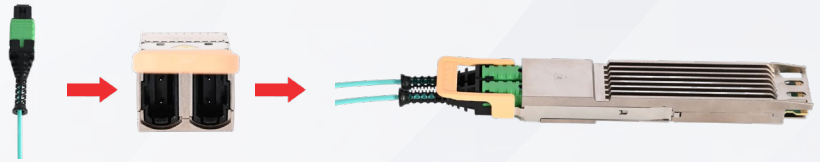
Siemon 800G/400G/200G Transceiver/Fiber Assembly Guide

This application assembly guide directs you through building Transceiver/Fiber assemblies using Siemon end-to-end connectivity solutions in order to build a complete network channel. For questions on compatibility and availability, please contact your regional Siemon sales or technical representative.



800G OSFP IHS/RHS Modules

2 x 400G optical connections per transceiver

Module Pluggable Type	Optical Transceiver Type	InfiniBand or Ethernet	Transceiver PN	Reach (m)	Power Budget Minimum	Fiber Type	Connector Interface	Fiber Jumper PN (Ultra Low Loss)	Fiber Trunk PN*# (Ultra Low Loss)
OSFP (Finned-Top)	800G SR8 (2x SR4)	Ethernet/RoCE	XCRF800SR8-3A2G	30/50	*1.8 dB*	OM3/OM4	2x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (Finned-Top)	800G DR8 (2x DR4)	Ethernet/RoCE	XCRF800DR8-3S2G	500	*3.1 dB*	OS2	2x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
OSFP (RHS)	800G SR8 (2x SR4)	Ethernet/RoCE	XCRE800SR8-3A2G	30/50	*1.8 dB*	OM3/OM4	2x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (RHS)	800G DR8 (2x DR4)	Ethernet/RoCE	XCRE800DR8-3S2G	500	*3.1 dB*	OS2	2x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
OSFP (Finned-Top)	800G SR8 (2x SR4)	InfiniBand NDR	XCRF800SR8M3A2G	30/50	*1.8 dB*	OM3/OM4	2x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (Closed-Top)	800G DR8 (2x DR4)	InfiniBand NDR	XCRC800DR8M3S2G	500	*3.1 dB*	OS2	2x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
OSFP (Closed-Top)	800G SR8 (2x SR4)	InfiniBand NDR	XCRC800SR8M3A2G	30/50	*1.8 dB*	OM3/OM4	2x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (RHS)	800G DR8 (2x DR4)	InfiniBand NDR	XCRE800DR8M3S2G	500	*3.1 dB*	OS2	2x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B

400G OSFP-RHS/QSFP112 Modules

1x 400G or 200G optical connection options per transceiver[1]

Module Pluggable Type	Optical Transceiver Type	InfiniBand or Ethernet	Transceiver PN	Reach (m)	Power Budget Minimum	Fiber Type	Connector Interface	Fiber Jumper PN (Ultra Low Loss)	Fiber Trunk PN*# (Ultra Low Loss)
OSFP (RHS)	400G SR4	Ethernet/RoCE	XCRR400SR4-3A1G	30/50	*1.8 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
QSFP112	400G SR4	Ethernet/RoCE	XCRQ400SR4-3A1G	30/50	*1.8 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (RHS)	400G DR4	Ethernet/RoCE	XCRR400DR4-3S1G	500	*3.1 dB*	OS2	1x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
QSFP112	400G DR4	Ethernet/RoCE	XCRQ400DR4-3S1G	500	*3.1 dB*	OS2	1x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
OSFP (RHS)	400G SR4	InfiniBand NDR	XCRR400SR4M3A1G	30/50	*1.8 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
QSFP112	400G SR4	InfiniBand NDR	XCRQ400SR4M3A1G	30/50	*1.8 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
OSFP (RHS)	400G DR4	InfiniBand NDR	XCRR400DR4M3S1G	500	*3.1 dB*	OS2	1x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B
QSFP112	400G DR4	InfiniBand NDR	XCRQ400DR4M3S1G	500	*3.1 dB*	OS2	1x MPO12/APC (BASE-8)	GJL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B

1. 400G SR4 or DR4 Transceivers can be operated in 200G SR2 or DR2 modes. 4-pair Fiber jumpers/trunks could be used in this scenario. Not shown in this guide.

Fiber PN Legend: *Trunk Fiber Count, XXX = fiber count in 1, 2, or 3 digits, ex: 8, 16, or 128
#Trunk & MPO cord length, YYY = length in 3 digits, ex: 010 = 10ft or 10m
Unit of Length, Z = M (meters) or F (feet)

400G QSFP56-DD Modules 1x 400G optical connection per transceiver

Module Pluggable Type	Optical Transceiver Type	InfiniBand or Ethernet	Transceiver PN	Reach (m)	Power Budget Minimum	Fiber Type	Connector Interface	Fiber Jumper PN (Ultra Low Loss)	Fiber Trunk PN*# (Ultra Low Loss)
QSFP-DD	400G SR8	Ethernet/RoCE	XCRD400SR8-3A1S	70/100	*2.0 dB*	OM3/OM4	1x MPO16/APC (BASE-16)	SJLVPFF-(YYY)(Z)-B	SL(XXX)-5UP(YYY)(Z)-B
QSFP-DD[2]	400G DR4	Ethernet/RoCE	XCRD400DR4-3S1G	500	*3.1 dB*	OS2	1x MPO12/APC (BASE-8)	GL-S2PFF-(YYY)(Z)B	GL(XXX)-SMP(YYY)(Z)-B

2. 8 electrical lanes to 4 optical lanes utilizing a gearbox.

200G QSFP56 Modules 1x 200G or 100G optical connection options per transceiver[3]

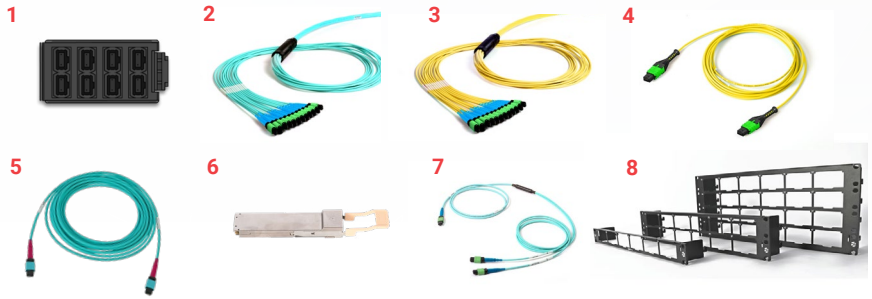
Module Pluggable Type	Optical Transceiver Type	InfiniBand or Ethernet	Transceiver PN	Reach (m)	Power Budget Minimum	Fiber Type	Connector Interface	Fiber Jumper PN (Ultra Low Loss)	Fiber Trunk PN*# (Ultra Low Loss)
QSFP56	200G SR4	Ethernet/RoCE	XCRQ200SR4-3A1G	70/100	*2.0 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B
QSFP56	200G SR4	InfiniBand HDR	XCRQ200SR4M3A1G	70/100	*2.0 dB*	OM3/OM4	1x MPO12/APC (BASE-8)	GJL-5UPFF-(YYY)(Z)B	GL(XXX)-5UP(YYY)(Z)-B

3. 200G SR4 Transceivers can be operated in 100G SR2 mode. 4-pair Fiber jumpers/trunks could be used in this scenario. Not shown in this guide.

Notes: Fiber jumpers are recommended for in cabinet connections, fiber trunks are recommended for inter-cabinet connections.
OM3 and OM4 = Multimode fiber | OS2 = Singlemode fiber

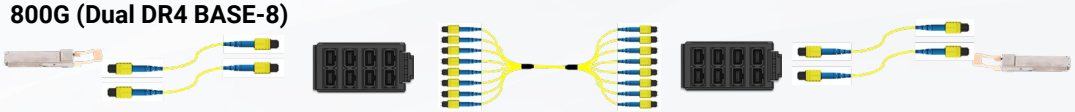
Fiber PN Legend: *Trunk Fiber Count, XXX = fiber count in 1, 2, or 3 digits, ex: 8, 16, or 128
#Trunk & MPO cord length, YYY = length in 3 digits, ex: 010 = 10ft or 10m
Unit of Length, Z = M (meters) or F (feet)

Product Description		Data Sheet
1	8-Port Adapter Plate, MPO Black	LINK
2	Trunk w/APC Connectors, Multimode	LINK
3	Trunk w/APC Connectors, Singlemode	LINK
4	Jumper BASE-8 MTP/MPO Connectors, Multimode | Singlemode	LINK
5	Jumper BASE-16 MTP/MPO Connectors, Multimode | Singlemode	LINK
6	High-Speed SR/DR Optical Transceivers	LINK
7	Conversion Cord w/MTP Connectors, 400G to 200G, Multimode	LINK
8	LightVerse® Infinity Fiber Patch Panels	LINK



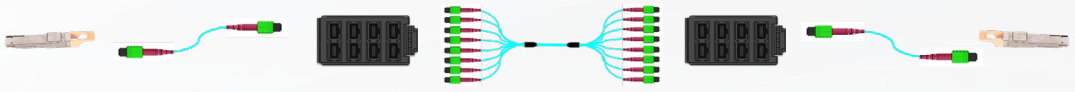
Example; Structured Cabling & Breakouts

800G (Dual DR4 BASE-8)



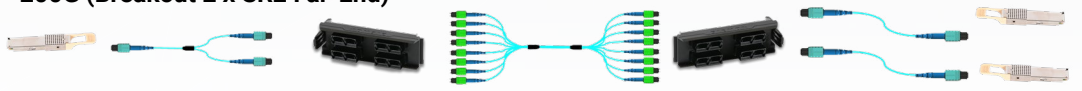
OSFP	GJLPAPFF-(YYY)(Z)B 8-Fiber MTP/U -to- MTP/U BASE-8 Type-B OS1/OS2 Jumper	LVAM8-MPB-BN-A 8-Port Type A MPO Adapter Plate	GL64M5UP(XXX)(Z)-B 64-Fiber MTP/P -to- MTP/P BASE-8 Type-B OS1/OS2 Trunk	LVAM8-MPB-BN-A 8-Port Type A MPO Adapter Plate	GJLPAPFF-(YYY)(Z)B 8-Fiber MTP/U -to- MTP/U BASE-8 Type-B OS1/OS2 Jumper	OSFP

400G (SR8 BASE-16)



QSFP-DD	SJLVPFF-(YYY)(Z)-B 16-Fiber MTP/U -to- MTP/U BASE-16 Type-B OM4 Jumper	LNAM8-OMPQ-BN-A MPO Adapter Plate	SL128-SUP(YYY)(Z)-B 128-Fiber MTP/P -to- MTP/P BASE-16 Type-B OM4 Trunk	LNAM8-OMPQ-BN-A MPO Adapter Plate	SJLVPFF-(YYY)(Z)-B 16-Fiber MTP/U -to- MTP/U BASE-16 Type-B OM4 Jumper	QSFP-DD

200G (Breakout 2 x SR2 Far-End)



QSFP	YJ8F4F5UP(XXX)(Z) MTP/U -to- (2) MTP/U BASE-8 Type-B OM4 "Y" Splitter	LVAM8-MPQ-BN-A 8-Port Type A MTP Adapter Plate	GL64M5UP(XXX)(Z)-B 64-Fiber MTP/P -to- MTP/P BASE-8 Type-B OM4 Trunk	LVAM8-MPQ-BN-A 8-Port Type A MTP Adapter Plate	GJL-5UPFF-(XXX)(Z)B MTP/U -to- MTP/U BASE-8 Type-B OM4 Jumper	QSFP x2