

Super QSFP-DD/Ultra QSFP-DD Copper Cable Assembly

OVERVIEW

Luxshare-TECH is the leading Super QSFP-DD(200G)/Ultra QSFP-DD(400G) solution provider in the industry by developing the end-to-end products including copper cable, the corresponding connector and cage.

Luxshare-TECH Super-/Ultra-QSFP-DD copper cable assembly combines 8 channels(Double Density against QSFP) operating at speeds up to 25Gbps(NRZ)/56Gbps(PAM4) per channel into one affordable high-density package(QSFP-DD). The total port bandwidth is up to 200Gbps/400Gbps.

Luxshare-TECH Super-/Ultra-QSFP-DD copper cables integrate a standard 76-position gold finger interface and zinc die-cast backshells for superior EMI performance. Luxshare-TECH Super-/Ultra-QSFP-DD copper cable provides excellent SI performance and reliability performance by adopting excellent SI performance raw cable and reliable components. Luxshare-TECH's Super-/Ultra-QSFP-DD copper cable products provide the diverse type and full range of length coverage for the customers in the industry, 400G DAC length up to 3meter, ACC up to 7meter length. And all the design is based on the industry standard specifications, such as SFF-8679, SFF-8636 and QSFP-DD MSA specification.



FEATURES & BENEFITS

- ◆ Compliant with QSFP-DD MSA Specification
- ◆ SFF-8679 electrical interface compliant
- ◆ SFF-8636 management interface support
- ◆ Compliant with IEEE802.3Bj, By, IEEE802.3CD Standard
- ◆ Support 25G and 50G (PAM4) electrical data rates/channel
- ◆ I2C for EEPROM communication
- ◆ Pull to Release latch design
- ◆ 30 ~ 26AWG Cable Optional
- ◆ Excellent EMI/EMC performance 360 degree cable shield termination
- ◆ Advantage dual side pre-solder automated assembly technologies
- ◆ Excellent SI performance
- ◆ Ultra QSFP-DD and Super QSFP-DD both are backward compatible with the QSFP(Qual Small Form Factor)

PRODUCT APPLICATIONS

Data center & Networking Equipment
Servers/Storage Devices
High Performance Computing (HPC)
Switches/Routers

INDUSTRY STANDARDS

IEEE 802.3bj
IEEE802.3cd
SFF-8071/8419
IBTA EDR, HDR

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TECHNICAL INFORMATION

MATERIAL

Contact gold plated 30u"
Nickel plated zinc die cast shells & latching
Mechanism parts
Thermoplastic cable pull tab

ELECTRICAL PERFORMANCE

Differential impedance: 100ohm
Current : 0.5 A/contact
Voltage: 30 V AC/contact

MECHANICAL PERFORMANCE

Rated Durability Cycles 250
Latch Pull Strength 90N MIN
Cable Retention in Plug 90N MIN

ENVIRONMENTAL

Storage temperature range: -40°C to +80°C
Operating temperature: -20°C to +80°C
RoHS compliant

SPECIFICATION

ES-10-00-0013

Partial PN Table

Product Numbers	Product Description
LA0DD001-SD-R	Passive Cable QSFP-DD to QSFP-DD 30AWG 0.5M
LA0DD002-SD-R	Passive Cable QSFP-DD to QSFP-DD 30AWG 1.0M
LA0DD003-SD-R	Passive Cable QSFP-DD to QSFP-DD 30AWG 1.5M
LA0DD008-SD-R	Passive Cable QSFP-DD to QSFP-DD 28AWG 2.0M
LA0DD016-SD-R	Passive Cable QSFP-DD to QSFP-DD 28AWG 2.5M
LA0DD045-SD-R	Passive Cable QSFP-DD to QSFP-DD 26AWG 3.0M
LA0DD101-SD-R	Active cable QSFP-DD to QSFP-DD 30AWG 4.0m
LA0DD102-SD-R	Active cable QSFP-DD to QSFP-DD 28AWG 5.0m
LA0DD103-SD-R	Active cable QSFP-DD to QSFP-DD 28AWG 6.0m
LA0DD104-SD-R	Active cable QSFP-DD to QSFP-DD 28AWG 7.0m

Schematic

WIRING TABLE----QSFP-DD TO QSFP-DD

P1	P2	P1	P2
GND(TX) P1	P20 GND(RX)	GND(TX) P39	P58 GND(RX)
TX2n P2	P21 RX2n	TX6n P40	P59 RX6n
TX2p P3	P22 RX2p	TX6p P41	P60 RX6p
GND(TX) P4	P23 GND(RX)	GND(TX) P42	P61 GND(RX)
TX4n P5	P24 RX4n	TX8n P43	P62 RX8n
TX4p P6	P25 RX4p	TX8p P44	P63 RX8p
GND(TX) P7	P26 GND(RX)	GND(TX) P45	P64 GND(RX)
GND(RX) P13	P32 GND(TX)	GND(RX) P51	P70 GND(TX)
RX3p P14	P33 TX3p	RX7p P52	P71 TX7p
RX3n P15	P34 TX3n	RX7n P53	P72 TX7n
GND(RX) P16	P35 GND(TX)	GND(RX) P54	P73 GND(TX)
RX1p P17	P36 TX1p	RX5p P55	P74 TX5p
RX1n P18	P37 TX1n	RX5n P56	P75 TX5n
GND(RX) P19	P38 GND(TX)	GND(RX) P57	P76 GND(TX)
GND(RX) P20	P1 GND(TX)	GND(RX) P58	P39 GND(TX)
RX2n P21	P2 TX2n	RX6n P59	P40 TX6n
RX2p P22	P3 TX2p	RX6p P60	P41 TX6p
GND(RX) P23	P4 GND(TX)	GND(RX) P61	P42 GND(TX)
RX4n P24	P5 TX4n	RX8n P62	P43 TX8n
RX4p P25	P6 TX4p	RX8p P63	P44 TX8p
GND(RX) P26	P7 GND(TX)	GND(RX) P64	P45 GND(TX)
GND(TX) P32	P13 GND(RX)	GND(TX) P70	P51 GND(RX)
TX3p P33	P14 RX3p	TX7p P71	P52 RX7p
TX3n P34	P15 RX3n	TX7n P72	P53 RX7n
GND(TX) P35	P16 GND(RX)	GND(TX) P73	P54 GND(RX)
TX1p P36	P17 RX1p	TX5p P74	P55 RX5p
TX1n P37	P18 RX1n	TX5n P75	P56 RX5n
GND(TX) P38	P19 GND(RX)	GND(TX) P76	P57 GND(RX)
SHELL	SHELL	SHELL	SHELL