

400G QSFP-DD to 2x200G QSFP56 ACC P/N: GQD-2Q56A401-XXC

Features

- ✓ Hot-plug QSFP-DD&QSFP56 form factor
- ✓ Support 8x 50/100Gb/s PAM4 modulation with 16 pairs
- ✓ Support up to 7m or longer length
- ✓ 100 ohm differential impedance system
- ✓ 3.3V power supply & typical power consumption 2.5W
- ✓ Commercial case temperature range of 0°C to 70°C
- ✓ I2C management

Applications

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



STANDARDS COMPLIANCE

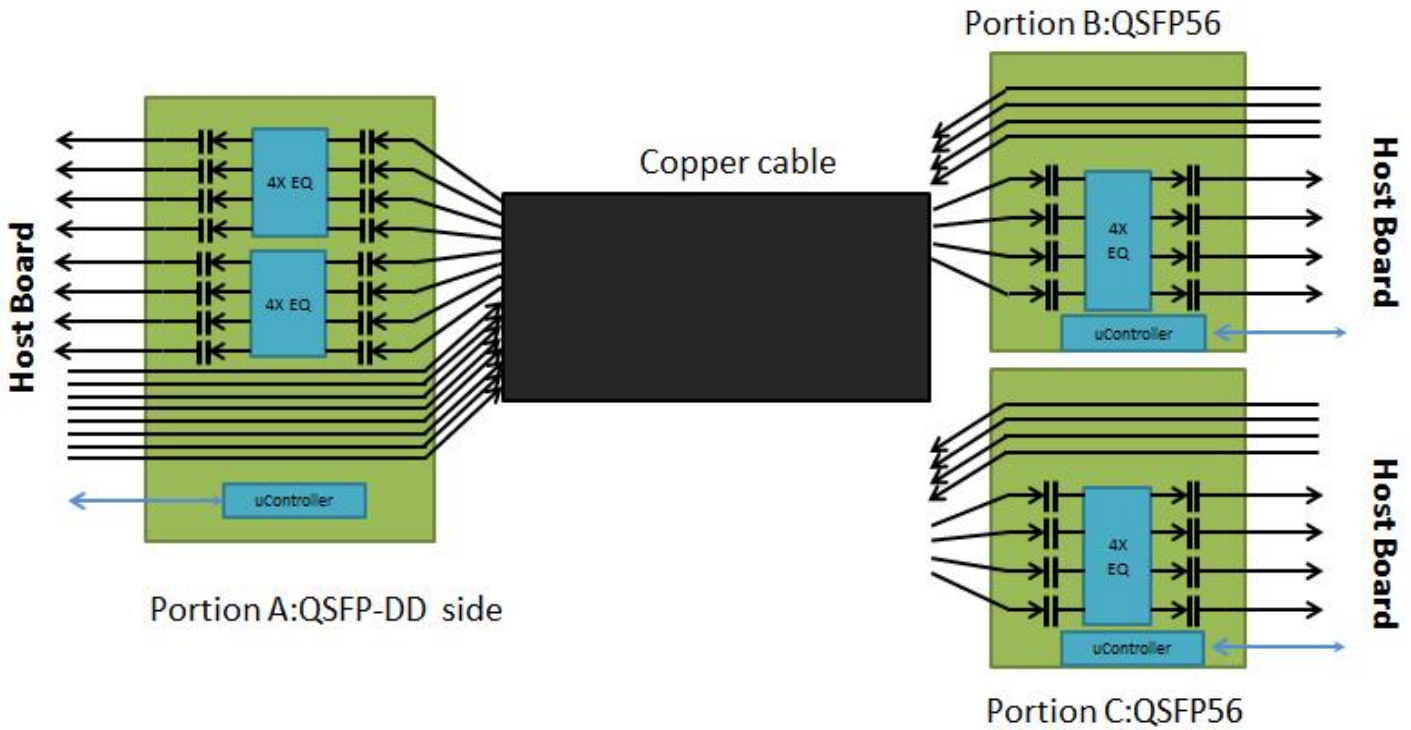
- ✓ IEEE P802.3cd
- ✓ QSFP-DD/QSFP MSA
- ✓ CMIS 4.0
- ✓ RoHS

Description

Gigalight's 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-2Q56A401-XXC cable connects data signals from each of the 16 pairs on the single QSFP-DD end to the dual QSFP56 ends, each pair operates at data rates of up to 50Gb/s and can be adaptive downward compatibility. The product operates 3.3V power supply and comply with QSFP-DD MSA and IEEE802.3cd ,it's high performance & cost effective I/O solutions for LAN, HPC and SAN.

• Block Diagram



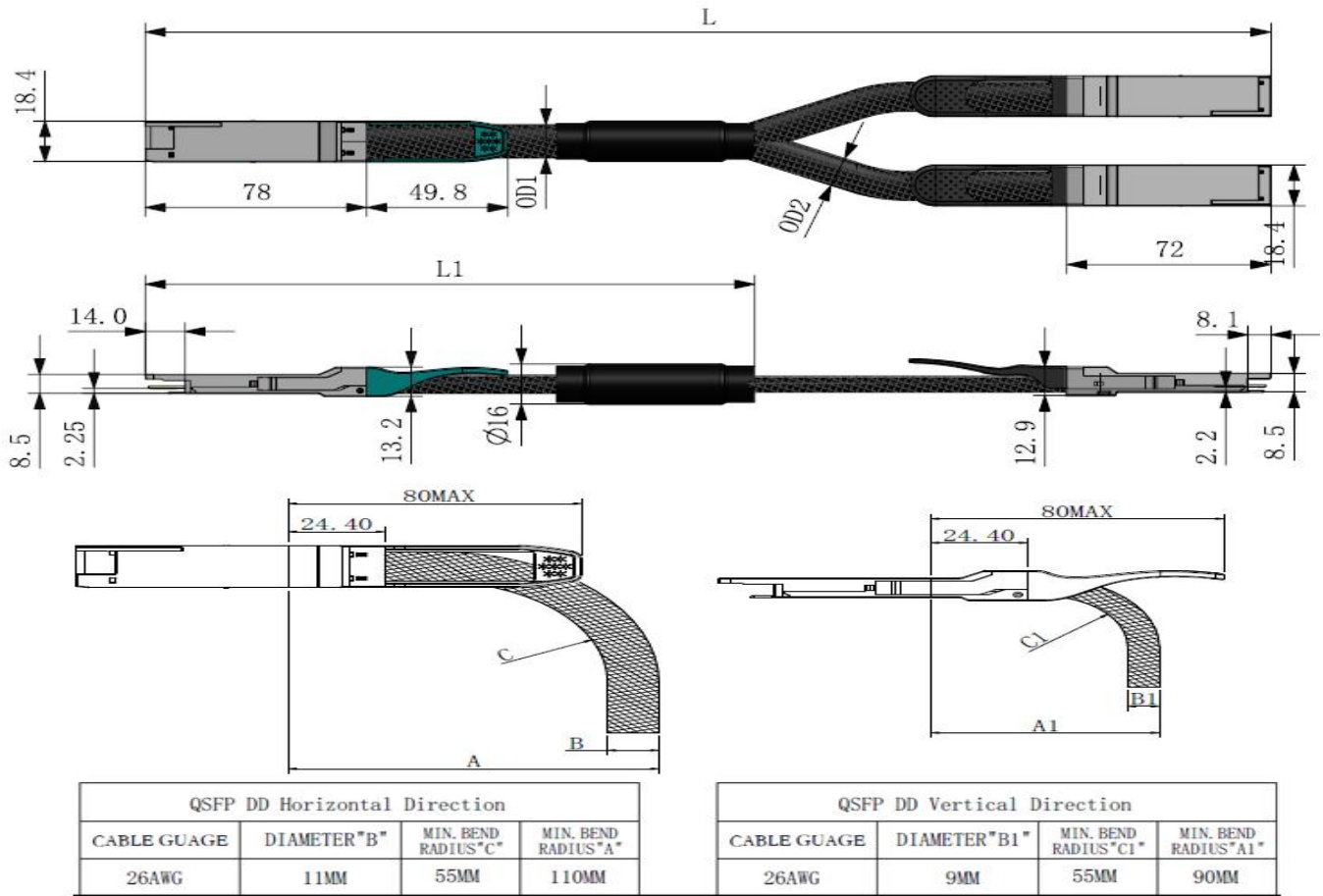
Absolute Maximum Ratings

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

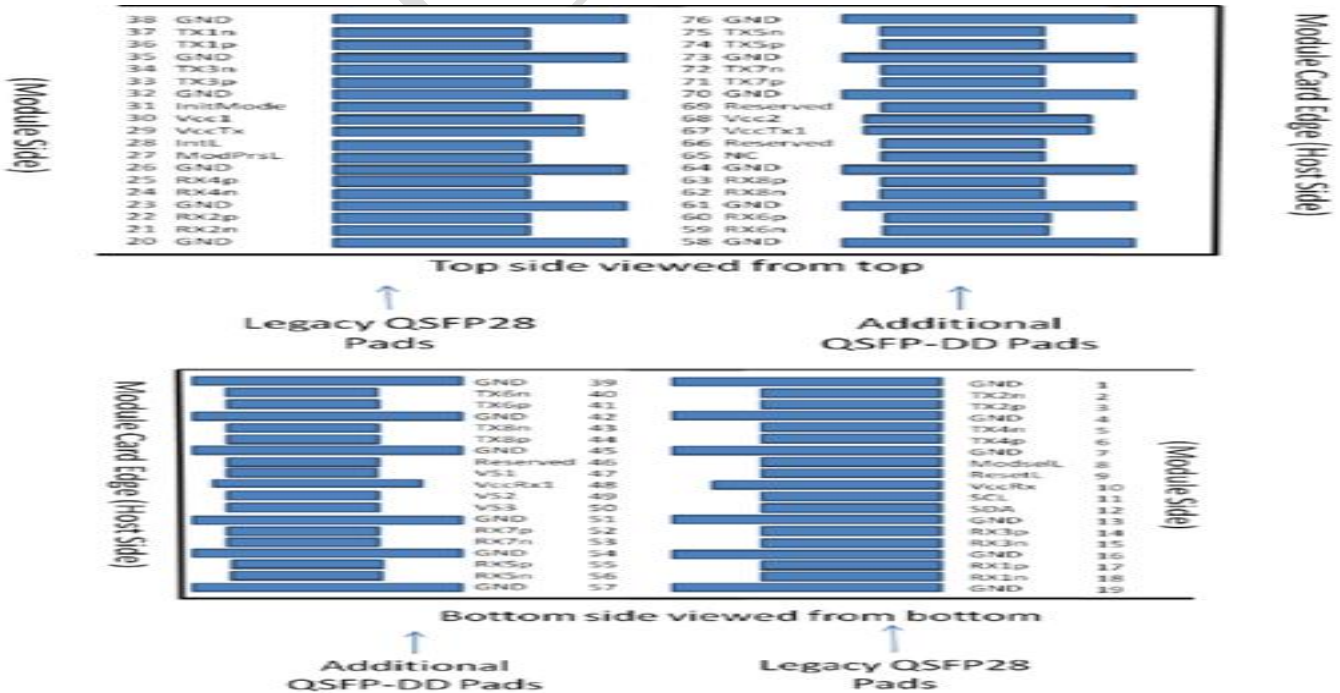
Recommended Operating Conditions

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		26.56		GBaud/s
Data Rate per lane(NRZ)	Fd2	10.3125		26.56	Gbps
Humidity	Rh	5		85	%

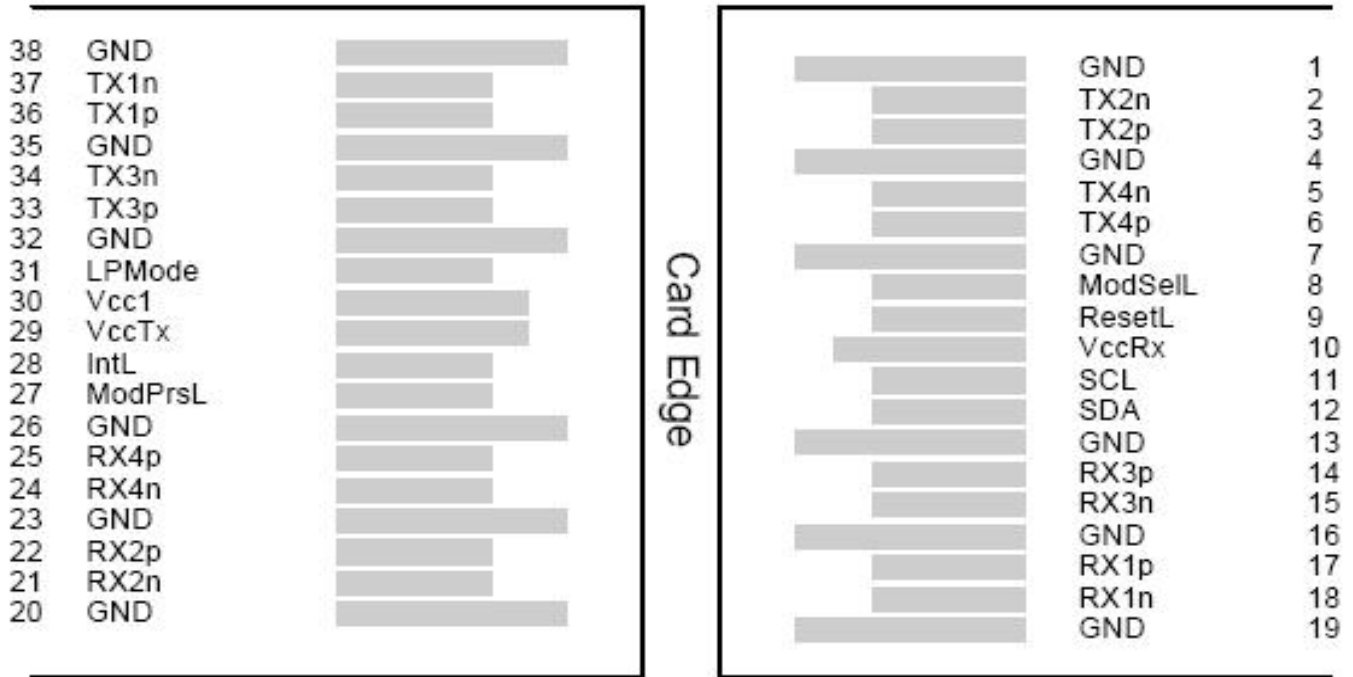
Mechanical Dimensions



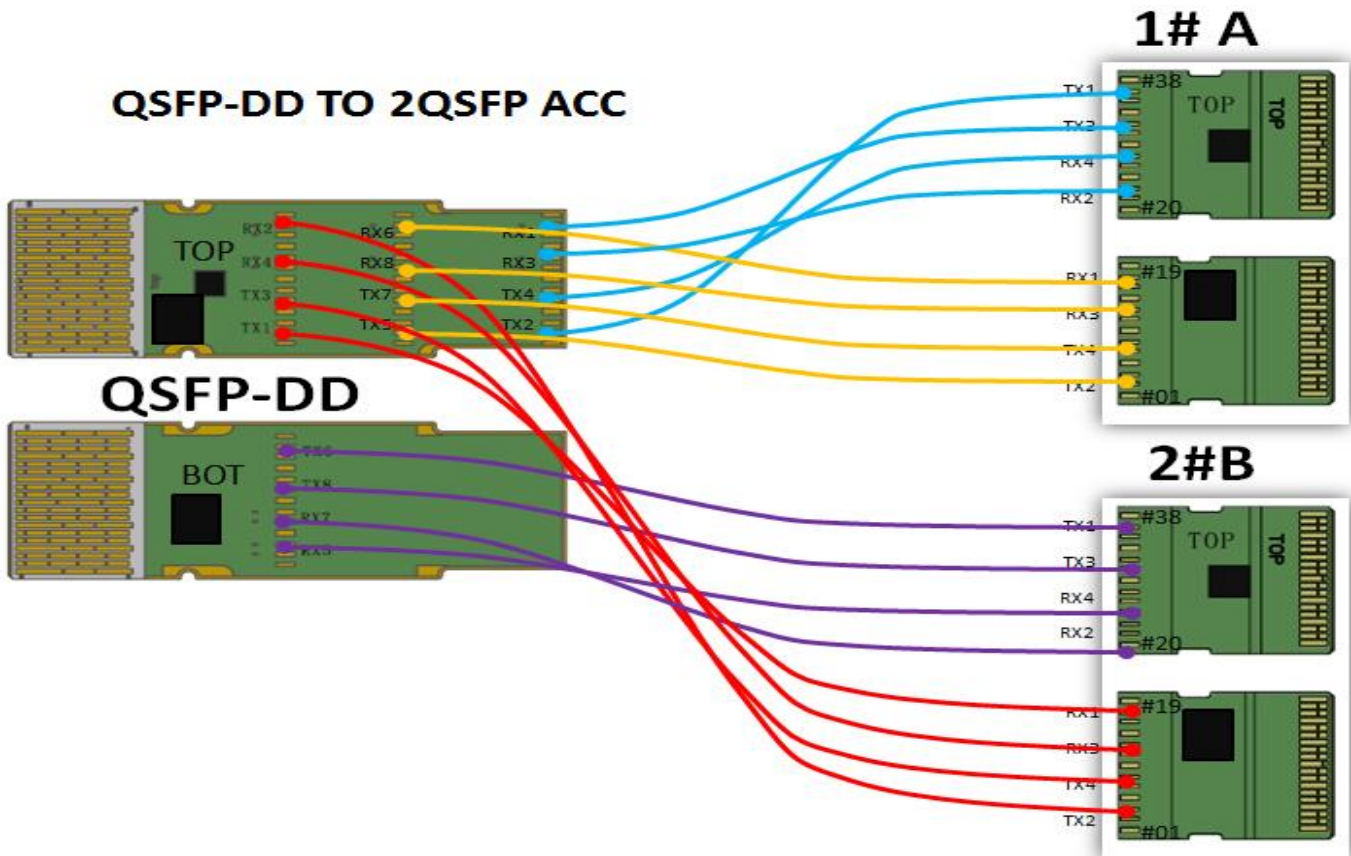
QSFP-DD Electrical pinout



QSFP56 Electrical pinout



Wire connection diagram



Ordering information

Part Number	GQD-2Q56A401-XXC
Length (meter)	3~7
Wire gauge (AWG)	AWG30/26

Less than 3m reach, it's recommend to choose Gigalight's 400G QSFP-DD passive copper cable
3~4m, 30AWG&26AWG is available alternatively;
4m~7m, the default wire gauge is 26AWG cable;
Above 7m, please consult the sales to customize.

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by Gigalight before they become applicable to any particular order or contract. In accordance with the Gigalight policy of continuous improvement specifications may change without notice.

The publication of information in this data sheet does not imply freedom from patent or other protective rights of Gigalight or others. Further details are available from any Gigalight sales representative.

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Revision History

Revision	Date	Description
Preliminary	Mar-28-2026	Advance Release.