



METROCLUSTER BLUE BOOK

Manual order processing – reference diagrams and
cable/component verification

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Notes

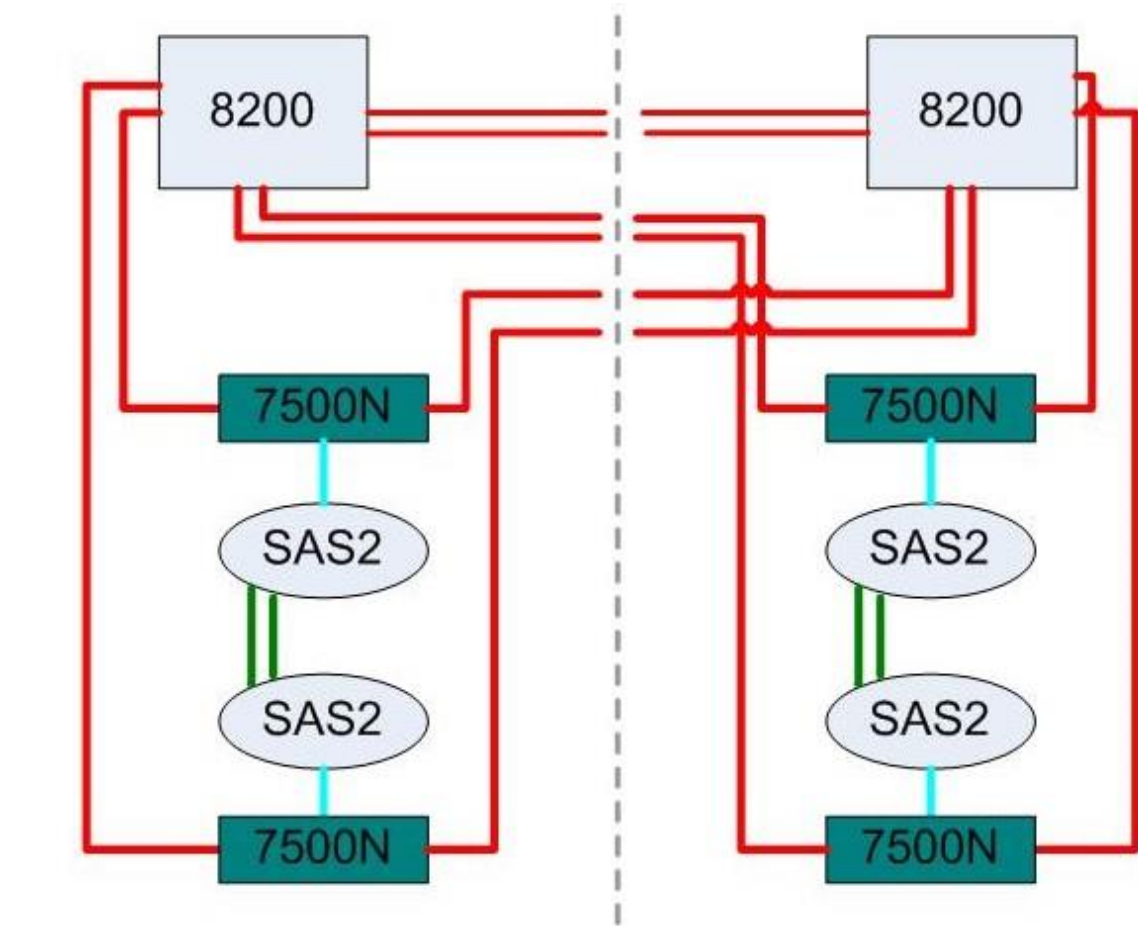
Stretch is **only** available as 2-node. Fabric configurations are available as 2-, 4-, and 8-node configuration. Patch panel means a panel with LC or QSFP jacks are connected across up to 100m (MiniSAS-HD to LC) or up to 500m (using LC-LC) depending on Stretch or Stretch Bridge, SAS2 or SAS3

Different cables are used for SAS2 and SAS3 shelves and some combinations are not usable (noted in diagrams).

Type	Brocade or Cisco Switch?	ATTO 7500N (or 6500N – rare)?	Patch Panel?
Stretch Direct	No	No	No
Stretch Direct Patch Panel	No	No	Yes
Stretch Bridge	No	Yes	No
Stretch Bridge Patch Panel	No	Yes	Yes
Fabric	Yes	Yes	Yes

Once you determine the TYPE, please consult the diagrams for the types of cables.

1. FAS8200 MCC SAS2 Stretch Bridge Patch Panel



 MiniSAS HD - QSFP - X66022A-R6-C (5m)

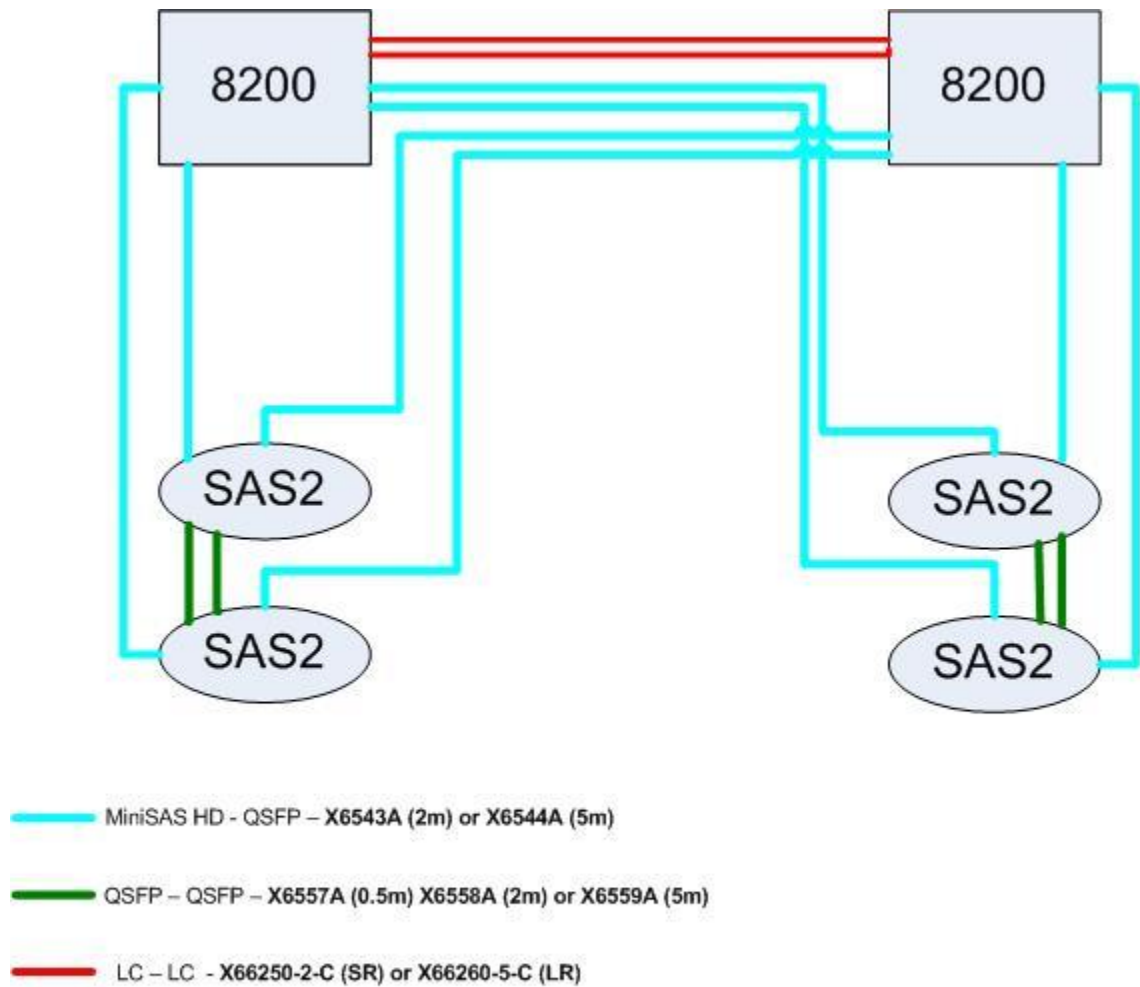
 QSFP - QSFP - X6557A-R6-C (0.5m) X6558A-R6-C (2m) or X6559A-R6-C (5m)

 LC - LC - X66250-2-C (SR) or X66260-5-C (LR)

8200 MCC SAS2 Stretch Bridge Patch Panel

Qty	Facilitating part numbers/parts
4	X66022A-R6-C
(no. of shelves – 2) * 2	X6557A-R6-C or X558A-R6-C or X559A-R6-C
16	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
# of stacks	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

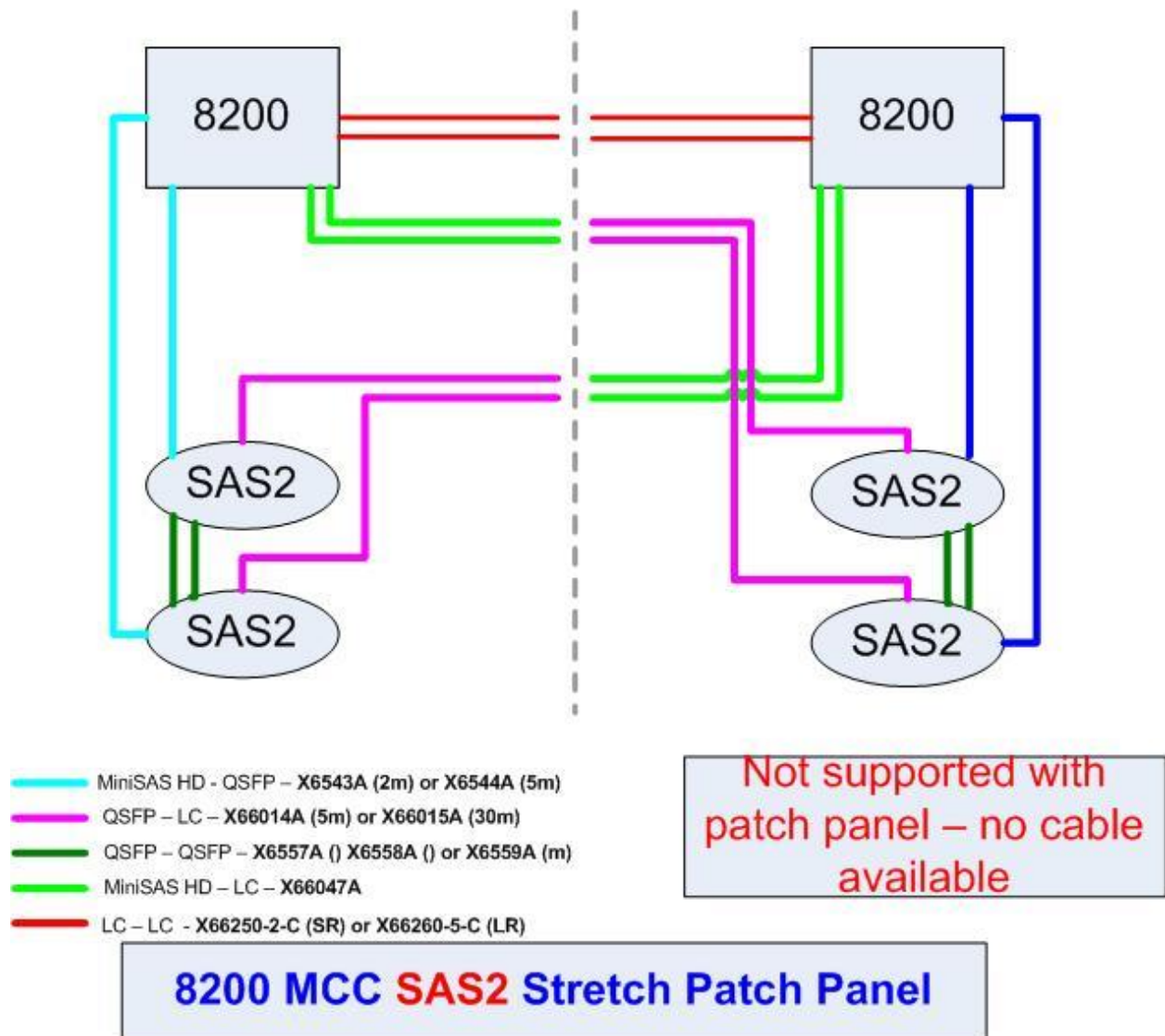
2. FAS8200 MCC SAS2 Stretch Direct



8200 MCC SAS2 Stretch Direct

Qty	Facilitating part numbers/parts
8	X6543A or X6544A
(no. of shelves – 2) * 2	X6557A-R6-C or X558A-R6-C or X559A-R6-C
2	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
# of stacks	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

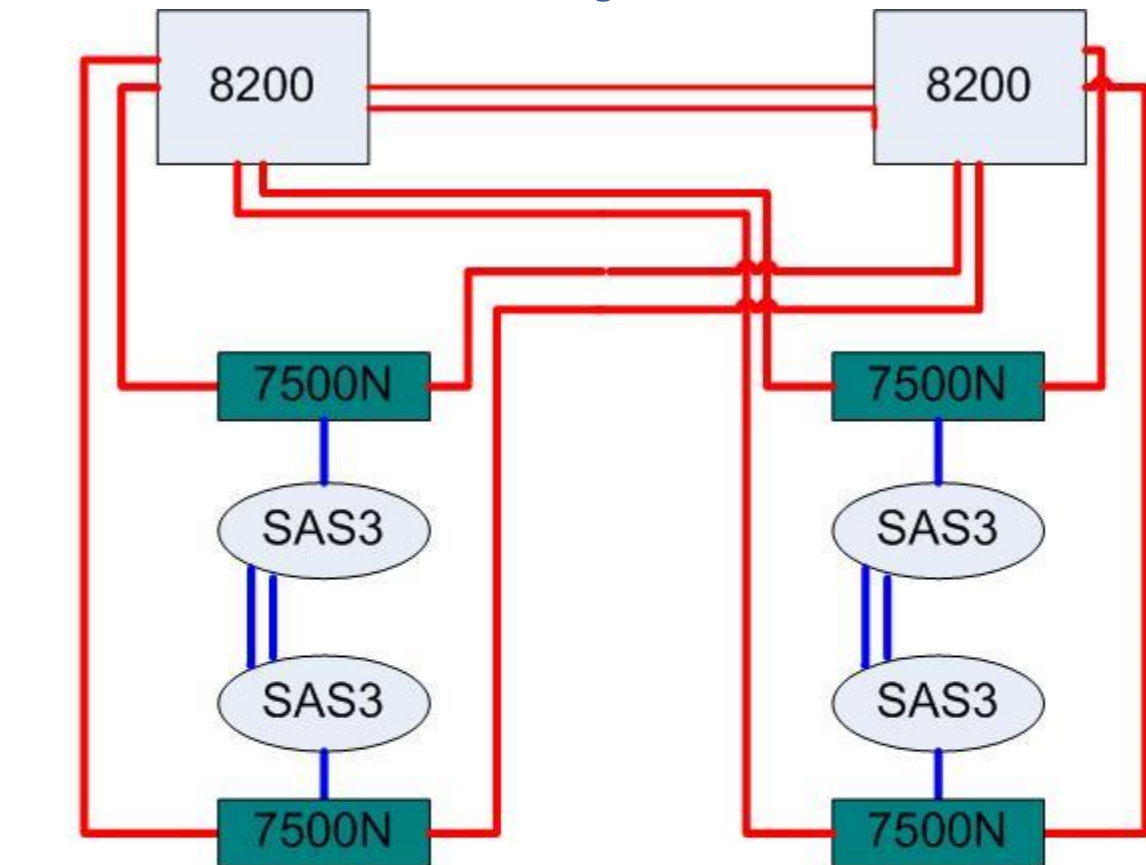
3. FAS8200 MCC SAS2 Stretch Direct Patch Panel



Will work using X2069 Beechnut card.

Qty	Facilitating part numbers/parts
4	X6543A or X6544A
(no. of shelves – 2) * 2	X6557A-R6-C or X558A-R6-C or X559A-R6-C
8	X66014A or X66015A
# of controllers	X2069
4	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
# of stacks	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

4. FAS8200 MCC SAS3 Stretch Bridge (fix multimode cable X66260 reference)



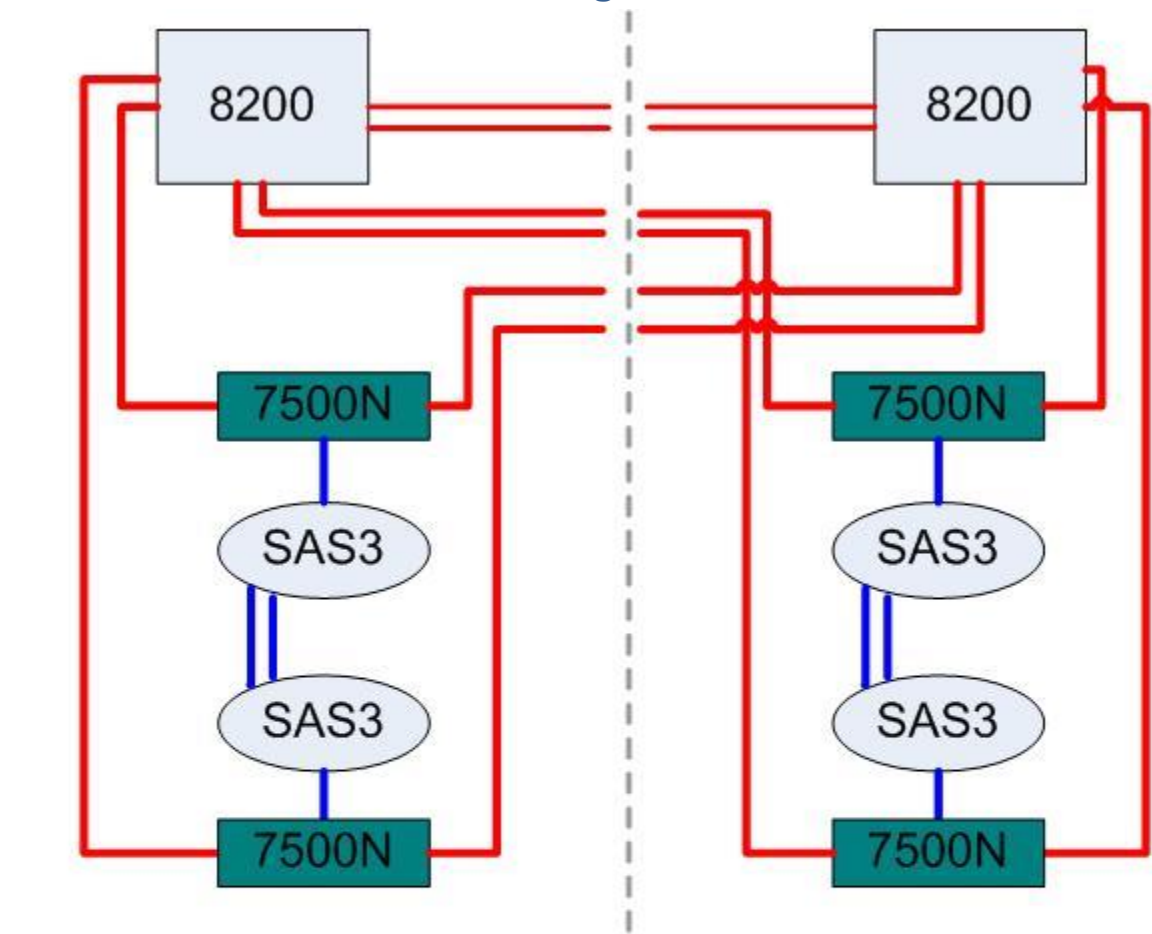
— MiniSAS HD - MiniSAS HD - X66031A-C or X66032A-C

— LC - LC - X66250-2-C (SR) or X66260-5-C (LR)

8200 MCC SAS3 Stretch Bridge

Qty	Facilitating part numbers/parts
(no. of shelves) * 2	X66031A-C or X66032A-C
10	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
# of stacks	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

5. FAS8200 MCC SAS3 Stretch Bridge Patch Panel



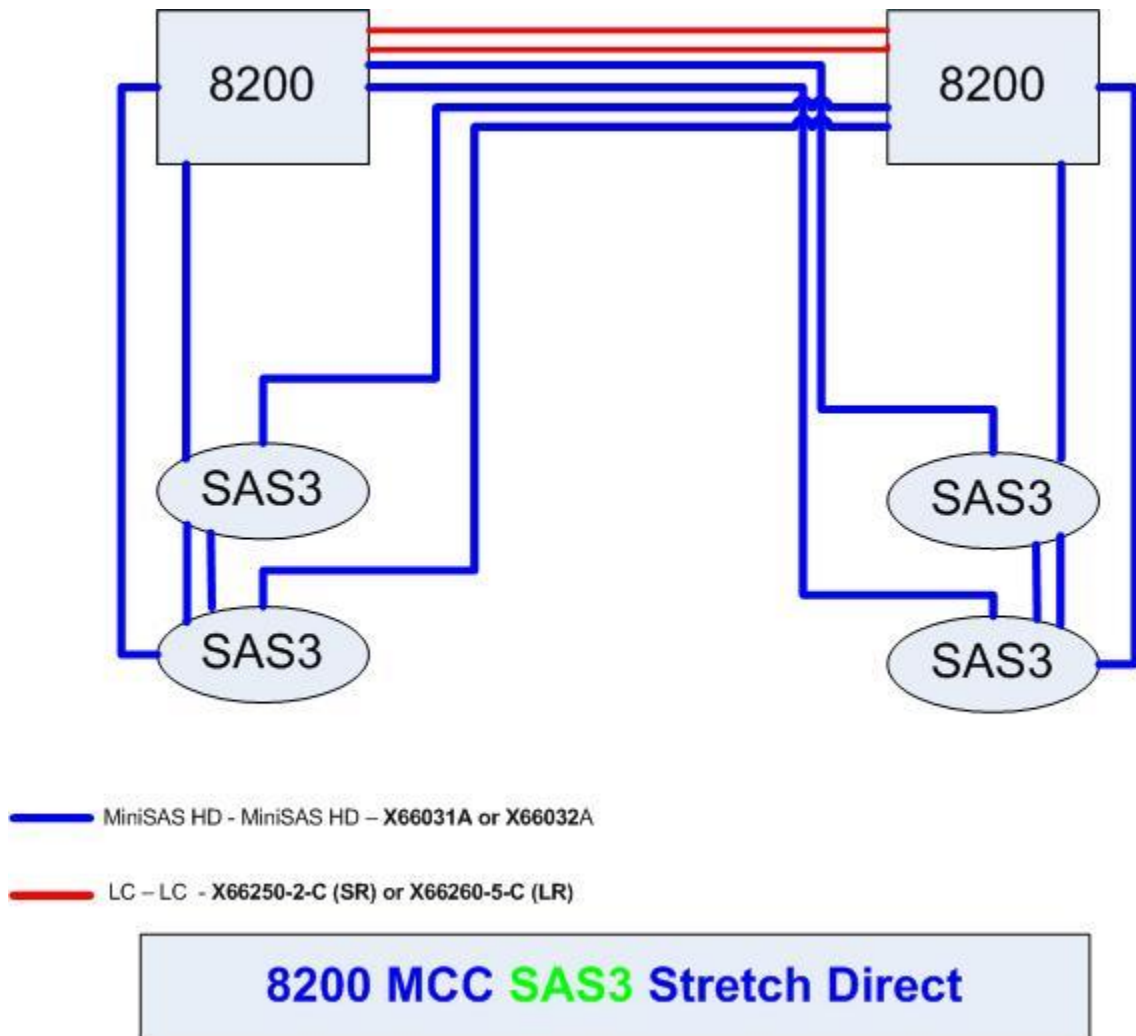
— MiniSAS HD - MiniSAS HD - X66031A-C or X66032A-C

— LC - LC - X66250-2-C (SR) or X66260-5-C (LR)

8200 MCC SAS3 Stretch Bridge Patch Panel

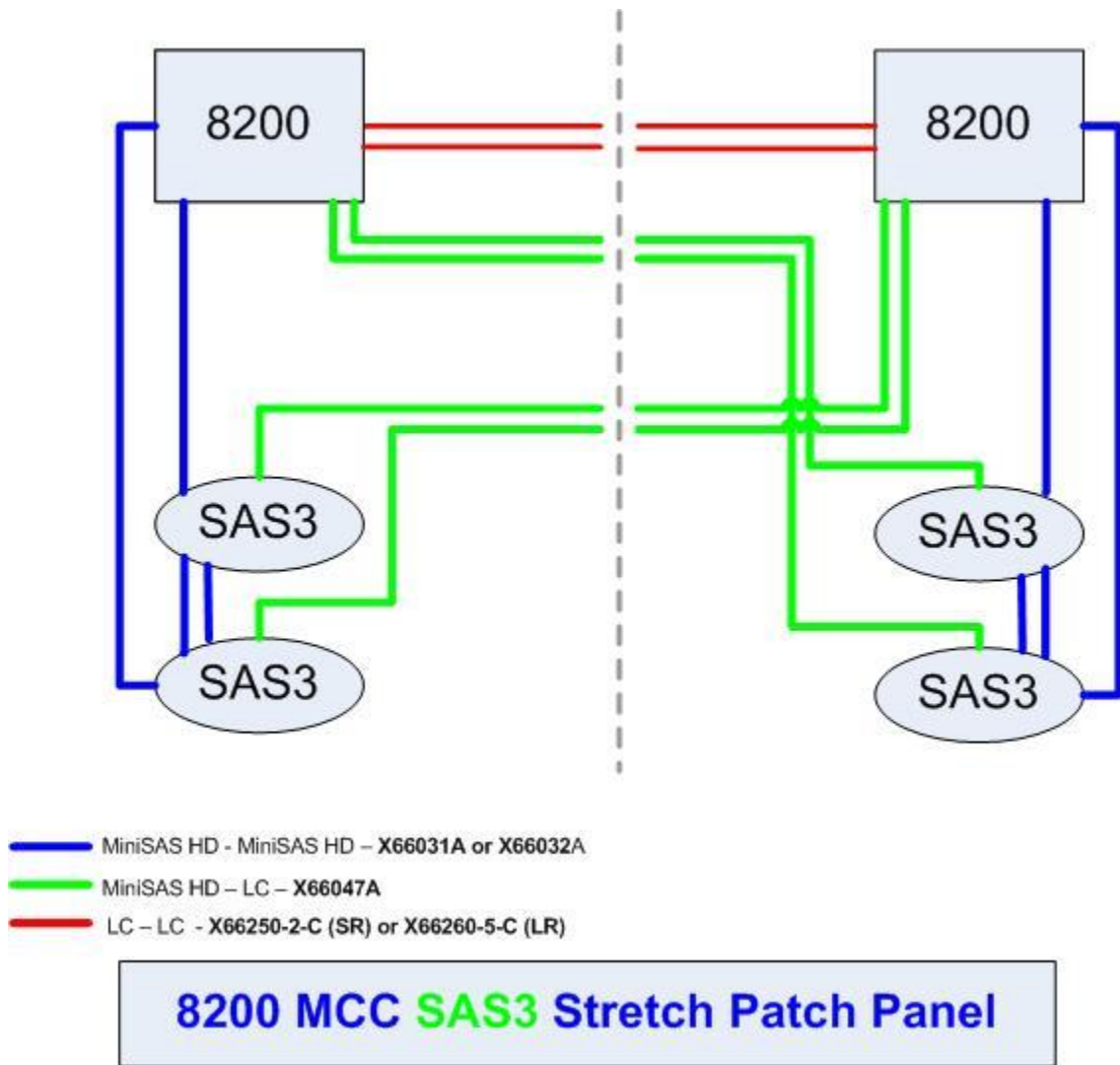
Qty	Facilitating part numbers/parts
(no. of shelves) * 2	X66031A-C or X66032A-C
16	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
#ATTO 7500/2	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

6. FAS8200 MCC SAS3 Stretch Direct



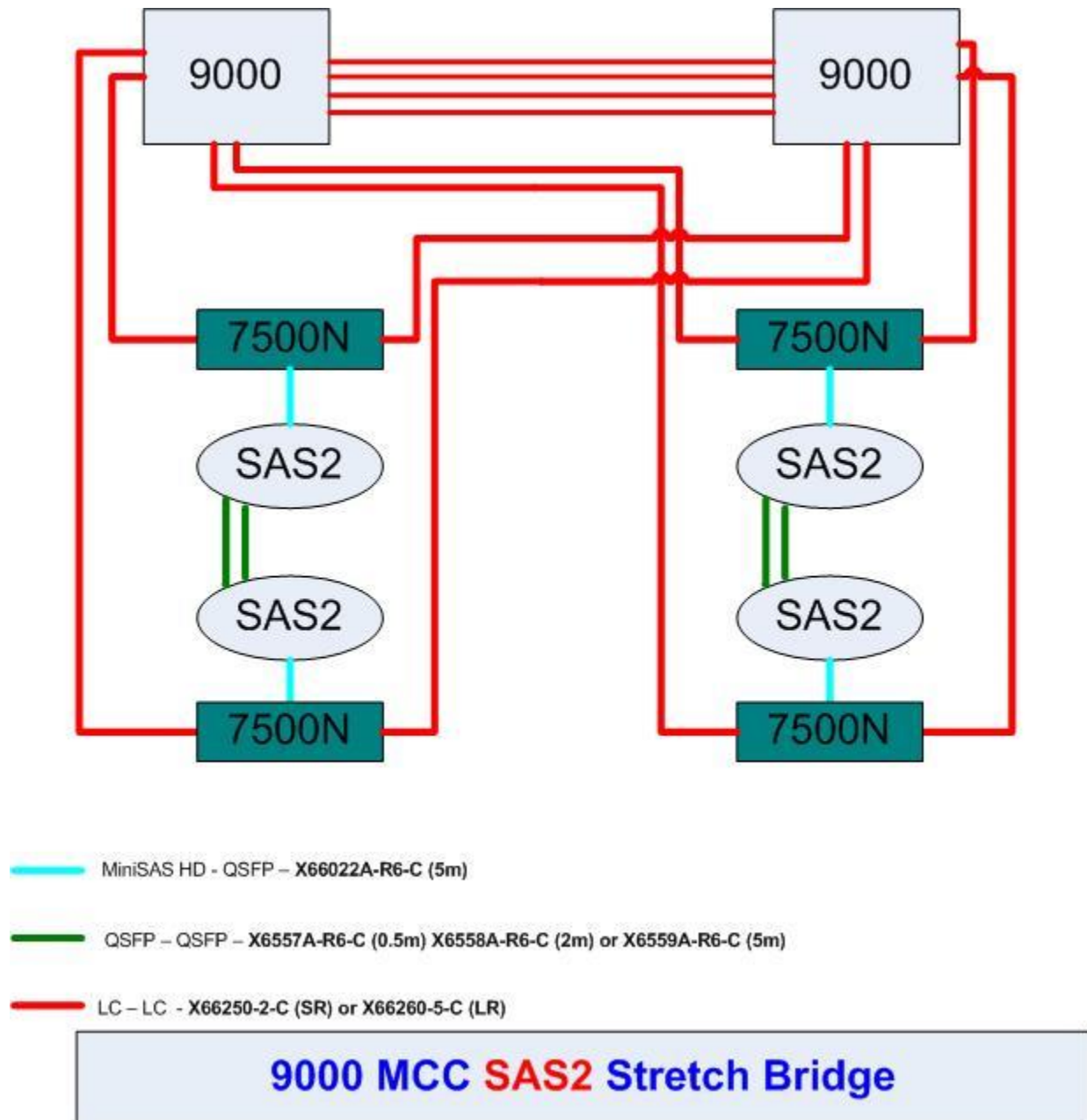
Qty	Facilitating part numbers/parts
8 + {(no. of shelves - 2) * 2}	X66031A-C or X66032A-C
2	X66250-2-C or X66260-5-C
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
# of stacks	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C
2*#controllers	X6562-R6-C

7. FAS8200 MCC SAS3 Stretch Direct Patch Panel



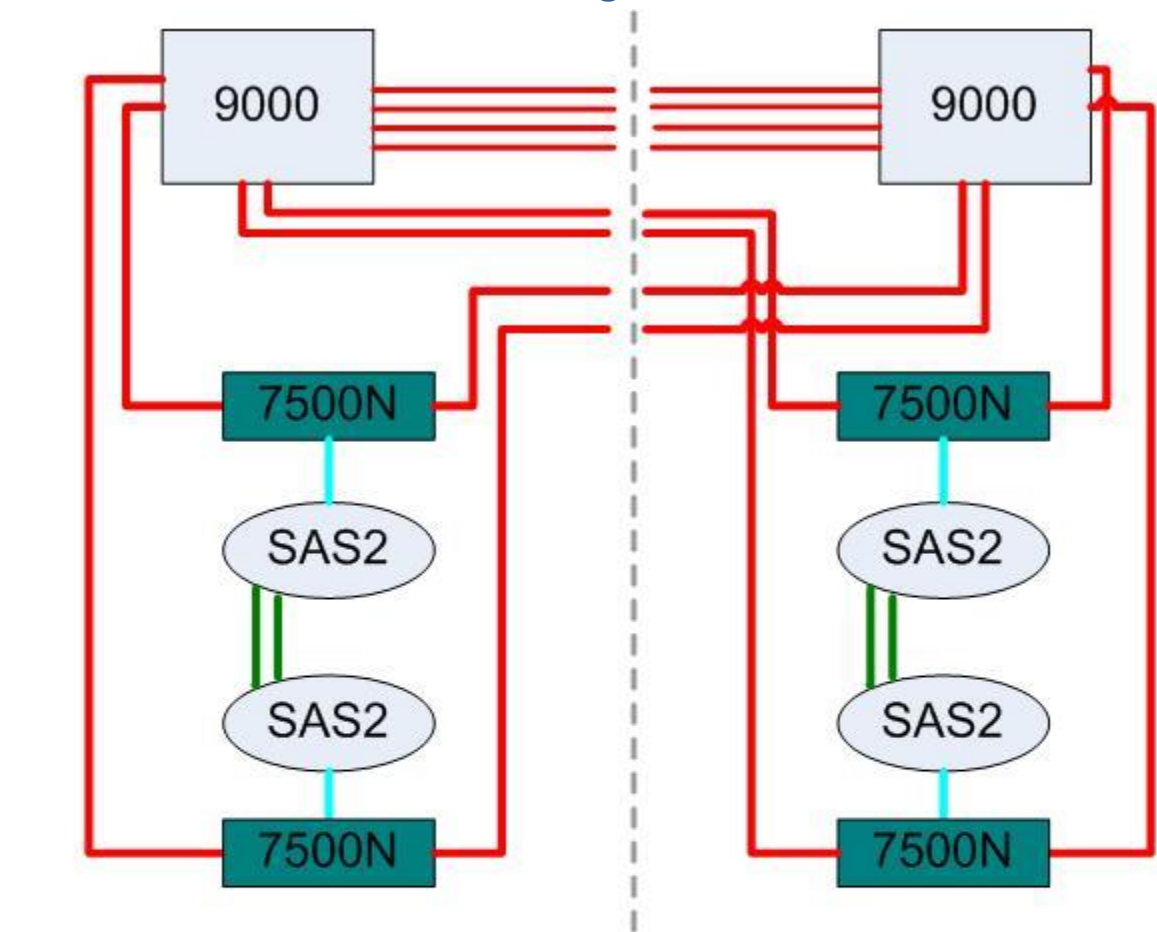
Qty	Facilitating part numbers/parts
4 + {(no. of shelves - 2) * 2}	X66031A-C or X66032A-C
4	X66250-2-C or X66260-5-C
8	X66047A
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
# of stacks	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
2*#controllers	X6562-R6-C

8. FAS9000 MCC SAS2 Stretch Bridge



Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

9. FAS9000 MCC SAS2 Stretch Bridge Patch Panel



MiniSAS HD - QSFP - X66022A-R6-C (5m)

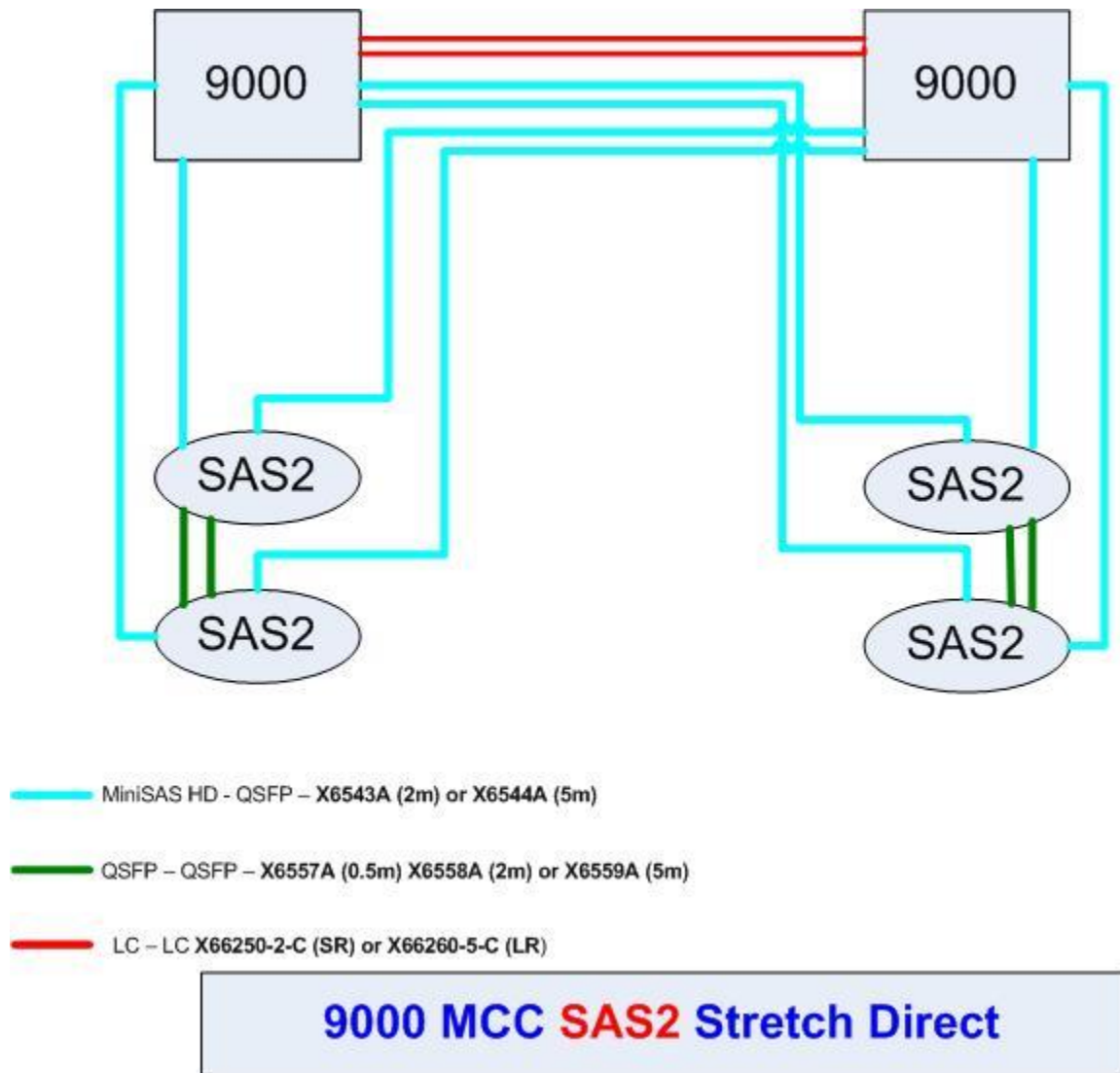
QSFP - QSFP - X6557A-R6-C (0.5m) X6558A-R6-C (2m) or X6559A-R6-C (5m)

LC - LC - X66250-2-C (SR) or X66260-5-C (LR)

9000 MCC SAS2 Stretch Bridge Patch Panel

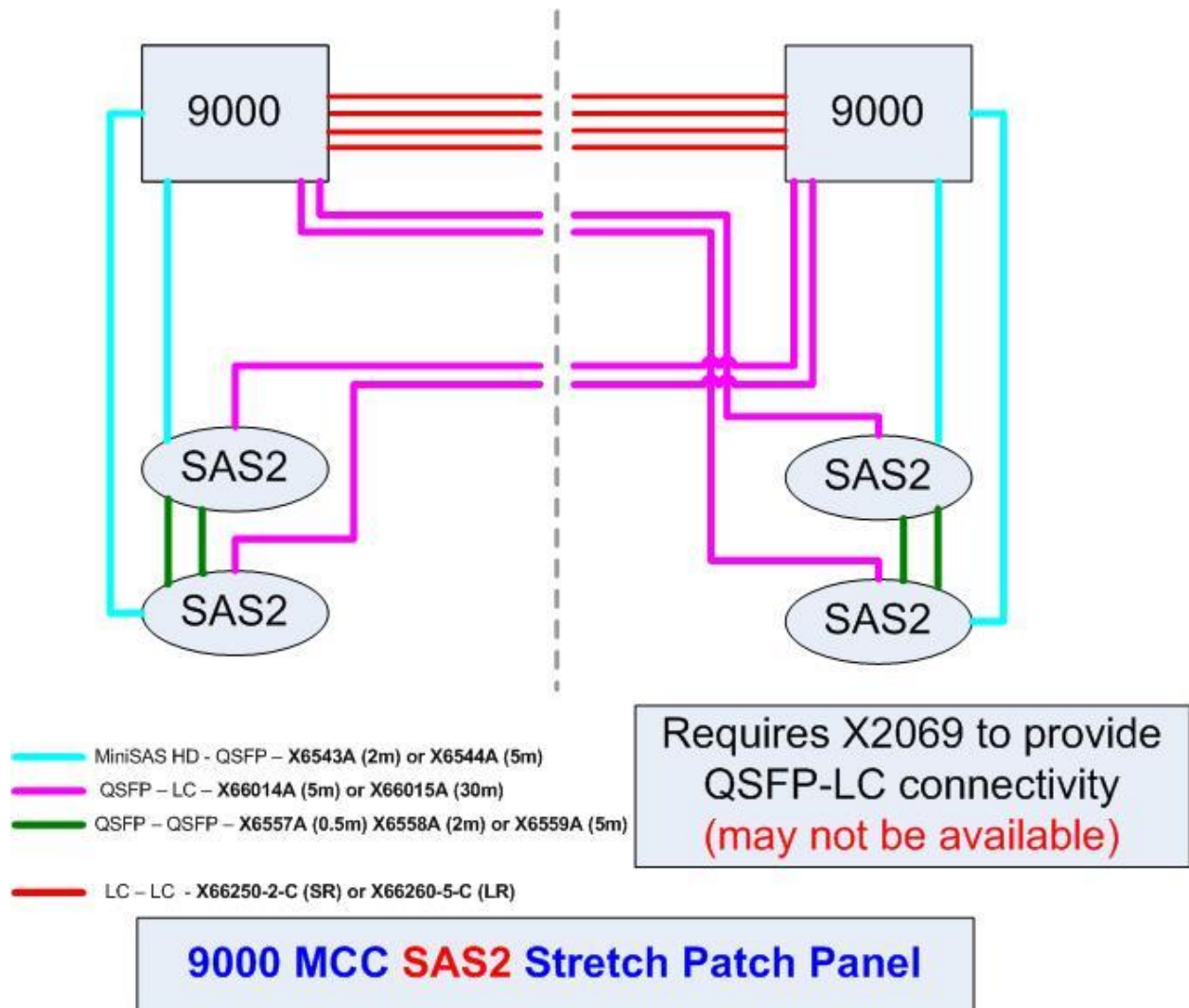
Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
#ATTO 7500/2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

10. FAS9000 MCC SAS2 Stretch Direct



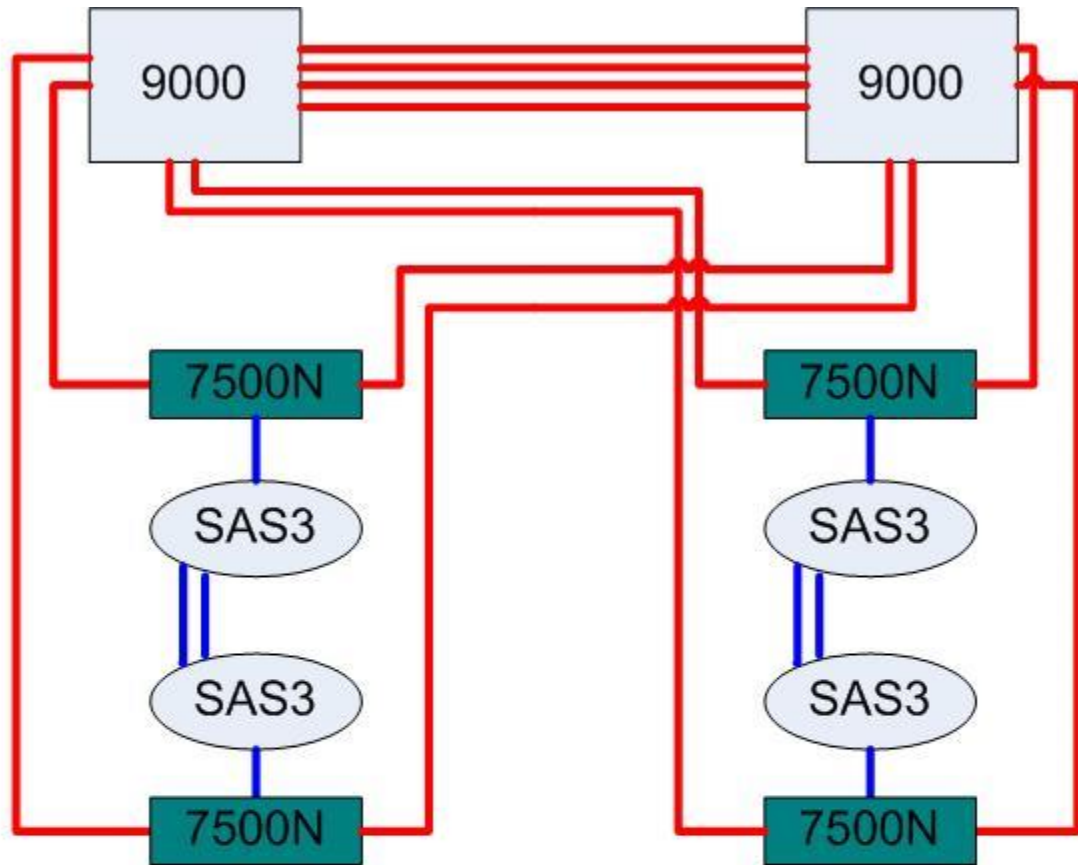
Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

11. FAS9000 MCC SAS2 Stretch Direct Patch Panel



Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

12. FAS9000 MCC SAS3 Stretch Bridge



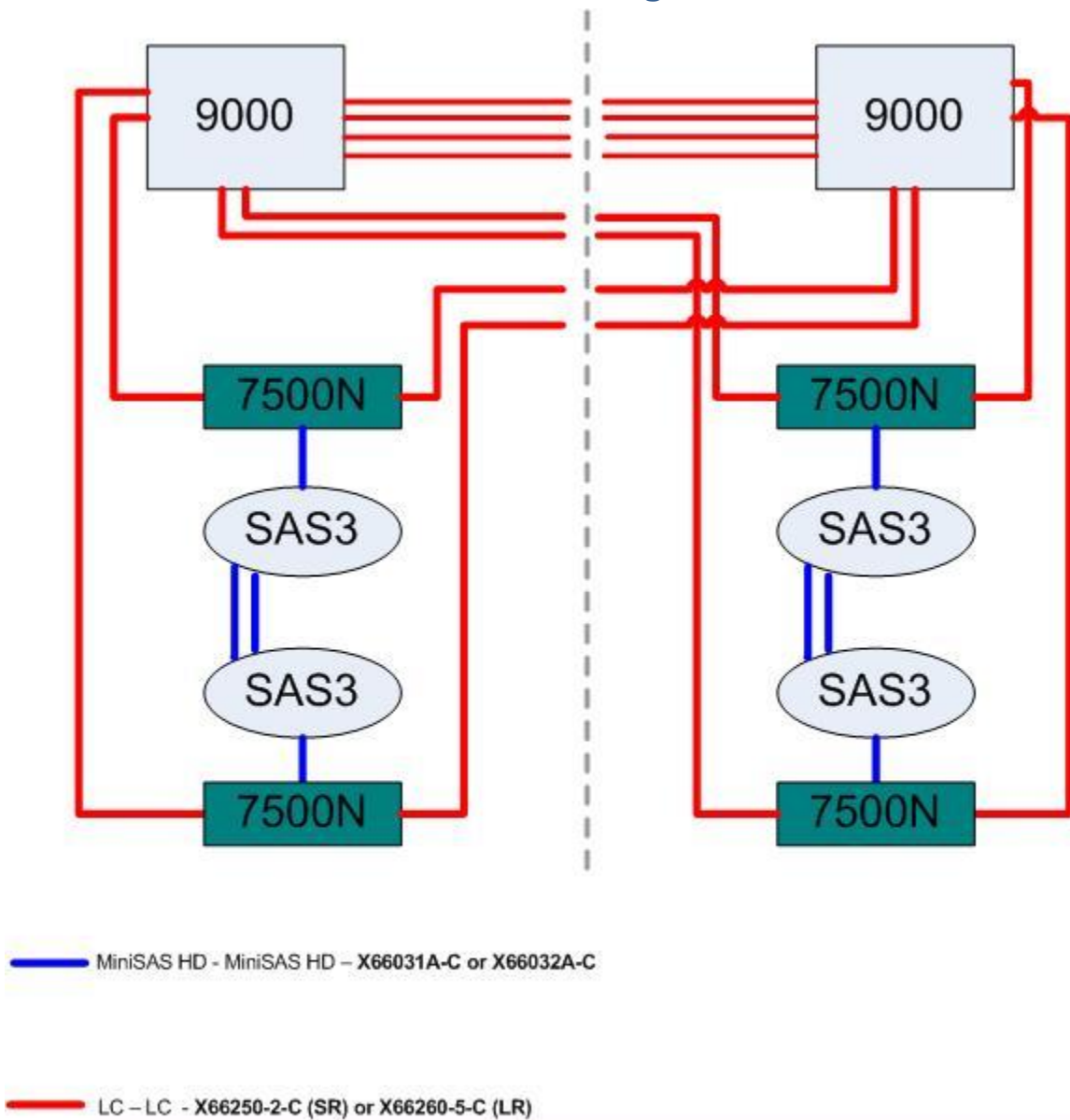
— MiniSAS HD - MiniSAS HD - X66031A-C or X66032A-C

— LC - LC - X66250-2-C (SR) or X66260-5-C (LR)

9000 MCC SAS3 Stretch Bridge

Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

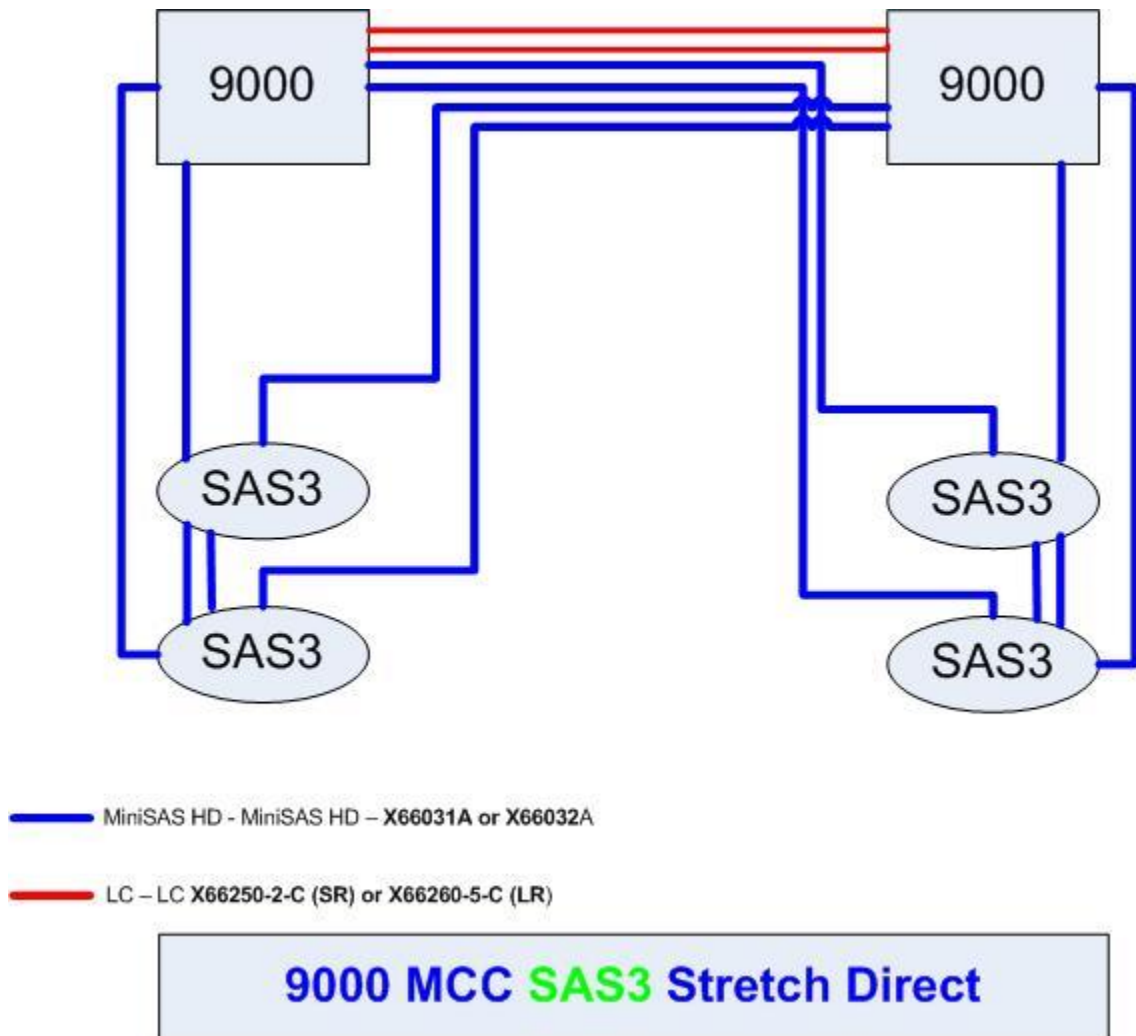
13. FAS9000 MCC SAS3 Stretch Bridge Patch Panel



9000 MCC SAS3 Stretch Bridge Patch Panel

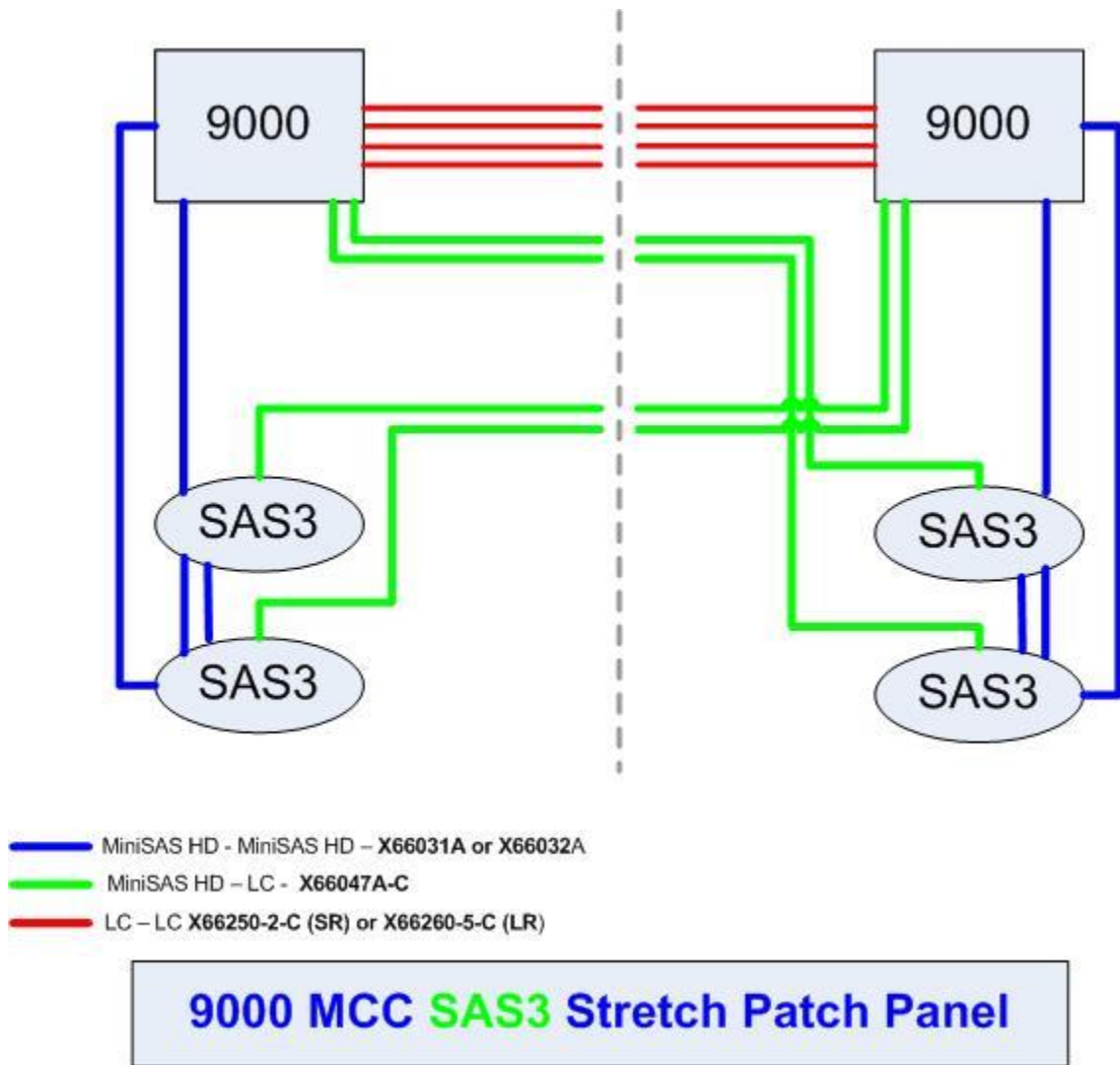
Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-BRIDGE
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

14. FAS9000 MCC SAS3 Stretch Direct



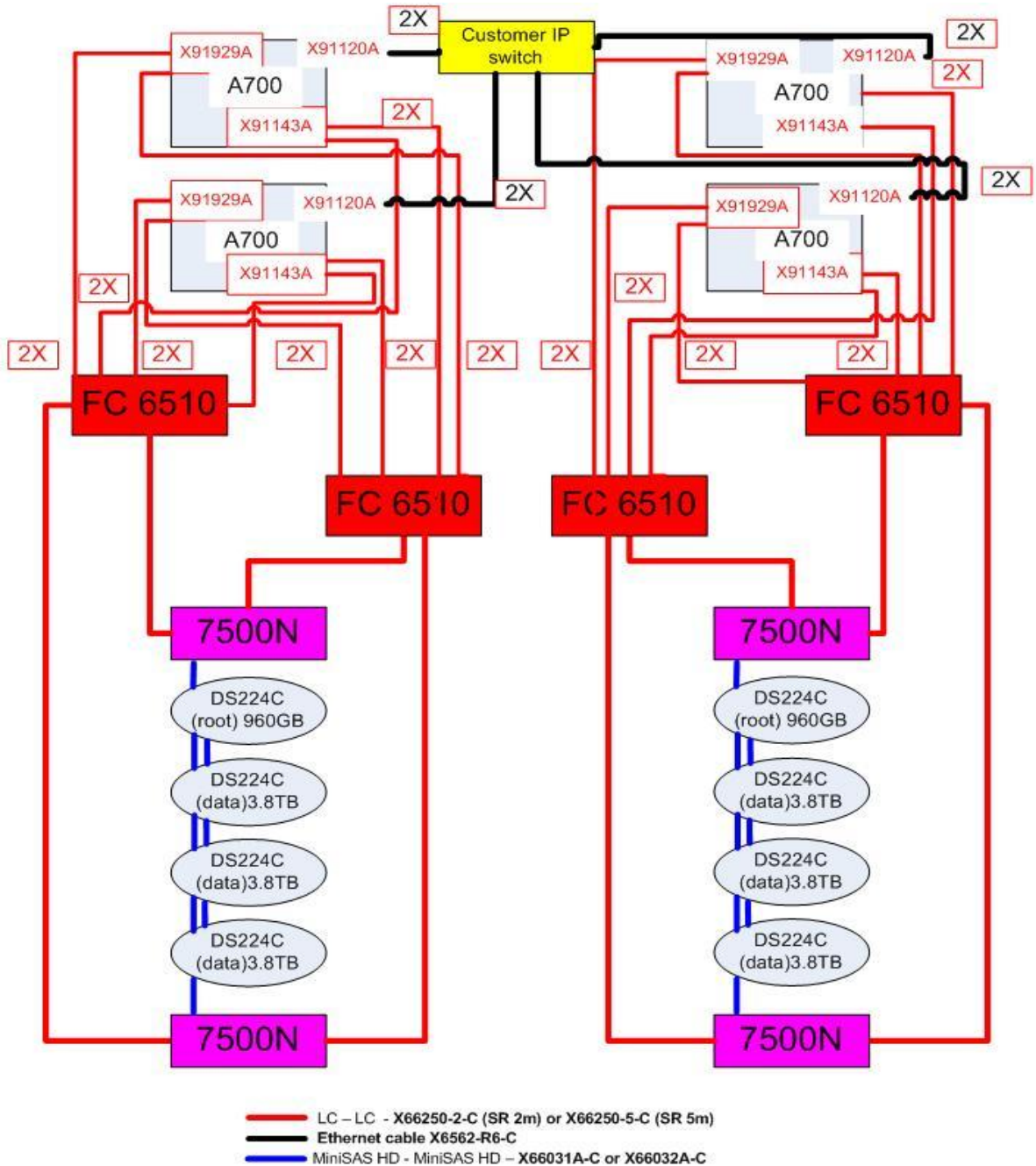
Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

15. FAS9000 MCC SAS3 Stretch Patch Panel



Qty	Facilitating part numbers/parts
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	2NODE-SAS
2	STACKS
1	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2	X3118-R6-C (2node only)
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C

16. AFF700 MCC SAS3 Fabric 4-node



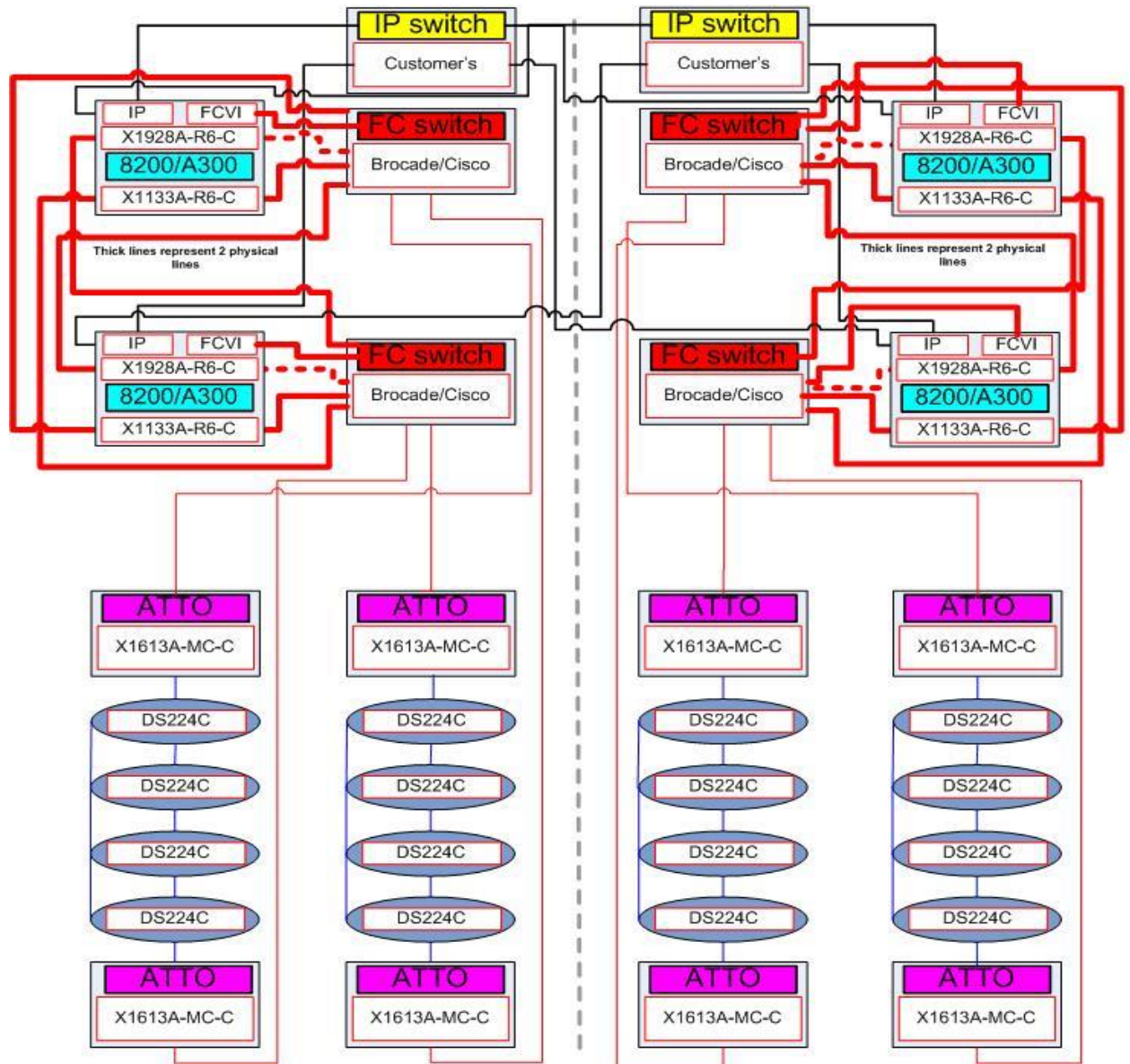
Minimum required: Qty 4 X91929A, Qty 4 X91120A, Qty 4 X91143A
 Qty 4 X1613A-MC-C (ATTO 7500N), Qty 4 FC switch (Brocade or Cisco)
 Maximum 4 SSD or 10 HDD shelves per pair of 7500Ns.
 No mixing of IOM6/IOM12 (SAS2/SAS3) shelves - DS224C only or DS4246 only; not both

#ATTOS: 4 SSD shelves in one stack, 10 HDD shelves in one stack

Each stack needs 2 ATTOS.

Qty	Facilitating part numbers/parts
# of controllers	X91929A-C
# of controllers	X91143A-C
(4* # controllers * #switches)/2	X66250-2-C
(#switches * #ATTO) /2	X66250-5-C
#shelves * 2	X66030A / X66031A / X66032A (Converged shelves)
#shelves * 2	X6557A-R6-C/X6558A-R6-C / X6559A-R6-C (Non-converged shelves)
2 * #stacks	X66021A-R6-C or X66022A-R6-C (Mini SAS HD – QSFP) (Non-converged shelves)
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	4NODE-FMC
#ATTO 7500/2	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
1*#controllers	X91120A-C
2*#controllers	X6562-R6-C
4* #controllers	X6596-R6-C

17. FAS8200 MCC SAS3 Fabric 4-node



- Optional X1928A HBA FCVI (use onboard as FC)
- 1 wire
- 2 wires
- LC - LC - X66250-2-C (SR 2m) or X66250-5-C (SR 5m)
- Ethernet cable X6562-R6-C
- MiniSAS HD - MiniSAS HD - X66031A-C or X66032A-C

Qty	Facilitating part numbers/parts
# of controllers	X1928A-C
# of controllers	X1133A-C
(3* # controllers * #switches)/2	X66250-2-C
(#switches * #ATTO) /2	X66250-5-C
#shelves * 2	X66030A / X66031A / X66032A (Converged shelves)
#shelves * 2	X6557A-R6-C/X6558A-R6-C / X6559A-R6-C (Non-converged shelves)
2 * #stacks	X66021A-R6-C or X66022A-R6-C (Mini SAS HD – QSFP) (Non-converged shelves)
1	CFREMOTE
1	UTA-FC-P12-INIT-P34-INIT
1	4NODE-FMC
#ATTO 7500/2	STACKS
2	SW-2-CL-BASE
2	SW-2-CL-LICENSEMGR
2	OC-SW-2-CL-LICENSEMGR
2*#controllers	X6562-R6-C
4* #controllers	X6596-R6-C