MOLEX TRANSCEIVER SOLUTIONS FOR TELECOM NETWORKS ›

End-to-End Optical Infrastructure for Next-Gen Networks

molex

INNOVATION THAT DRIVES ›
TOMORROW'S TELECOM INFRASTRUCTURE

Telecommunication plays an essential role in our daily lives and will become even more important in the future as it is one of the core building blocks of the digital world.
As 5G, Artificial Intelligence,Virtual Reality, autonomous driving and telehealth become a reality, higher levels of data traffic need to be efficiently and economically sent via a network to fulfill the rising network capacity requirements.

Building on decades of expertise in the telecom and datacom industries, Molex is a leader in designing and manufacturing high-performance connectivity solutions for leading telecom and datacom companies. Molex leverages its optical experience to produce some of the highest performing, field-proven optical components in the market.

We apply our expertise along with our strong mechanical design capabilities to offer a range of products that deliver 100 Mbps to 400 Gbps data rates and compliance with Ethernet, SONET/SDH, Fibre Channel and CPRI standards.

Working with all key stakeholders, our expert team can assist you as you plan for future network needs, creating efficiencies in design that optimize the use of both your inside and outside fiber plants. Our team can design solutions to address many network segments such as data center, access, metro and long-haul applications.

SFP28 and QSFP28
Optical Transceiver

BiDi Transceiver

SETTING THE STANDARDS ›
THAT PROPEL THE INDUSTRY

Backed by global reach, all of our products are produced with Molex's high-quality standards, delivering superior optical, electrical and EMI performance for network robustness. Molex is a one-stop shop for end-to-end optical solutions and, along with optics, provides cages, connectors and cable assemblies.

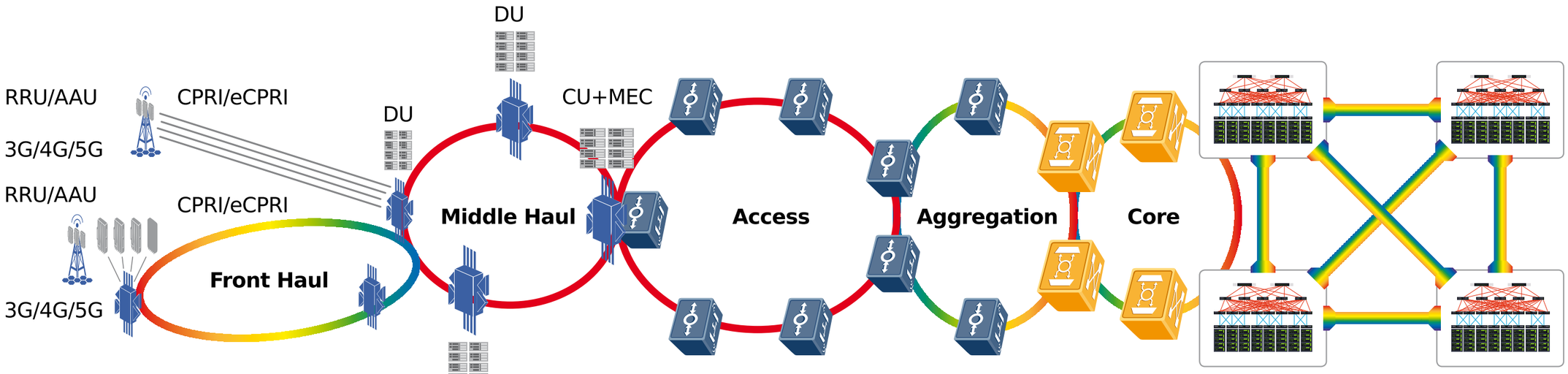
As a founding member and chair of many MSAs, Molex is actively participating in, setting, evaluating and adapting industry connectivity standards.

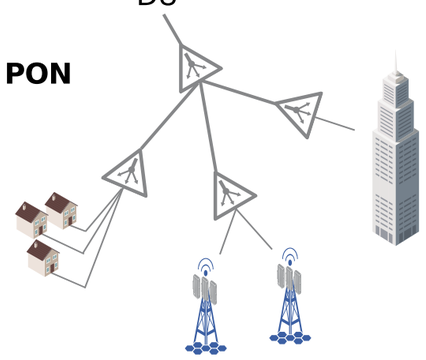
Molex collaborates with Open Compute, Open19, OpenCAPI and other groups, and is able to deliver state-of-the-art solutions to you and your customers.

QSFP-DD
OIF
SFP-DD
100G Lambda MULTI-SOURCE AGREEMENT
IEEE Advancing Technology for Humanity
cobo MEMBER
OPEN Compute Project

END-TO-END SOLUTIONS NETWORKING›

Molex offers a wide range of transceiver solutions supporting 10/25/100 Gbps, over duplex or BiDi fiber, and also support DWDM over extended temperature range for outdoor deployment.





Complementary Products

Copper Solutions
- Direct Attach Copper Cables
- RET Cables
- RF Jumpers

Fiber Management
- High-Density Enclosures
- Fiber Optic Patch Cords

Wavelength Management
- Mux/Demux
- Optical Switches
- Optical Taps

Active Cable

Optical Shuffle Box

Optical Taps

ROADM

Form Factor	Application Code	Gbps	Rate	Operating Temp [C]	Reach	Wavelength (nm)	Connector	Media Type	Molex PN
SFP	1000BASE-T	1	Single	0 to 70°C	100m		RJ-45	Cat5 cable	1837021004
SFP	1000BASE-T	1	Single	-40 to 85°C	100m		RJ-45	Cat5 cable	TRPRG1VA4I000E2G
SFP	10G-SR	10	Single	0 to 70°C	300m	850	LC	MMF	1837041011
SFP	1000Base-SX	1	Single	-40 to 85°C	500m	850	LC	MMF	TRPUG1ESXI000E2G
SFP	1000Base-SX	1	Single	0 to 70°C	550m	850	LC	MMF	1837022037
SFP	OC-48 SR1	2,5	Multi	-40 to 85°C	2Km	1310	LC	SMF	1837023159
SFP	1000Base-LX	1	Dual	0 to 70°C	10Km	1310	LC	SMF	1837023037
SFP	1000Base-LX	1	Dual	-40 to 85°C	10Km	1310	LC	SMF	1837023042
SFP	OC-48 IR1	2,5	Multi	-40 to 85°C	15Km	1310	LC	SMF	1837023156
SFP	1000Base-EX	1	Single	0 to 70°C	40Km	1310	LC	SMF	1837024404
SFP	1000Base-EX	1	Single	-40 to 85°C	40Km	1310	LC	SMF	TRPUG1EEXI000E2G
SFP	1000Base-EX	1	Single	-40 to 85°C	40Km	1310	LC	SMF	TRPUG1EEXI000E2G
SFP	OC-48 LR1	2,5	Multi	-40 to 85°C	40Km	1310	LC	SMF	1837024911
SFP	OC-3 LR2	0,1	Multi	-40 to 85°C	80Km	1550	LC	SMF	1837022036
SFP	1000Base-ZX	1	Single	-40 to 85°C	80Km	1550	LC	SMF	1837024392
SFP	1000Base-ZX	1	Single	0 to 70°C	80Km	1550	LC	SMF	1837024405
SFP	OC-48 LR2	2,5	Single	0 to 70°C	80Km	1550	LC	SMF	TRPE48KL2C000H0G
SFP	1000Base-120km	1	Single	-40 to 85°C	120Km	CWDM	LC	SMF	TRPUG1KVXI000*0G[1]
SFP+	10G-SR	10	Multi	0 to 70°C	300m	850	LC	MMF	1837041071
SFP+	10G-LR	10	Single	-40 to 85°C	1.4Km	1310	LC	SMF	1837042032
SFP+	10G-LR	10	Multi	0 to 70°C	2Km	1310	LC	SMF	1837042088
SFP+	10G-LR	10	Dual	-5 to 85°C	2Km	1310	LC	SMF	1837042089
SFP+	10G-BX10-U	10	Single	0 to 70°C	10Km	BiDi 1270nm/1330nm	LC	SMF	1837020025
SFP+	10G-BX10-D	10	Single	0 to 70°C	10Km	BiDi 1330nm/1270nm	LC	SMF	1837020027
SFP+	10G-BX10-D	10	Single	-40 to 85°C	10Km	BiDi 1330nm/1270nm	LC	SMF	1837020028
SFP+	10G-BX10-U	10	Single	-40 to 85°C	10Km	BiDi 1270nm/1330nm	LC	SMF	1837020026
SFP+	10G-LR	10	Multi	0 to 70°C	10Km	1310	LC	SMF	1837042025
SFP+	10G-LR	10	Single	-40 to 85°C	10Km	1310	LC	SMF	1837042033
SFP+	10G-LR	10	Multi	-40 to 85°C	20Km	CWDM	LC	SMF	TPC4XGHLRI000x0A[2]
SFP+	10G-BX40-U	10	Single	0 to 70°C	40Km	BiDi 1270nm/1330nm	LC	SMF	1837040019
SFP+	10G-BX40-U	10	Single	-40 to 85°C	40Km	BiDi 1270nm/1330nm	LC	SMF	1837040023
SFP+	10G-BX40-D	10	Single	0 to 70°C	40Km	BiDi 1330nm/1270nm	LC	SMF	1837040031
SFP+	10G-BX40-D	10	Single	-40 to 85°C	40Km	BiDi 1330nm/1270nm	LC	SMF	1837040035
SFP+	10G-ER	10	Single	0 to 70°C	40Km	1550	LC	SMF	1837043258
SFP+	10G-ER	10	Multi	0 to 70°C	40Km	1550	LC	SMF	1837043262
SFP+	10G-ER	10	Single	-40 to 85°C	40Km	1550	LC	SMF	1837043264
SFP+	10G-ER	10	Dual	-5 to 85°C	40Km	1550	LC	SMF	TPP7XGJERE000E2G
SFP+	10G-ER	10	Single	-40 to 85°C	40Km	DWDM	LC	SMF	TPD7XGJERI000**G[3]
SFP+	10G-ER	10	Single	0 to 70°C	40Km	DWDM	LC	SMF	TPD7XGJERC000**G[3]
SFP+	10G-ZR	10	Multi	-40 to 85°C	80Km	1550	LC	SMF	1837043268
SFP+	10G-ZR	10	Single	0 to 70°C	80Km	1550	LC	SMF	TPP7XGKZERC000E2G
SFP+	10G-ZR	10	Dual	-5 to 85°C	80Km	1550	LC	SMF	TPP7XGKZRE000E2G

Form Factor	Application Code	Gbps	Rate	Operating Temp [C]	Reach	Wavelength (nm)	Connector	Media Type	Molex PN
XFP	10G-SR1	10	Multi	0 to 70°C	2km	1310	LC	SMF	TXP1XGDS1C000E2G
XFP	10G-SR1	10	Multi	-40 to 85°C	2Km	1310	LC	SMF	TXP1XGDS1I000E2G
XFP	10G-LR	10	Single	0 to 70°C	10Km	1310	LC	SMF	TXP1XGDLRC000E2G
XFP	10G-ER	10	Multi	-40 to 85°C	40Km	1550	LC	SMF	1837034162
XFP	10G-IR2	10	Multi	-40 to 85°C	40Km	1550	LC	SMF	TXP3XGGI2I000E2G
XFP	10G-IR2	10	Multi	0 to 70°C	40Km	1550	LC	SMF	TXP3XGGI2C000E2G
XFP	10G-IR2	10	Multi	0 to 70°C	40Km	CWDM	LC	SMF	TXC3XGHI2I000x0G[4]
XFP	10G-IR2	10	Single	-5 to 85°C	40Km	1550	LC	SMF	TXP3XGGI2E000E2G
XFP	10G-IR2	10	Multi	-40 to 85°C	40Km	1550	LC	SMF	TXP3XGGI2I000E2G
XFP	10G-IR2	10	Multi	0 to 70°C	80Km	DWDM	LC	SMF	TXD3XGGI2I000xxG[3]
XFP	10G-LR2	10	Multi	0 to 70°C	80km	1550	LC	SMF	TXP3XGHL2C000E2G
XFP	10G-LR2	10	Multi	-5 to 85°C	80Km	1550	LC	SMF	TXP3XGHL2E000E2G
XFP	10G-LR2	10	Multi	0 to 70°C	80Km	CWDM	LC	SMF	TXC3XGJL2I000x0G[4]
XFP	10G-LR2	10	Multi	0 to 70°C	80Km	1550	LC	SMF	TXP3XGHL2C000E2G
XFP	10G-LR2	10	Multi	0 to 70°C	80Km	DWDM	LC	SMF	TXD3XGHL2I000xxG[3]
SFP28	25G-LR	25	Single	0 to 70°C	10Km	1310	LC	SMF	1837084001
SFP28	25G-LR	25	Single	-40 to 85°C	10Km	1310	LC	SMF	1837084003
SFP28	25G-LR	25	Single	-40 to 85°C	10Km	BiDi 1270nm/1330nm	LC	SMF	1837084017
SFP28	25G-LR	25	Single	-40 to 85°C	10Km	BiDi 1330nm/1270nm	LC	SMF	1837084018
SFP28	25G-LR	25	Single	0 to 70°C	10Km	BiDi 1270nm/1330nm	LC	SMF	1837084015
SFP28	25G-LR	25	Single	0 to 70°C	10Km	BiDi 1330nm/1270nm	LC	SMF	1837084016
SFP28	25G-ER	25	Single	0 to 70°C	30Km	BiDi 1270nm/1330nm	LC	SMF	1837084023
SFP28	25G-ER	25	Single	0 to 70°C	30Km	BiDi 1330nm/1270nm	LC	SMF	1837084024
SFP28	25G-ER	25	Single	-40 to 85°C	30Km	BiDi 1270nm/1330nm	LC	SMF	1837084025
SFP28	25G-ER	25	Single	-40 to 85°C	30Km	BiDi 1330nm/1270nm	LC	SMF	1837084026
QSFP+	40G-PSM4	40	Single	0 to 70°C	2Km	1310	MPO	SMF	1837050014
QSFP28	100G-SR4	100	Single	0 to 70°C	100m	850	MPO	MMF	1064033101
QSFP28	100G-CWDM4	100	Single	0 to 70°C	2Km	CWDM	LC	SMF	1064271000
QSFP28	100G-4WDM-20	100	Single	0 to 70°C	10Km	LWDM	LC	SMF	1837104011
QSFP28	100G-LR4	100	Single	-40 to 85°C	10Km	LWDM	LC	SMF	1837104024
QSFP28	100G-LR4	100	Dual	0 to 70°C	10Km	LWDM	LC	SMF	1837104029
QSFP28	100G-LR4	100	Single	-5 to 85°C	10Km	LWDM	LC	SMF	QTA1C04L2E000E1A
QSFP28	100G-4WDM-20	100	Dual	-5 to 85°C	10Km	LWDM	LC	SMF	QTA1C04L2E000E2A
QSFP28	100G-4WDM-20	100	Single	0 to 70°C	20Km	LWDM	LC	SMF	QTA1C04L3C000E1A
QSFP28	100G-4WDM-20	100	Dual	0 to 70°C	20Km	LWDM	LC	SMF	QTA1C04L3C000E2A
QSFP28	100G-ER4 Lite	100	Single	0 to 70°C	40Km	LWDM	LC	SMF	1837106001

Replace * with the respective letter/digit for the right wavelength/channel – please refer to the respective datasheet on molex.com for more details on the explanation of the different placeholders

[1] L,K,J,H,G,F,D,C,B,A,1,2,3,4,5,6,7,8
[2] L,K,J,H,G,F
[3] 17 – 61
[4] 1 – 8

The Molex Approach

At Molex, we take a multidimensional, consultative approach to bring your telecom infrastructure to life. With reliable technologies that are backed by Molex performance and quality, our global team of experts will work with you at every step to develop a comprehensive solution.

If you'd like us to contact you to discuss solutions for your telecom infrastructure challenges, visit ***www.molex.com/transceiver/contact*** to provide your contact information.

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one company › a world of innovation

Order No. 987652-0641 EU/0/BO/CB/2019.06