

GL40-DY130/26xxM

QSFP+ 40Gb/s Direct Attached Cable

PRODUCT FEATURES

- Up to 40Gbps total bandwidth
- 4 independent duplex channels 10Gbps
- Up to 7meter transmission
- InfiniBand QDR
- Compliant with SFF-8436.
- Temperature Range: 0~ 70 °C
- RoHS compliant



APPLICATIONS

- 40G Ethernet
- InfiniBand QDR
- Networked storage systems
- Hubs, Switches, Routers, Servers

PRODUCT DESCRIPTION

The QSFP+ passive cable assemblies are high performance, cost effective I/O solutions for 40G Ethernet. QSFP+ copper cables allow hardware manufactures to achieve high port density, configurability and utilization at a very low cost and reduced power budget.

Ordering Information

Part Number	Description
GL40-DY1300.5M	40G QSFP+ to QSFP+ DAC passive cable 30AWG 0.5m
GL40-DY13001M	40G QSFP+ to QSFP+ DAC passive cable 30AWG 1m
GL40-DY13002M	40G QSFP+ to QSFP+ DAC passive cable 30AWG 2m
GL40-DY13003M	40G QSFP+ to QSFP+ DAC passive cable 30AWG 3m
GL40-DY12605M	40G QSFP+ to QSFP+ DAC passive cable 26AWG 5m
GL40-DY12607M	40G QSFP+ to QSFP+ DAC passive cable 26AWG 7m

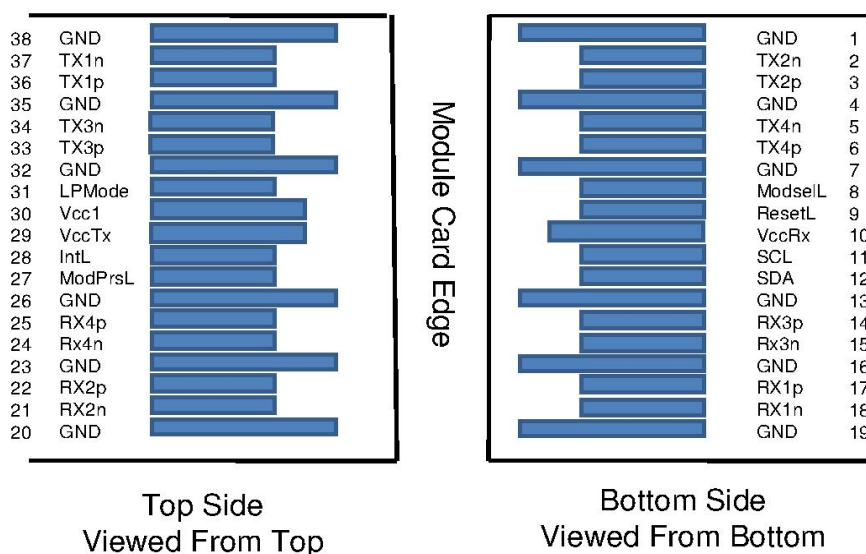
General Product Characteristics

QSFP+ DAC Specifications	
Number of Lanes	Tx & Rx
Channel Data Rate	10.3125 Gbps
Operating Temperature	0 to + 70°C
Storage Temperature	-40 to + 85°C
Supply Voltage	3.3 V nominal
Electrical Interface	38 pins edge connector
Management Interface	Serial, I ² C

High Speed Characteristics

Parameter	Symbol	Min	Typ	Max	Units	Notes
Differential Impedance	Zd	90	100	110	ohm	
Differential Input Return Loss	SDDXX	<-12+2* SQRT (f) with f in GHz			dB	0.01~4.1GHz
		<-6.3+13*Log10/(f/5.5) with f in GHz			dB	4.1~11.1GHz
Common Mode Output Return Loss	SCCXX	< -7+1.6*f with f in GHz			dB	0.01~2.5GHz
				-3	dB	2.5~11.1GHz
Difference Waveform Distortion	dWDPc			6.75	dB	
VMA Loss	L			4.4	dB	
VMA Loss to Crosstalk Ratio	VCR	32.5			dB	

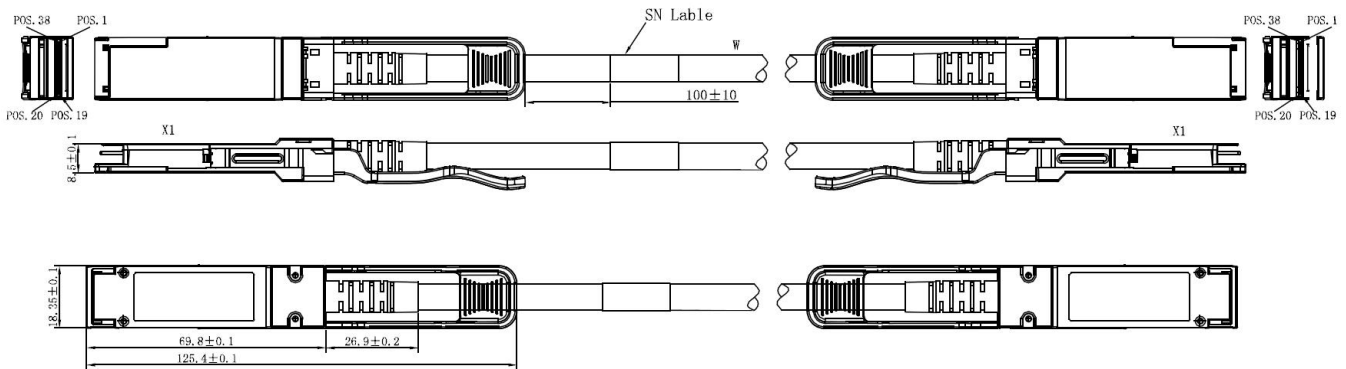
Pin Function Definition



Pin	Logic	Symbol	Description
1		GND	Ground
2	CML-I	Tx2n	Transmitter Inverted Data Input
3	CML-I	Tx2p	Transmitter Non-Inverted Data Input
4		GND	Ground
5	CML-I	Tx4n	Transmitter Inverted Data Input
6	CML-I	Tx4p	Transmitter Non-Inverted Data Input
7		GND	Ground
8	LVTTL-I	ModSelL	Module Select
9	LVTTL-I	ResetL	Module Reset
10		Vcc Rx	+3.3V Power Supply Receiver
11	LVC MOS-I/O	SCL	2-wire serial interface clock
12	LVC MOS-I/O	SDA	2-wire serial interface data
13		GND	Ground
14	CML-O	Rx3p	Receiver Non-Inverted Data Output
15	CML-O	Rx3n	Receiver Inverted Data Output
16		GND	Ground
17	CML-O	Rx1p	Receiver Non-Inverted Data Output
18	CML-O	Rx1n	Receiver Inverted Data Output
19		GND	Ground
20		GND	Ground
21	CML-O	Rx2n	Receiver Inverted Data Output
22	CML-O	Rx2p	Receiver Non-Inverted Data Output

23		GND	Ground
24	CML-O	Rx4n	Receiver Inverted Data Output
25	CML-O	Rx4p	Receiver Non-Inverted Data Output
26		GND	Ground
27	LVTTL-O	ModPrsL	Module Present
28	LVTTL-O	IntL	Interrupt
29		Vcc Tx	+3.3V Power supply transmitter
30		Vcc1	+3.3V Power supply
31	LVTTL-I	LPMode	Low Power Mode
32		GND	Ground
33	CML-I	Tx3p	Transmitter Non-Inverted Data Input
34	CML-I	Tx3n	Transmitter Inverted Data Input
35		GND	Ground
36	CML-I	Tx1p	Transmitter Non-Inverted Data Input
37	CML-I	Tx1n	Transmitter Inverted Data Input
38		GND	Ground

Mechanical Specifications



Regulatory Compliance

Feature	Test Method	Performance
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883C Method 3015.7	Class 1(>2000 Volts)
Electromagnetic Interference (EMI)	FCC Class B	Compliant with Standards
	CENELEC EN55022 Class B	
	CISPR22 ITE Class B	
RF Immunity (RFI)	IEC61000-4-3	Typically Show no Measurable Effect from a 10V/m Field Swept from 80 to 1000MHz
RoHS Compliance	RoHS Directive 2011/65/EU and it's Amendment Directives 6/6	RoHS 6/6 compliant