

PRIMERGY BX400 System Unit

System configurator and order-information guide

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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.

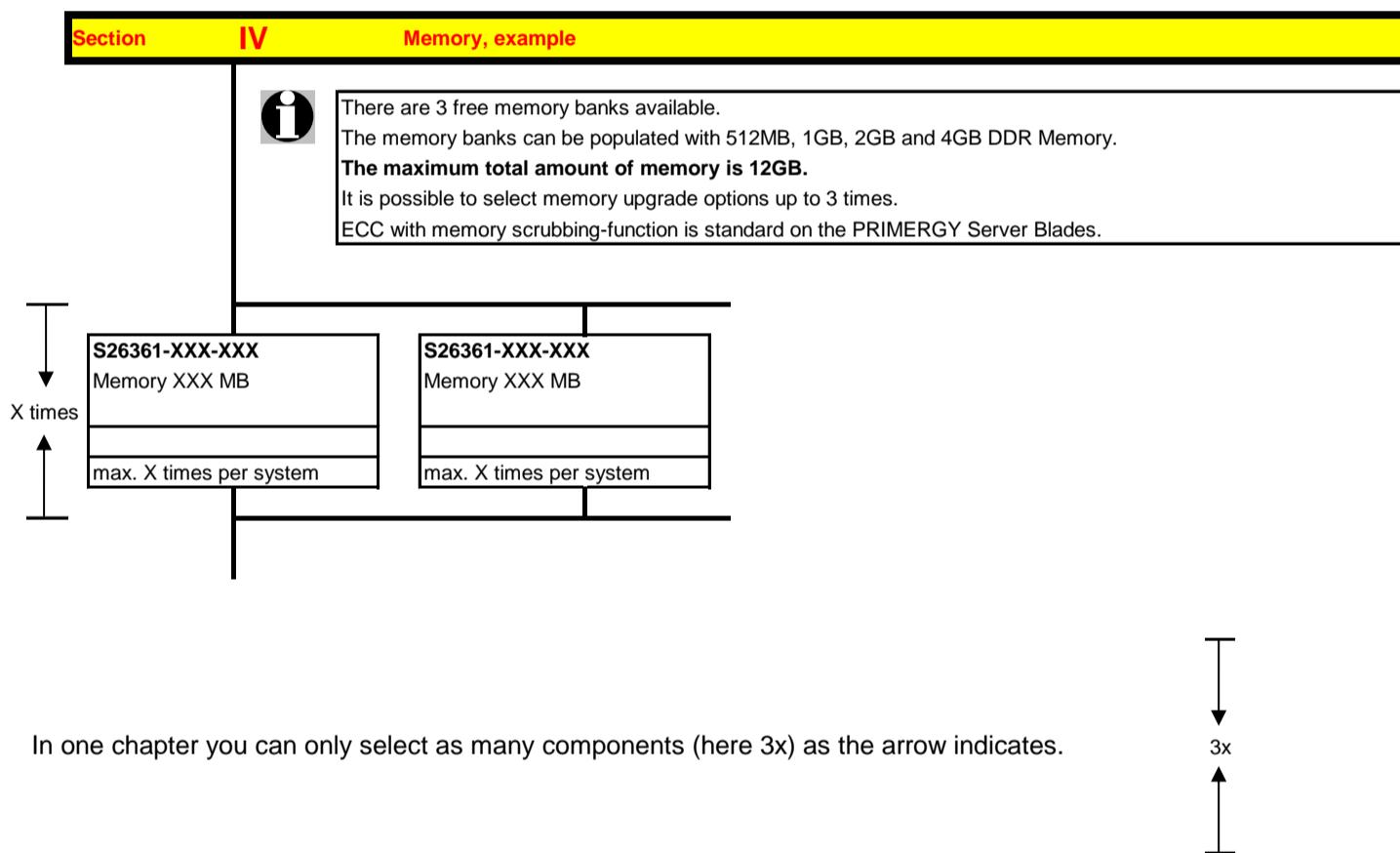
Only the tool "System-Architect" will ensure a fast and proper configuration of your PRIMERGY server or your complete PRIMERGY Rack system.

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:

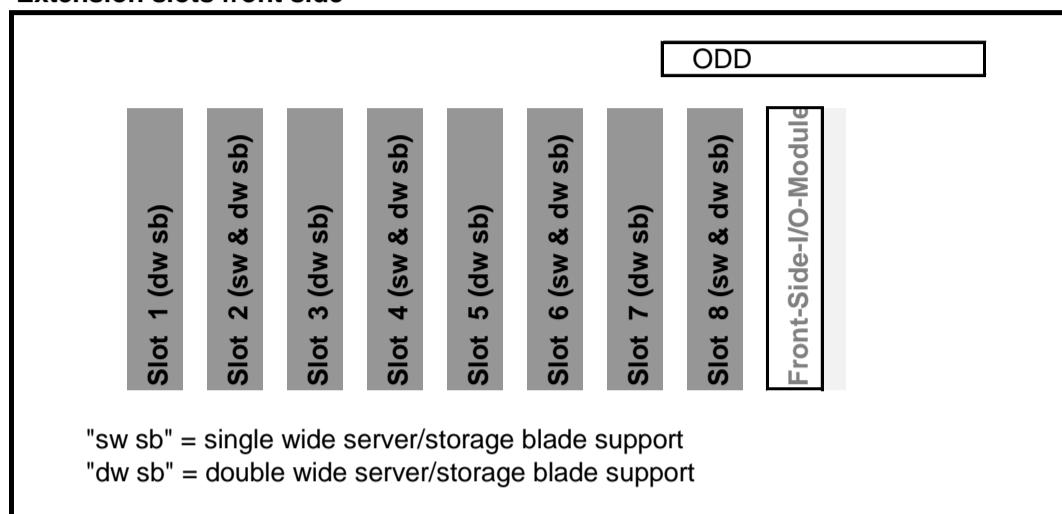
http://ts.fujitsu.com/products/standard_servers/index.html (internet)

[https://partners.ts.fujitsu.com/com/order-supply/configurators/primerav_config/Pages/Currentconfig\(extranet\).aspx](https://partners.ts.fujitsu.com/com/order-supply/configurators/primerav_config/Pages/Currentconfig(extranet).aspx)

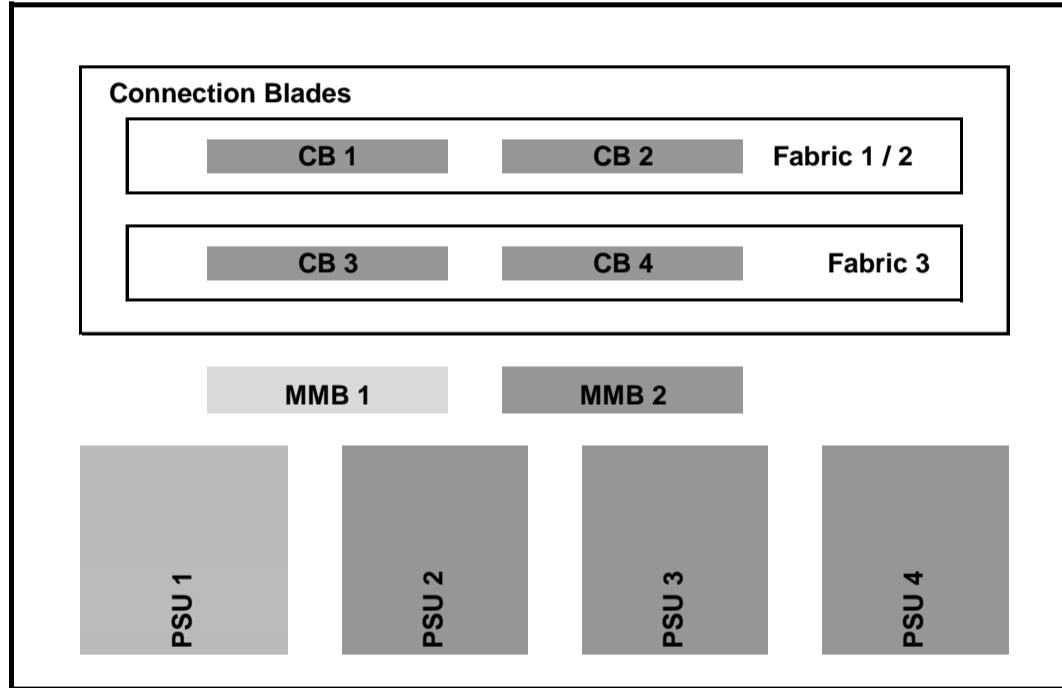
Prices and availability see price list and PC-/ System-Architect
Subject to change and errors excepted

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 | |

A B

Section I System Unit BX400 S1

S26361-K1335-V201

The System Unit BX400 S1 consists of:

- * 6U 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
- * 1 Hot-plug PSU 1600W (230V) / 1100W (115V) with 2 fans at the rear side without power cable
- * Drives / bays / slots
 - 8 empty slots for 8 Server Blades at front side.
 - 4 empty slots for Connection Blades at rear side
 - 2 empty slots for additional hot-plug power supplies or fan modules at rear side
- * 1 hot-plug Management Blades
- * Front-Side-I/O-Module (FSIOM) provides 2x USB, 1x LAN, 1x serial port and 1 slot for front panel or LCD module

External Interfaces:

- 1x RS-232-C (serial, 9 pin) per Management Blade
- 2x Gb Ethernet per Management Blade
- 2x USB per Management Blade
- 1x VGA, 1x serial and 4x USB at front side of each Server Blade via special cable
- 2x USB at front side by FSIOM
- 1x Gb Ethernet (RJ45) at front side by FSIOM (redirected MMB LAN port)
- 1x RS-232-C (serial, 9 pin) at front side by FSIOM (redirected MMB serial port)

Cables (shipped with each System Unit):

- 1x special cable with 4x USB for external CD/FD, serial RS232 and 1x VGA for Server Blade front side connection.

Software:

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

i Note: At least one Server Blade must be integrated in the System Unit ex works.
Server Blades can also be ordered for further extention later!

i In total the number of configured PSU and Fan units must be three (3) !

- if no additional PSU is configured 3 Fan units must be configured
- if 1 additional PSU is configured 2 Fan units must be configured
- if 2 additional PSUs are configured 1 Fan unit must be configured
- if 3 additional PSUs are configured no Fan unit must be configured

i **Power and cooling considerations**

Number of PSU	Number of FAN	Max. Dual Server Blades	PSU Redundancy 230V	PSU Redundancy 115V
1	3	4	1+0	1+0
2	2	8	2+0	2+0
3	1	8	3+0	3+0
4	0	8	2+2	3+1
4	0	8	3+1	3+1

S26361-F3962-E500
Redundant BX900
Management Blade

max. 1x per system

S26361-F4474-E100
Rear Fan Unit
(2 Fans per unit)

max. 3x per system

S26113-F607-E201
Power Supply Unit (PSU)
230V AC 1600W
115V AC 1100W
without power cord

max. 3x per system

for BX400 within rack
please choose only 1 of this 2 cables

S26361-F3151-E301 Power Cord 16A IEC 320 C19 -> C20 default within rack 1x per PSU	S26361-F3151-E351 Power Cord 10A IEC 320 C19 -> C14 for 200V-240V only* 1x per PSU	S26361-F3151-E200 Power Cord 16A IEC 320 C19-> 16A CEE Blue without rack only 1x per PSU
---	---	--

i *) in System architect please
change the default 16A connection
to a 10A connection for all PSU

S26361-F3151-E100
Power Cord 16 A
IEC320 C19->
CEE7/7 Schuko
without rack only

1x per PSU

S26361-F3151-E500
Power Cord
IEC320 C19 ->
US NEMA L6-20p
without rack only

1x per PSU

T26139-Y3850-E10
No Power Cord

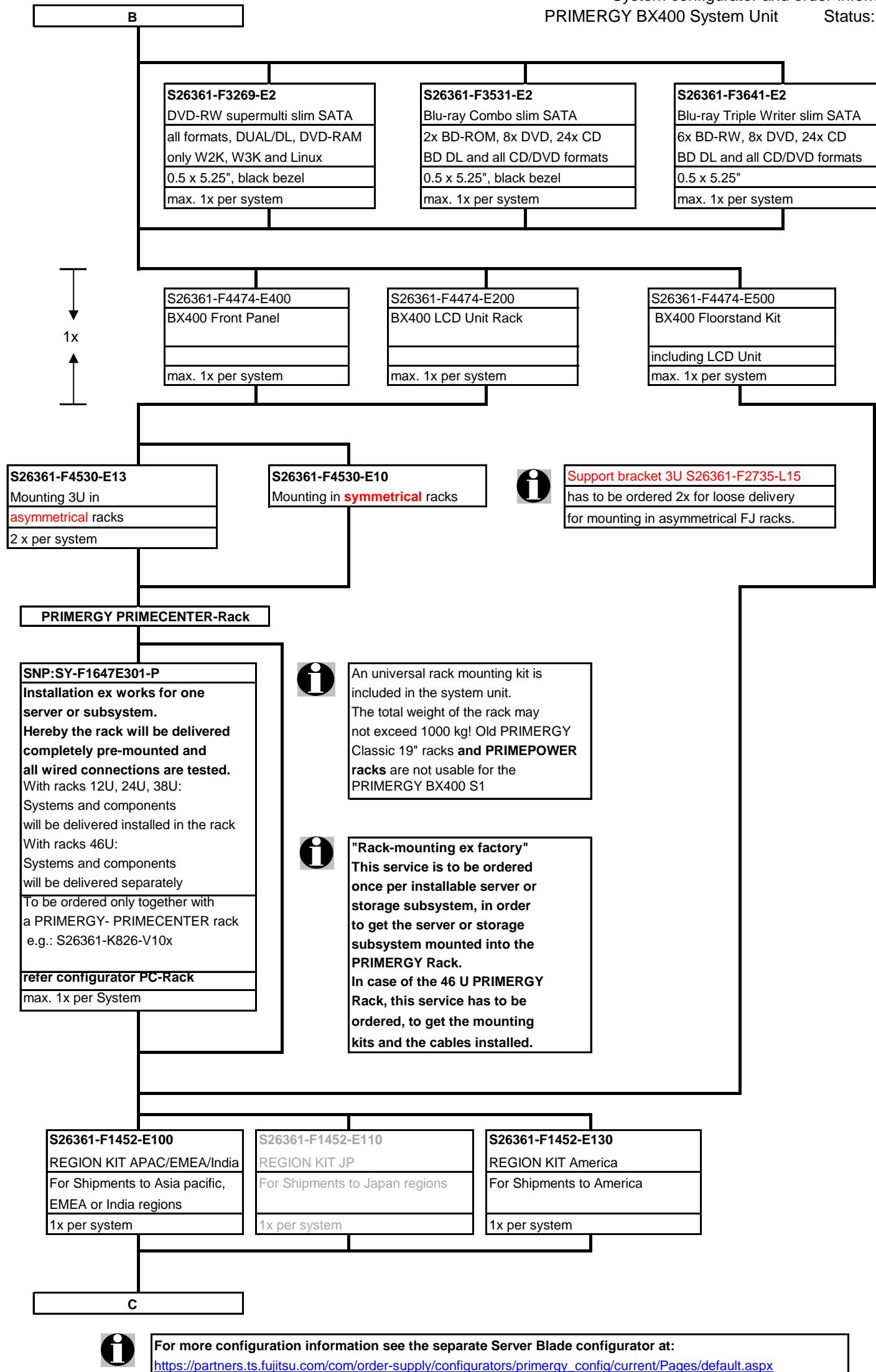
without rack only

1x per PSU

B

Fujitsu PRIMERGY Server

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Section

II

BX900 Server Blades in System Unit BX400 S1

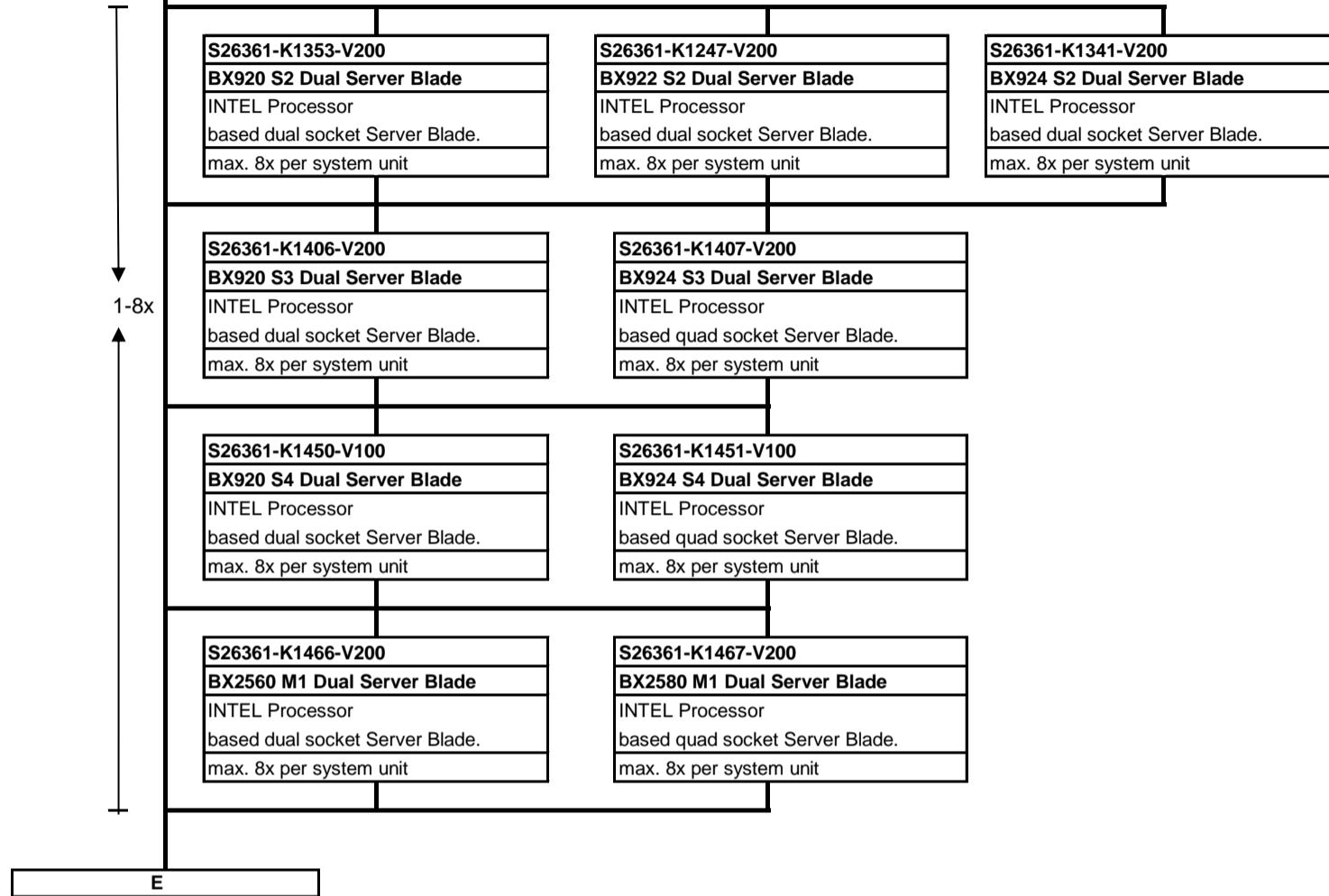


For the BX400 the defined BX900 Server Blades can be used!

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

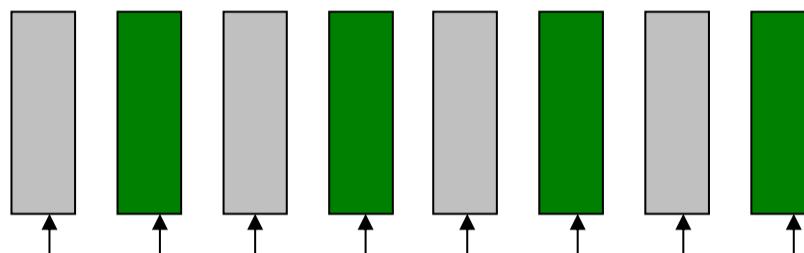


Section

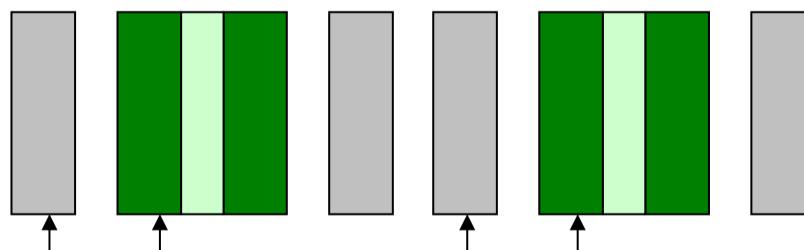
III

BX900 Storage Blades in System Unit BX400 S1

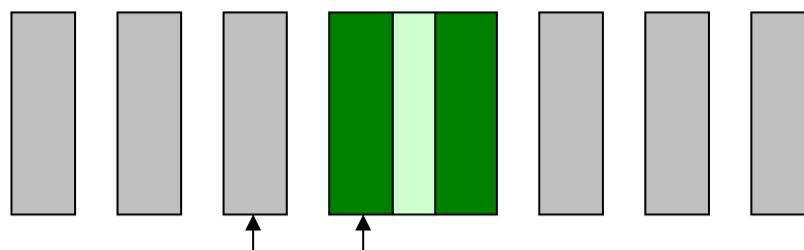
Front slots: 1 2 3 4 5 6 7 8



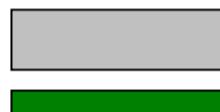
SX910 configurations
SX940 configurations



SX960 configurations



SX960 configurations



Server Blade



Storage Blade



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

↓
1-4x
↑

S26361-K1292-V200
PY SX940 S1 Storage Blade Disk
1x or 2x PCIe Controller
up to 4x SAS HDD
max. 4x per system unit

S26361-K1290-V200
PY SX910 S1 Storage Tape Blade
1x PCIe Controller
1x SAS LTO Drive
max. 4x per system unit

↓
max. 2x
↑

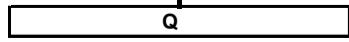
S26361-K1382-V303
PY SX960 S1 Storage Blade Disk
1x PCIe Controller SAS HBA / RAID
up to 10x SAS HDD
max. 2x per system unit

S26361-K1382-V303
PY SX960 S1 Storage Tape Blade
1x PCIe Controller
1x SAS LTO Drive
max. 4x per system unit

↓
max. 2x
↑

S26361-K1383-V210
PY SX980 S1 JBOD Blade
up to 10x SAS HDD/SSD
max. 2x per system unit

S26361-K1383-V220
PY SX980 S2 JBOD Blade
up to 10x SAS HDD/SSD
redundant SAS paths
max. 2x per system unit



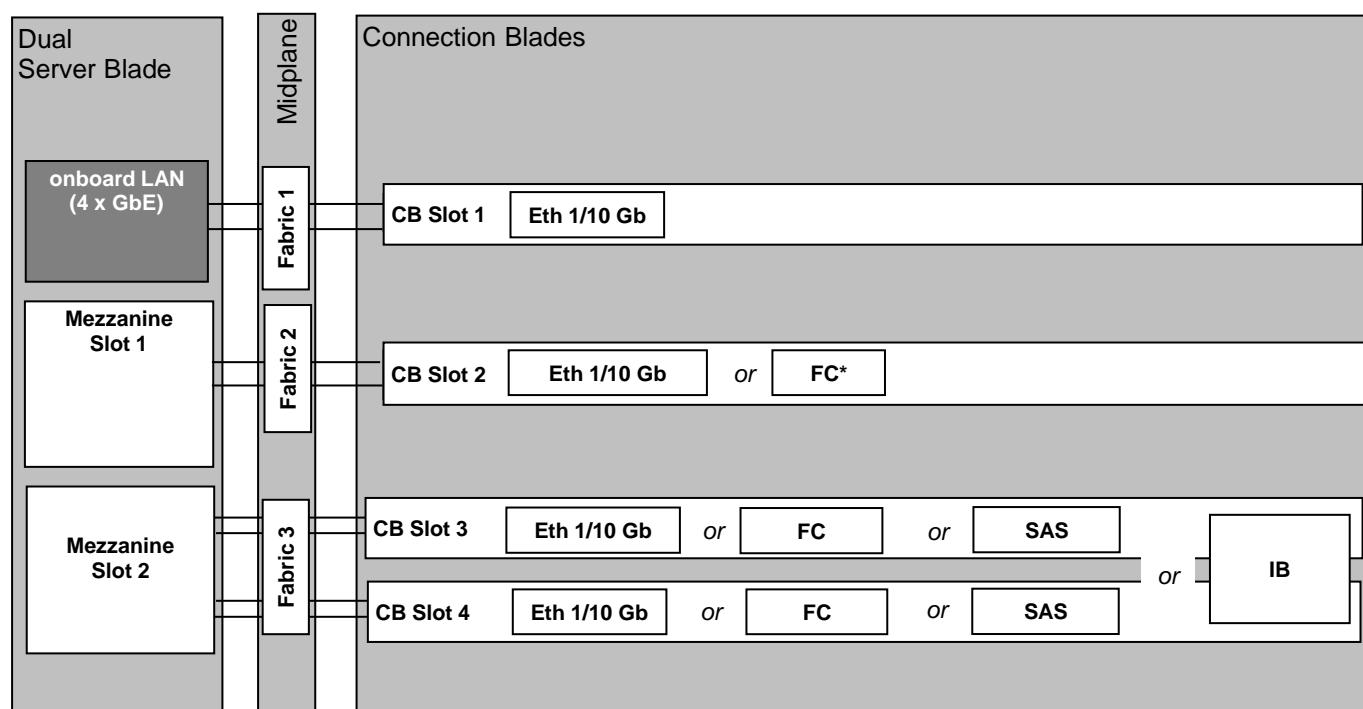
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Section IV Connection Blade Overview



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



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 4x 1Gb SFP	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-K1533-V100	PY CB Eth Switch 10/40Gb 18/8+2	1/2/3/4	18x 10Gb Eth	x 1
S26361-K1429-V100	PY CB DCB Switch 10Gb 18/6 (Brocade)	1/2/3/4	18x 10Gb Eth	x
S26361-K1429-V200	PY CB DCB SW 10Gb 18/6/6 Enterprise (1/2/3/4	18x 10Gb Eth	x
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-K1305-V26	FC SW 8G 18/8 26 Port (Brocade)	2/3/4	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-K1527-V14	PY CB FC Switch 16Gb 18/8 14 (Brocade)	2/3/4	18x 16Gb FC	8x 16Gb FC (SFP+)
S26361-K1527-V26	PY CB FC Switch 16Gb 18/8 26 (Brocade)	2/3/4	18x 16Gb FC	8x 16Gb FC (SFP+)
S26361-K1527-V27	PY CB FC Switch 16Gb 18/8 26 E (Brocade)	2/3/4	18x 16Gb FC	8x 16Gb FC (SFP+)
S26361-K1363-V18	PY CB FC Pass Thru 8G 18/18	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-K1391-V300	PY CB SAS Switch 6Gb 18/6	3/4	18x 6Gb SAS	6x 6Gb SAS (SFF8088)



There is no Connection Blade included in the System Unit.

Mezzanine Cards released for BX9xx Server Blades

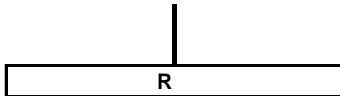
System	BX920 S2	BX920 S3	BX920 S4	BX922 S2	BX924 S2	BX924 S3	BX924 S4
	onboard LAN ports	4x 1GbE	2x 10GbE	4x 1GbE	4x 1GbE	2x 10GbE	2x 10GbE
	mezzanine slots	2 slots	2 slots	2 slots	2 slots	2 slots	2 slots
Eth 1Gb 4 Port	S26361-F3331-E1	X	X	X	X	X	X
FC 8Gb 2 Port	S26361-F3874-E1	X	X	X	X	X	X
FC 16Gb 2 Port	S26361-F4994-E402						X
IB 40Gb 2 Port	S26361-F3992-E2	X	X	X	X	X	X
IB 56Gb 2 Port	S26361-F4534-E1		X			X	X
Eth 10Gb 2 Port	S26361-F3997-E1	X	X	X	X	X	X
SAS HBA Mezz	S26361-F4480-E1	X	X	X	X	X	X
SAS RAID Mezz	S26361-F4481-E1	X	X	X	X	X	X
CNA 10GB BE3	S26361-F3592-E532		X			X	X

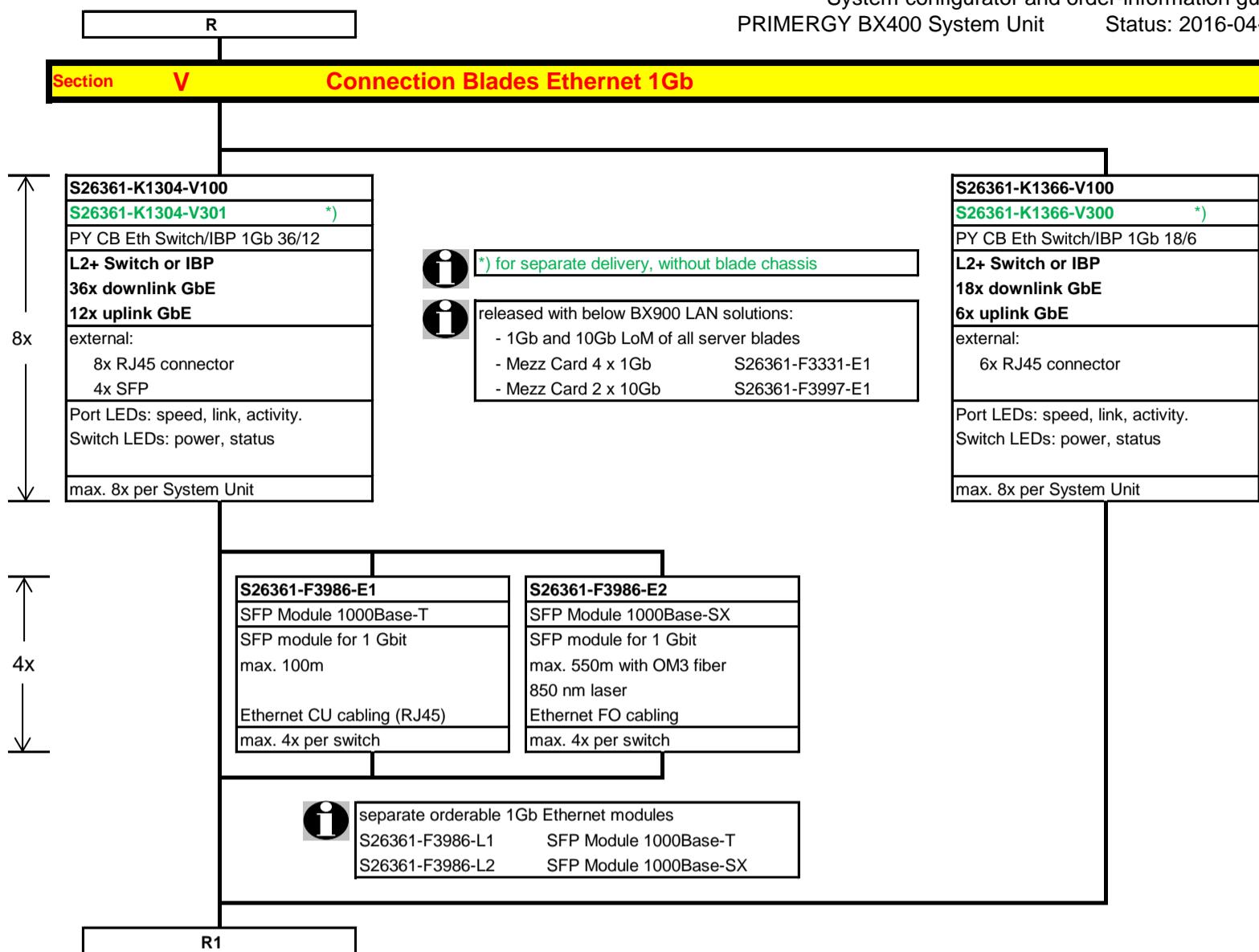
Supportmatrix for Ethernet Connection Blades

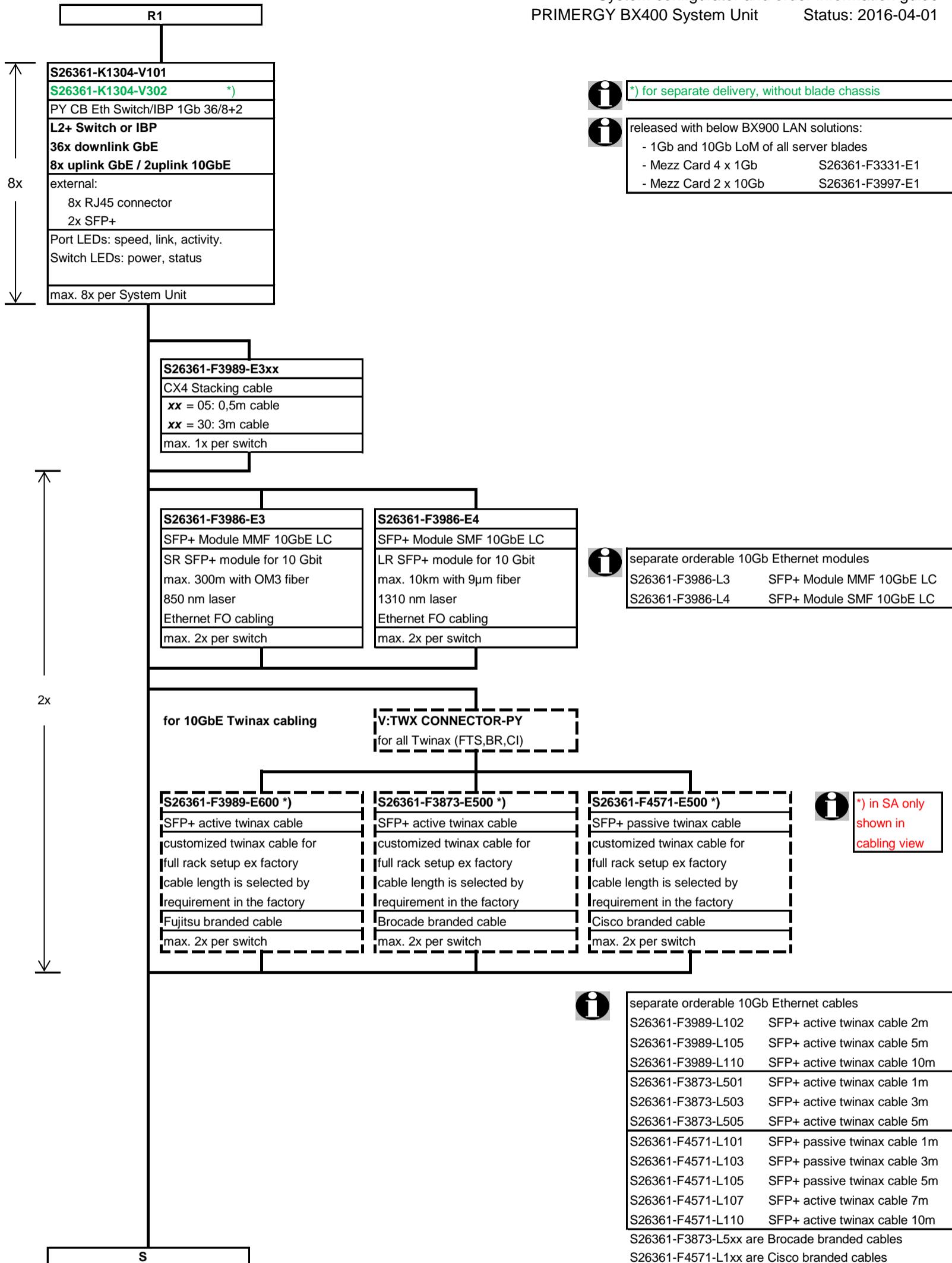
Order number	Codename	LAN on Motherboard								Eth 4x 1Gb F3331-E1	Eth 2x 10Gb F3997-E1	Eth 2x 10Gb F3592-E502	Eth 2x 10Gb F3592-E532	FC 2x 8Gb F3874-E1	FC 2x 16Gb F4994-E402
		BX920 S1/S2	BX920 S3/S4	BX2560 M1	BX922 S2	BX924 S2	BX924 S3/S4	BX2580 M1	BX960 S1						
S26361-K1304-V100	SB11A	X	X	X	X	X	X	X	X	X	X	X	X	X	X

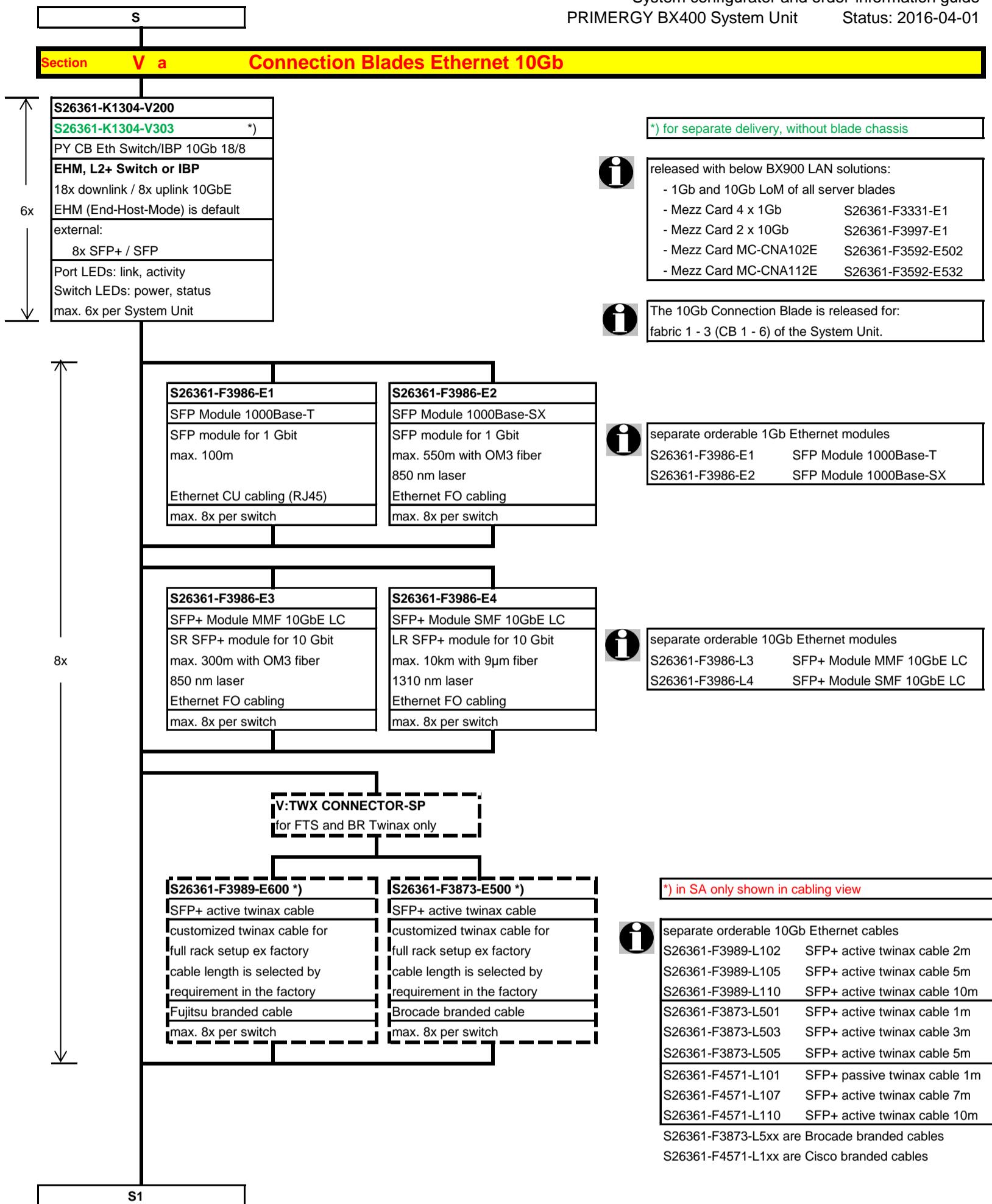
Fujitsu PRIMERGY Server

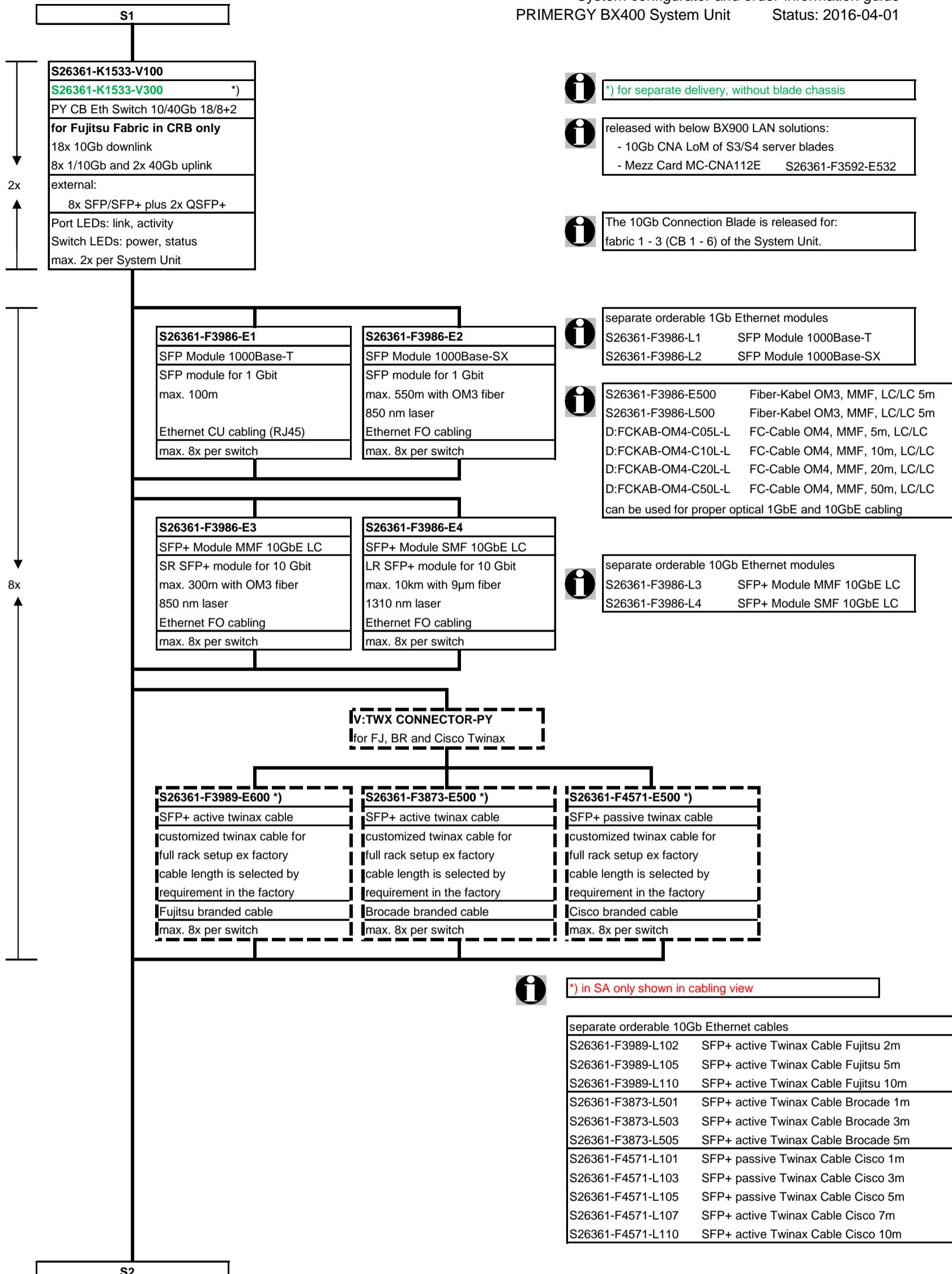
S26361-K1304-V100	SB11A	^	^	^	^	^	^	^	^	^	^	^	^	^	^
S26361-K1304-V101	SB11	X	X	X	X	X	X	X	X	X	X	---	X	---	---
S26361-K1366-V100	SB6	X	X	X	X	X	X	X	X	X	X	---	X	---	---
S26361-K1304-V200	SBAX2	X	X	X	X	X	X	X	X	X	X	X	X	---	---
S26361-K1533-V100	SBAX3	---	X	X	---	---	X	X	---	---	---	---	X	---	---
S26361-K1429-V100	Harrier	---	X	X	---	---	X	X	---	---	---	X	X	---	---
S26361-K1429-V200	Harrier	---	X	X	---	---	X	X	---	---	---	X	X	---	---
S26361-K1440-V100	FEX	---	X	X	---	---	X	X	---	---	---	---	X	---	---
S26361-K1440-V110	FEX	---	X	X	---	---	X	X	---	---	---	---	X	---	---
S26361-K1365-V18	Eth Pass Thru	X	X	X	X	X	X	X	X	X	X	X	X	---	---
S26361-K1305-V14	BR 5450	---	---	---	---	---	---	---	---	---	---	---	---	X	---
S26361-K1305-V126	BR 5450	---	---	---	---	---	---	---	---	---	---	---	---	X	---
S26361-K1305-V26	BR 5450	---	---	---	---	---	---	---	---	---	---	---	---	X	---
S26361-K1527-V14	BR 6545	---	---	---	---	---	---	---	---	---	---	---	---	X	X
S26361-K1527-V26	BR 6545	---	---	---	---	---	---	---	---	---	---	---	---	X	X
S26361-K1527-V27	BR 6545	---	---	---	---	---	---	---	---	---	---	---	---	X	X
S26361-K1363-V18	FC Pass Thru	---	---	---	---	---	---	---	---	---	---	---	---	X	---

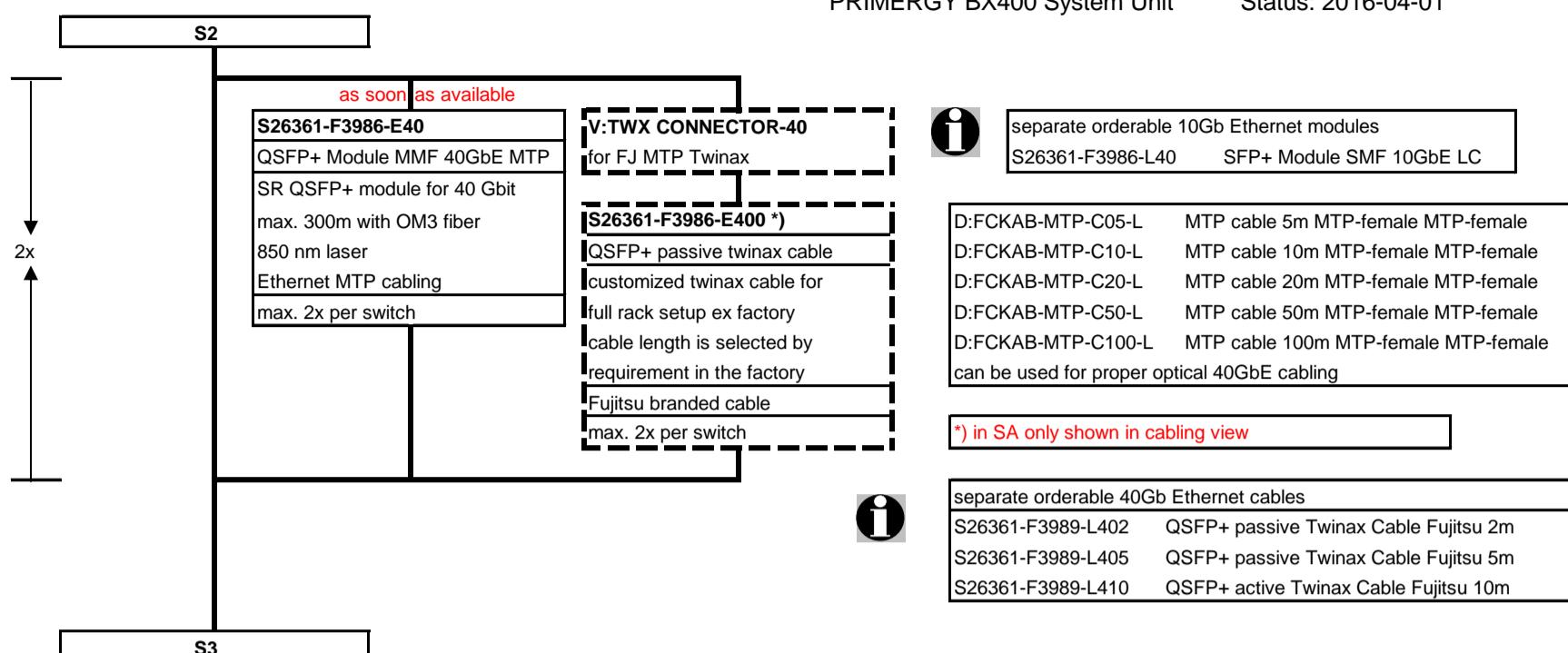


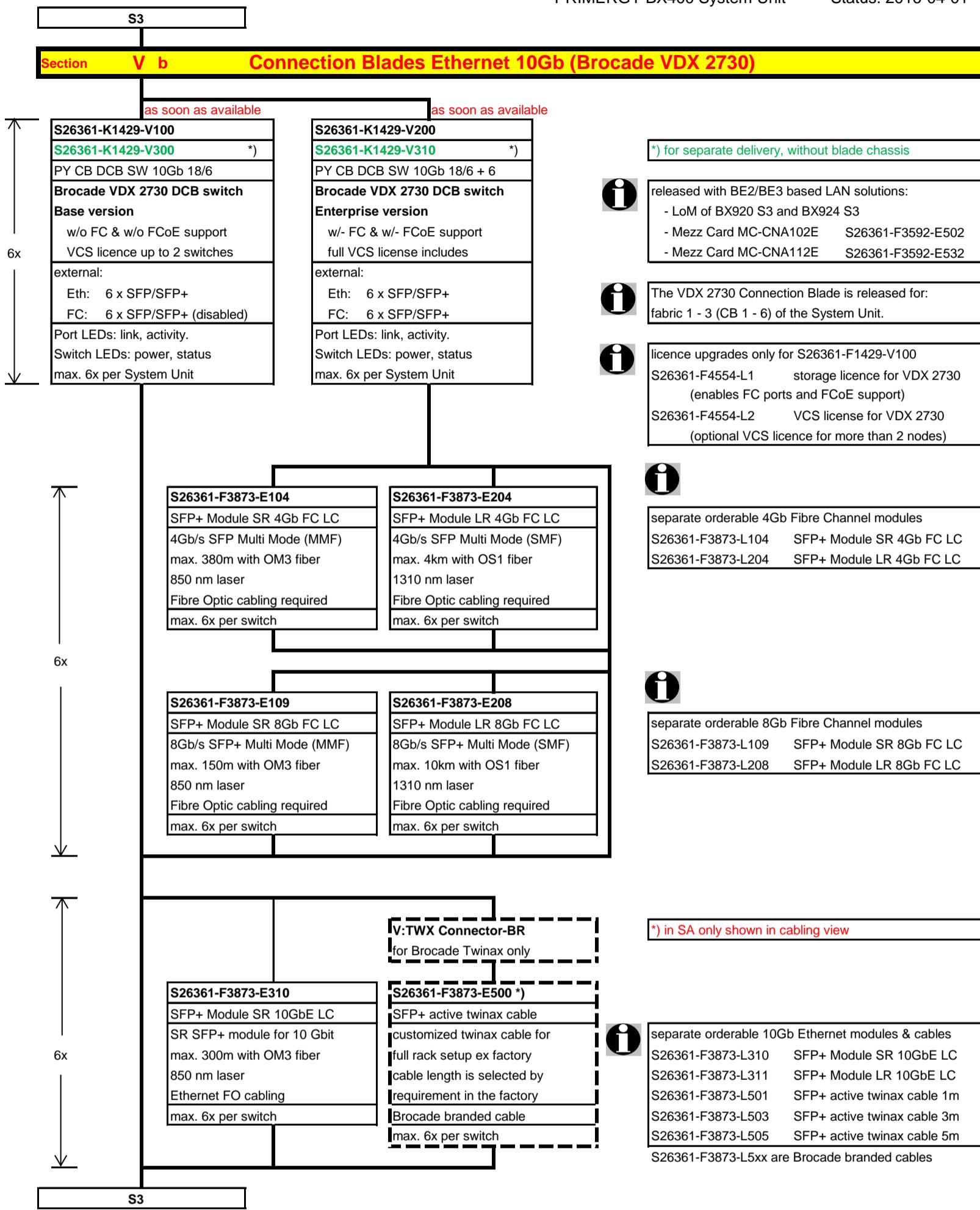


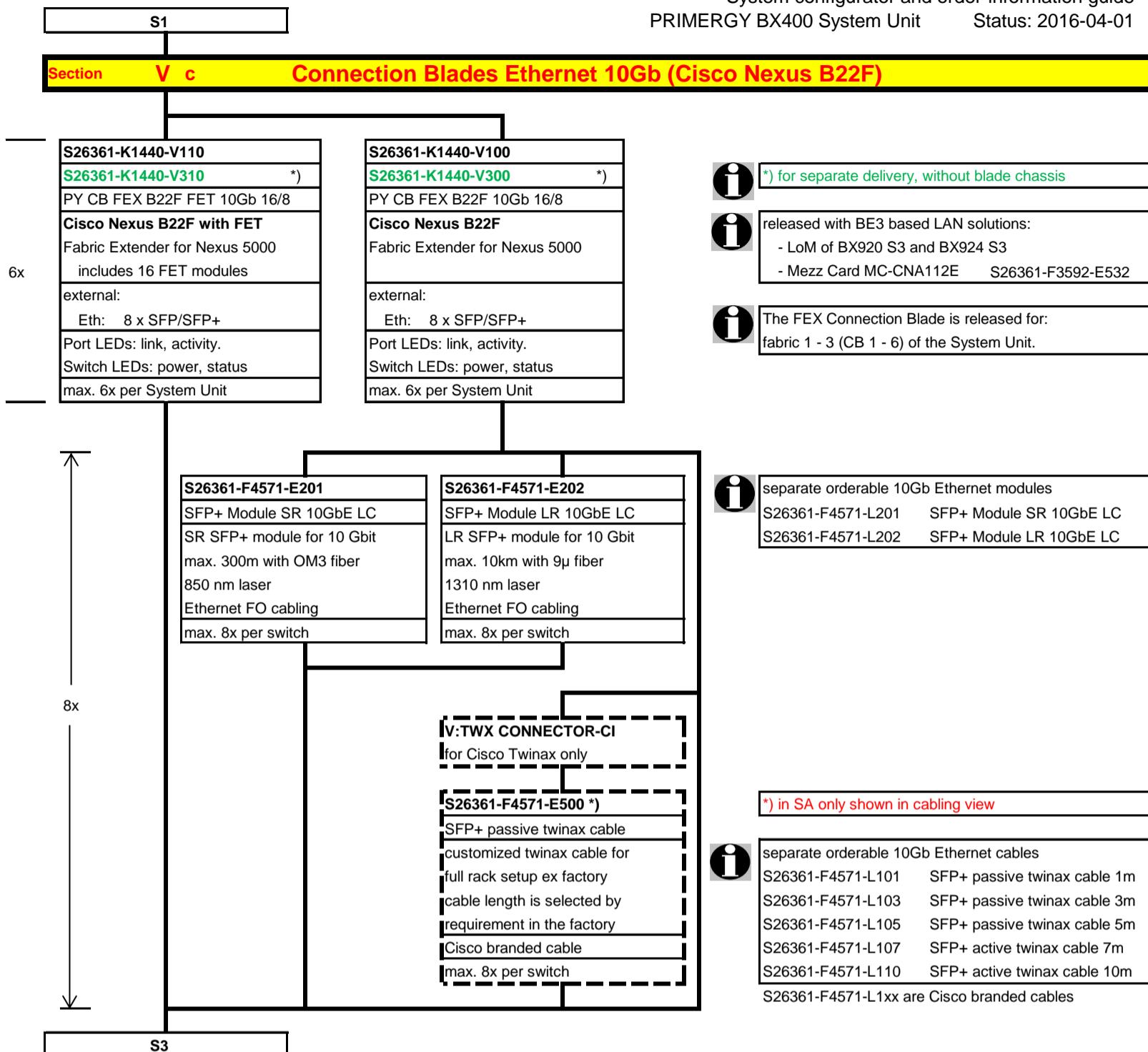


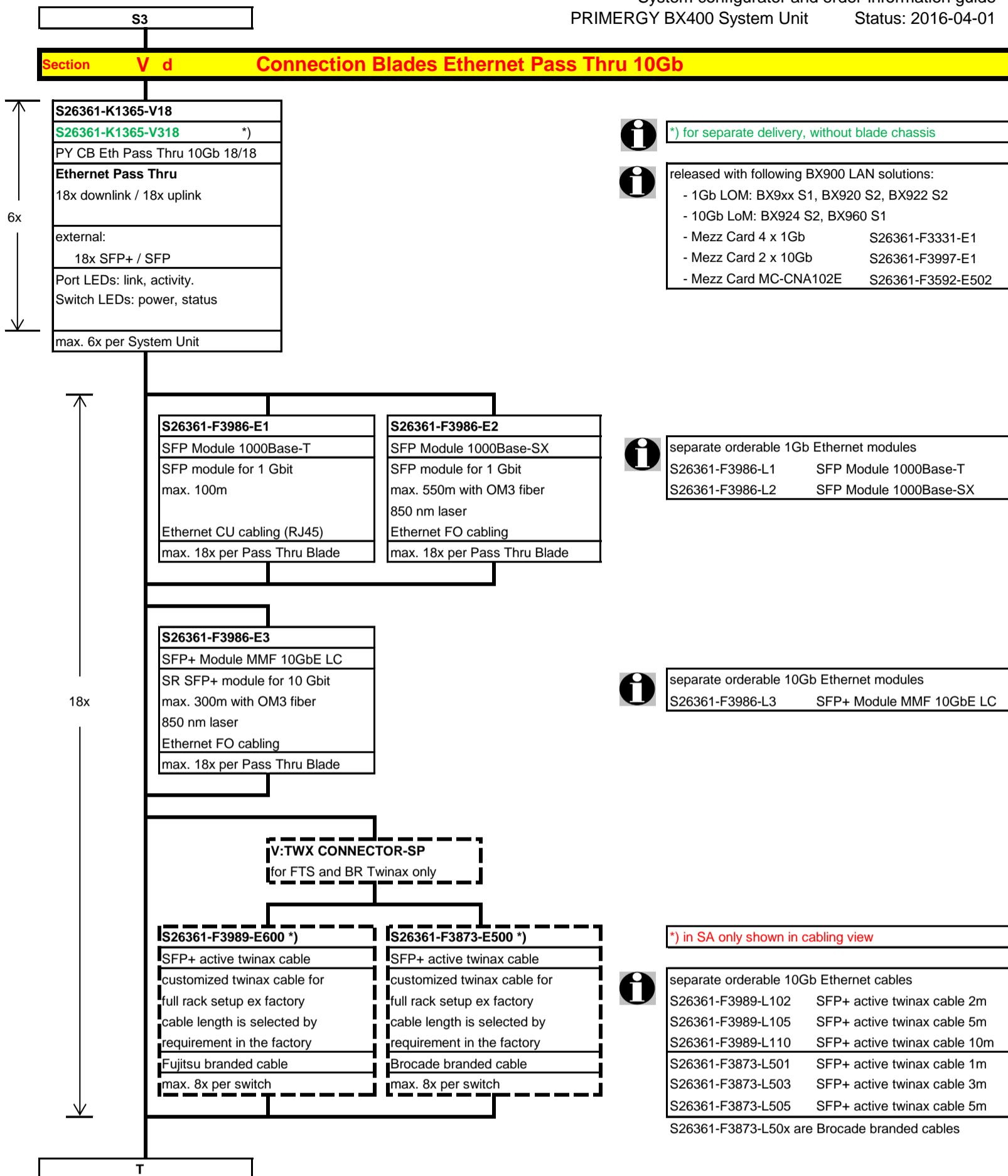


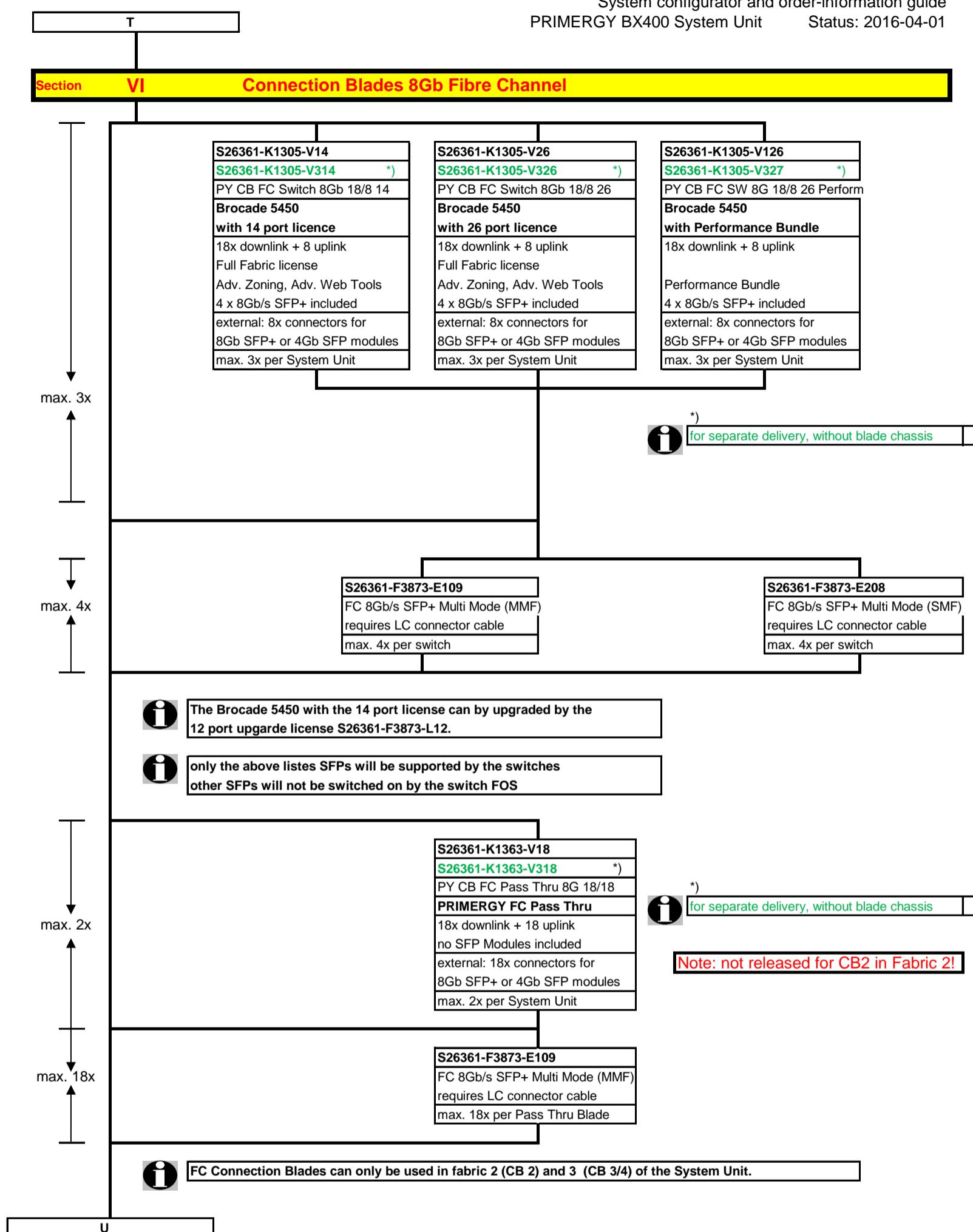


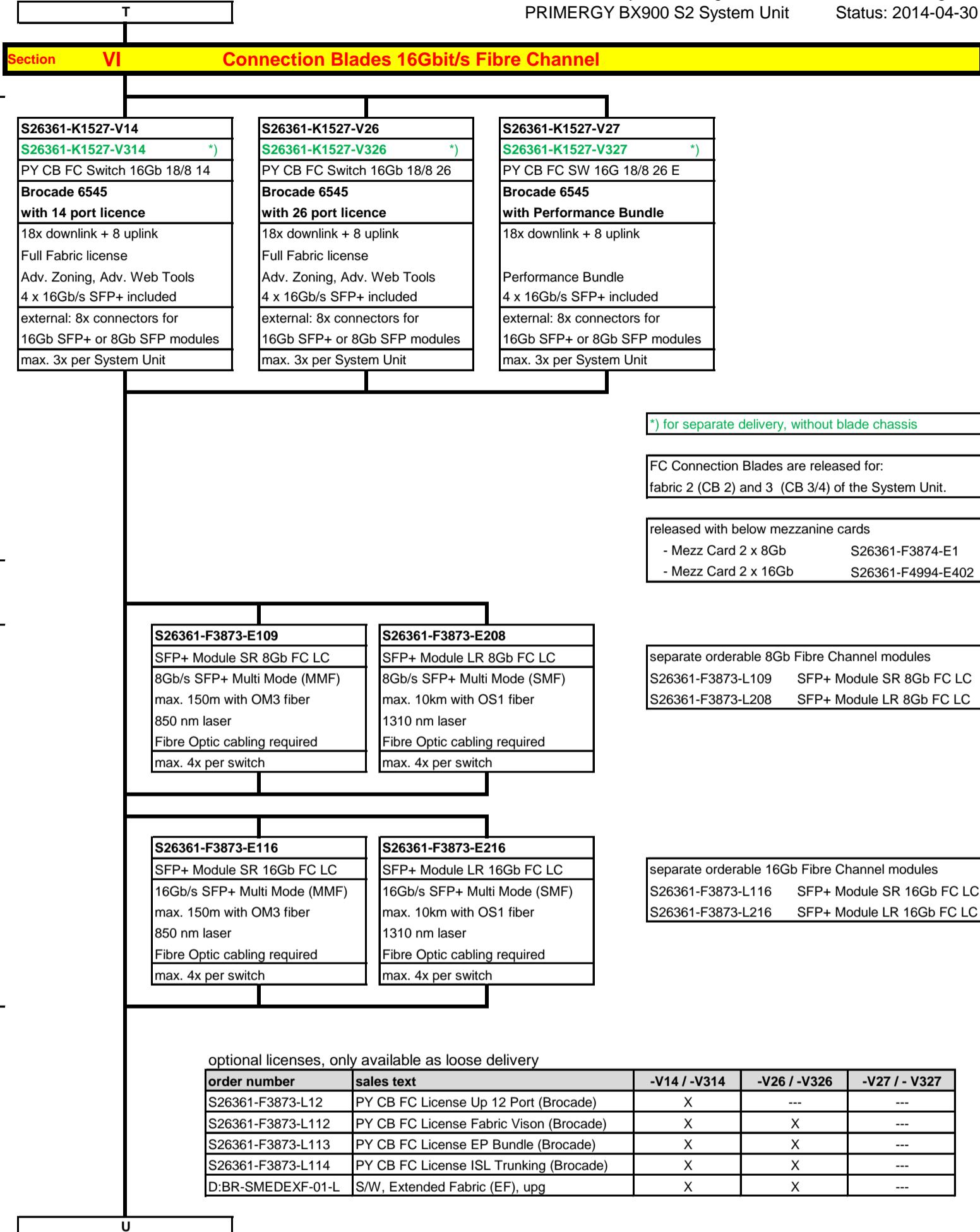


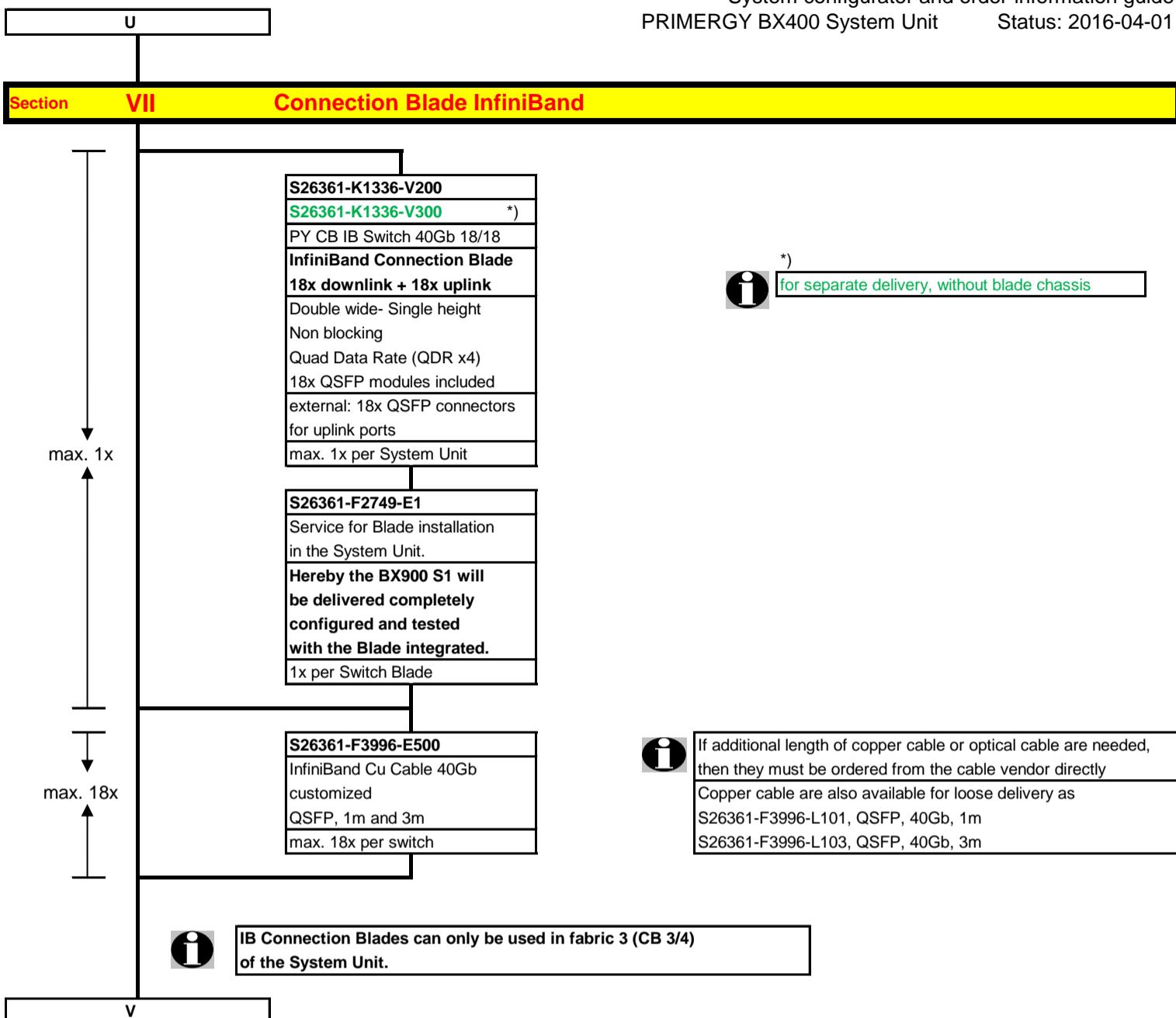


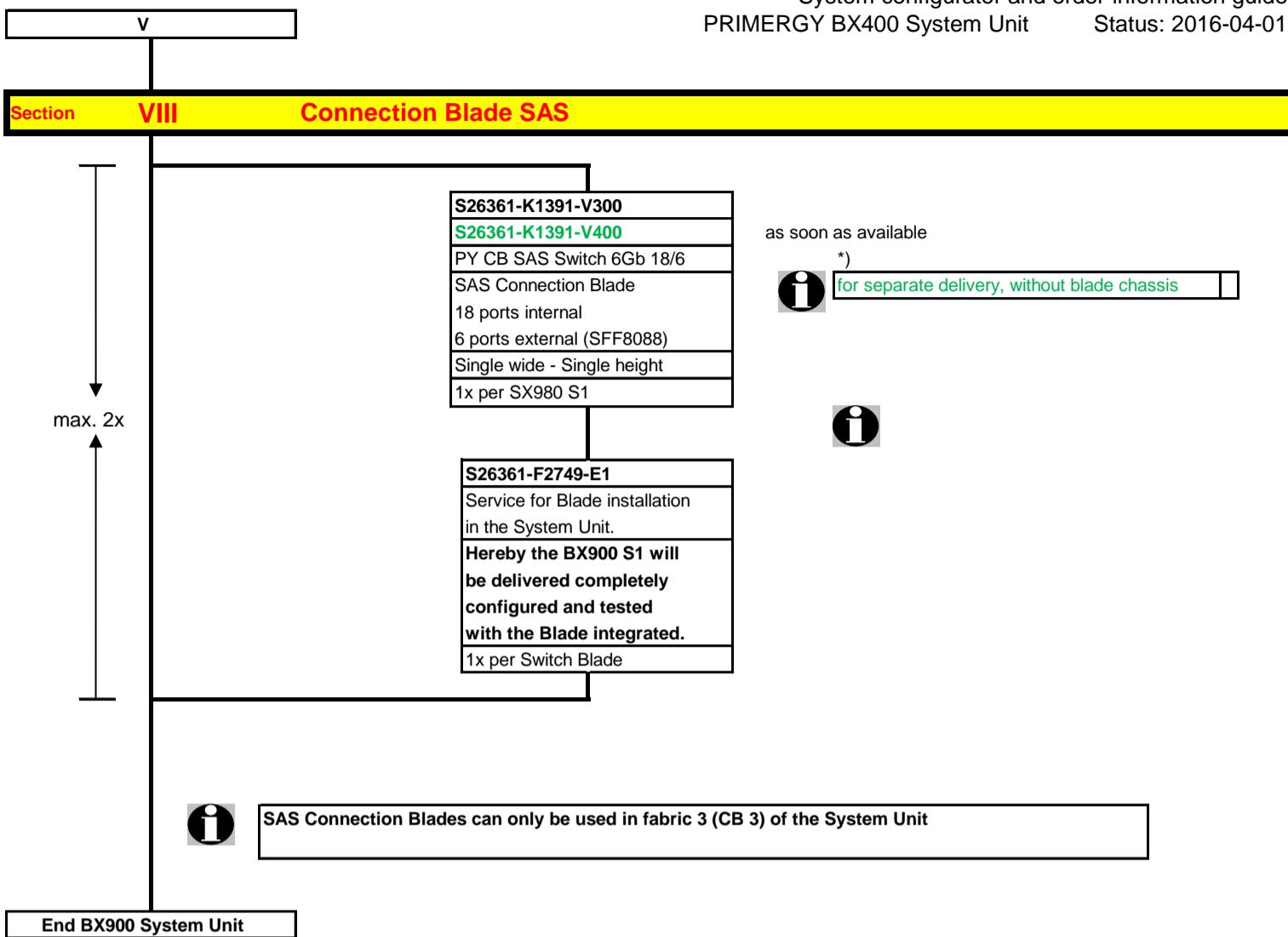












10 GbE Twinax Cabling

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 E8R800 Ext. Switch VDX 6720-60 S26361-K1452-V100 Ext. Switch VDX 6720 for DL-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 S26361-F4571-L110	FTS customized Brocade customized Brocade 1m Brocade 3m Brocade 5m Cisco customized Cisco 10m
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

<i>Product number</i>	<i>Connector</i>	<i>Description</i>
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):

E8R800-TWX-1M-L	SFP+ active Twinax cable BRCD 1m UPG	2x FC TWX 10G connector BR
E8R800-TWX-3M-L	SFP+ active Twinax cable BRCD 3m UPG	2x FC TWX 10G connector BR
E8R800-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