX-3M-L	SFP+ active Twinax cable BRCD 3m UPG	2x FC TWX 10G connector BR
EBR800-TWX-5M-L	SFP+ active Twinax cable BRCD 5m UPG	2x FC TWX 10G connector BR
S26361-F4571-L110	SFP+ active Twinax cable Cisco 10m	2x FC TWX 10G connector CI

In Addition the optional configurable Twinax-cable options (not for graphical cabling in systemarchitect usable!)

(to find under chapter "Hardware – Options" of the Blade system units BX900S2 and BX400S1)

S26361-F3873-L501	Brocade 1m
S26361-F3873-L503	Brocade 3m
S26361-F3873-L505	Brocade 5m
S26361-F4571-L101	Cisco 1m
S26361-F4571-L103	Cisco 3m
S26361-F4571-L105	Cisco 5m
S26361-F4571-L107	Cisco 7m
S26361-F3989-L102	FTS 2m
S26361-F3989-L105	FTS 5m
S26361-F3989-L110	FTS 10m

Change Report

Date	Order number	Changes
2012-12-01	10GbE Twinax Cabling	added sheet "Twinax cabling with virtual SFP+ modules
2012-07-17	S26361-F4571-E/Lxxx	Added SFP+ and Twinax cable for Cisco Nexus B22F
2012-07-17	S26361-K1440-V1x0/V3x0	Added 10GbE Cisco switches Cisco Nexus B22F
2012-06-29	S26361-F3873-E500/Lxxx	Added Twinax cable for DCB switch VDX 2730
2012-06-29	S26361-K1427-Vx00	Added 10GbE Brocade switches VDX 2730
14.06.2012		Added BX920 S3 and BX924 S3 Server Blade
28.03.2012	S26361-F3873-E108	Update of SFP Modul section
2012-01-30	S26361-F3641-E2	new Blue-ray Triple Writer added
2012-01-11	S26361-K1335-V200	basic unit removed due to VS65
22.12.2011	S26361-F3986-E4	added SFP+ Module SMF 10GbE LC
19.12.2011	S26361-F3989-L102	Info for Twinax Cable added
2011-09-29	S26113-F607-E201	PSU w/o power cable added
2011-09-29	S26361-K1335-V201	new basic unit due to regional kit and PSU w/o power cord
2011-01-31	S26361-K13xx-V3xx	new Connection Blades for loose delivery added
2011-01-28		Power cable added to PSU part list
2011-01-25		corrected power notation of PSUs
2011-01-12	S26361-K1365-V18	Ethernet Path trough added
2011-01-12	S26361-F3151-E3x1	Selection for power cord inserted
2010-11-01		First Release