

## 800GbE to 800GbE (QSFP-DD to QSFP-DD) Active copper Cable P/N: GQD-AC801-DXXC

### Features

- ✓ Hot-plug QSFP-DD form factor with 16 pair cables
- ✓ Support up to 8x 100Gb/s PAM4 and 10~50Gbps NRZ
- ✓ Support up to 4m length with 26AWG cable
- ✓ 100Ohm differential impedance system
- ✓ 3.3V power supply & typical power consumption 2.5W
- ✓ Commercial case temperature range of 0°C to 70°C
- ✓ Latency less than 20ns with 4m length
- ✓ I2C management

### Applications

- ✓ Infiniband NDR/HDR/EDR
- ✓ Switch / router / HBA
- ✓ Enterprise network
- ✓ Data Center Network
- ✓ Data storage and communication industry

### STANDARDS COMPLIANCE

- ✓ IEEE P802.3ck D3.0
- ✓ QSFP-DD MSA HW Rev 6.01
- ✓ CMIS 4.0
- ✓ ROHS

### Description

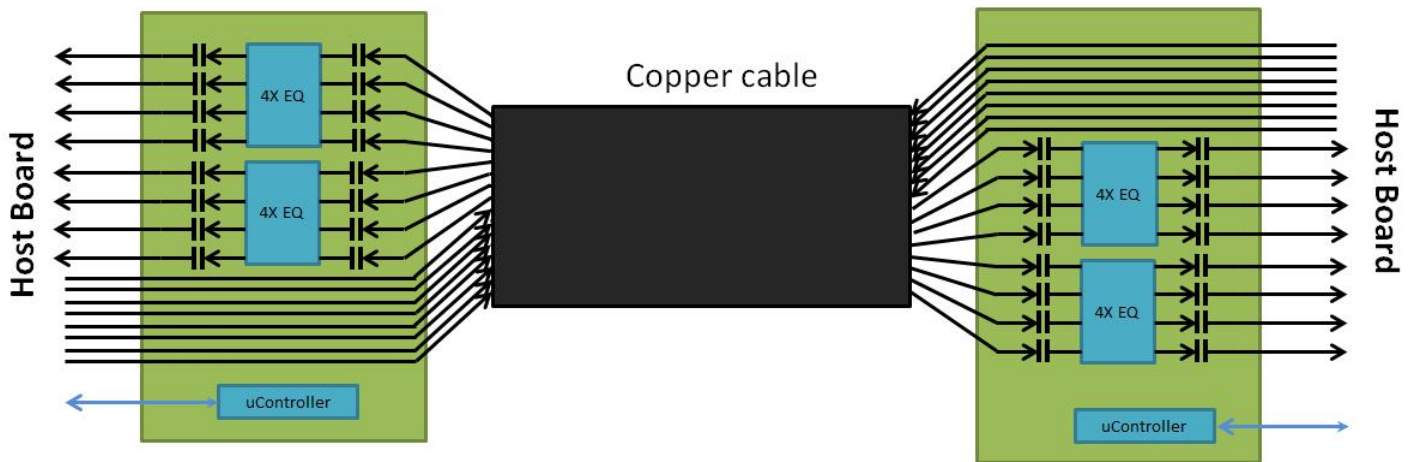
Gigalight's QSFP-DD800 ACC(Active Copper Cable) assembly series product provide superior signal integrity performance and reliability, comparing to PCC and AOC, ACC is a re-drive solution which built-in linear equalizer to compensate transmission loss, it is an effective solution with low power, low latency, low cost to help high-speed data centers even AI high-computational applications.

Gigalight's GQD-AC801-DxxC cable connects data signals from each of the 16 pairs on the single QSFP-DD end to the other QSFP-DD end, each pair operates at data rates of up to 100Gb/s and can be adaptive downward compatibility. The product operates 3.3V power supply and comply with QSFP-DD-MSA and



IEEE802.3ck ,it's high performance & cost effective I/O solutions for LAN, HPC and SAN. The high speed cable assemblies meet and exceed 800Gigabit Ethernet, Infiniband EDR /HDR and temperature requirements for performance and reliability.

### Block Diagram



### Absolute Maximum Ratings

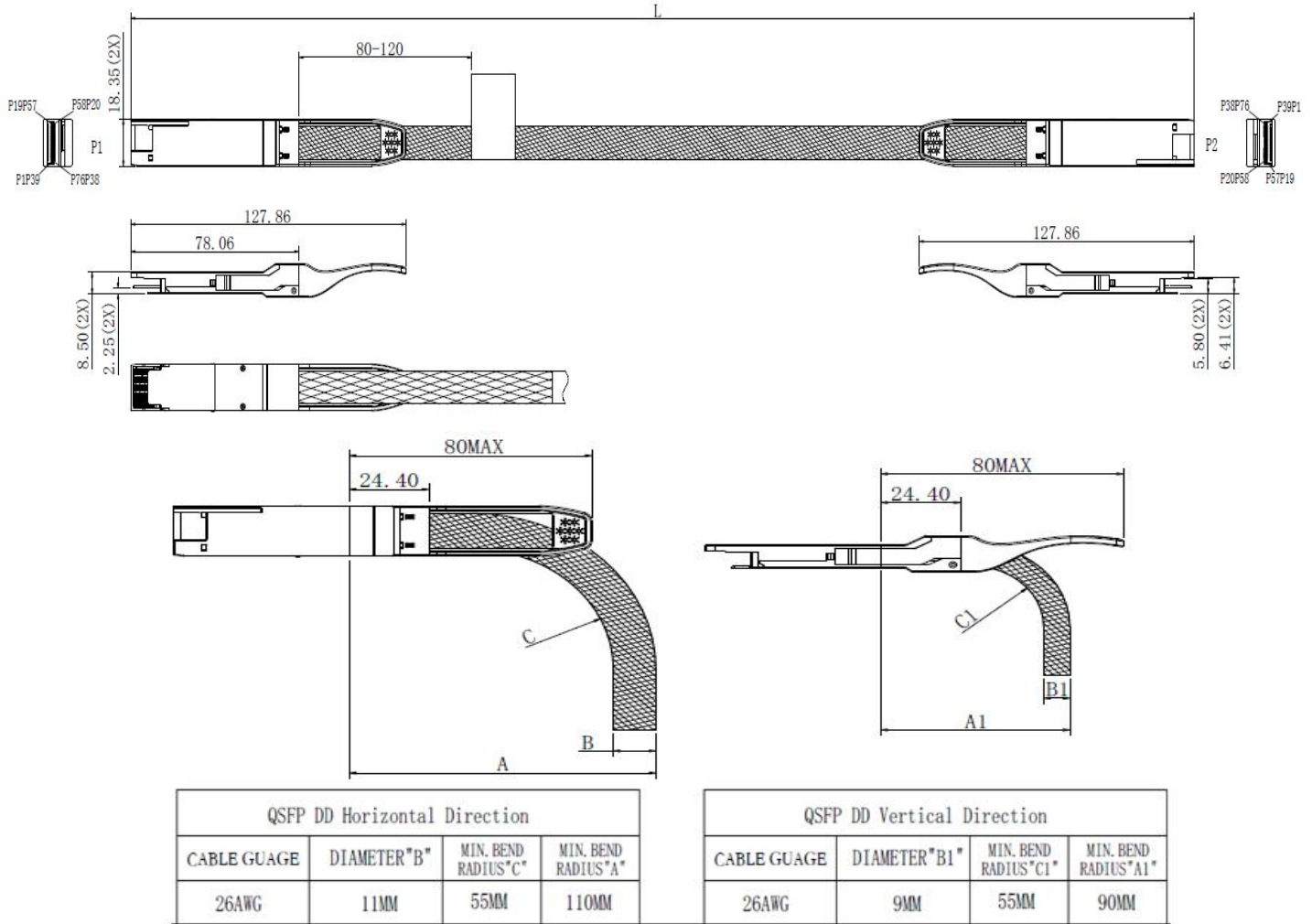
Parameter	Symbol	Min	Max	Unit
Storage Temperature	$T_s$	-20	85	°C
Humidity (non-condensing)	Rh	5	95	%
Supply Voltage	Vcc	-0.3	3.6	V
Latency(4m)	DL		20	ns
Weight(4m)	W		650	g

### Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Operating Case Temperature	$T_c$	0		70	°C
Supply Voltage	Vcc	3.13	3.3	3.47	V
Power Consumption	PD		2.5		W
Data Rate per Lane (PAM4)	Fd1			53.125	GBaud/s
Data Rate per Lane (NRZ)	Fd2	10.3125		53.125	Gbps

Humidity	Rh	5		85	%
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## Mechanical Dimensions



## Ordering information

Part Number	GQD-AC801-DXXC
Length (meter)	2~4
Wire gauge (AWG)	26

If length(meter) is decimal, PN should be as GQD-AC801-DXXC, the default wire gauge is 26AWG cable for 2~4m. It's recommend to choose Gigalight's QSFP-DD800 DAC for less than 2m reach.

## Important Notice

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### Revision History

Revision	Date	Description
V0	May-24-2023	Advance Release.