QSFP28 Passive Copper Cable Assembly

Features and Applications

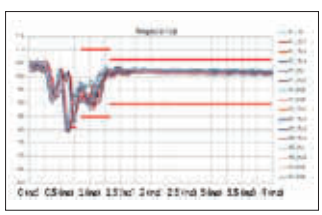
- Supprts aggregate data rates of 100Gbps
- Low insertion loss and cross talk
- Low EMI radiation Switches, servers and routers
- Data Center networks
- Storage area networks
- High performance computing
- Telecommunicaiton and wireless infrastructure
- Medical diagnostics and networking
- Test and measurement equipment

STANDARDS COMPLIANCE

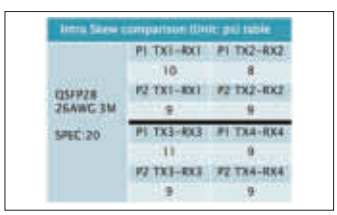
- 100G Ethernet (IEEE 802.3bj)
- InfiniBand EDR
- SFF-8665
- RoHS compliant

10Gtek's QSFP28 passive copper cable assembly features eight differential copper pairs, providing four data transmission channels at speeds up to 28Gbps per channel, and meets 100G Ethernet (4x25Gbps) and InfiniBand EDR (Enhanced Data Rate) requirements. These 100G copper cable assembly features a unique construction with individually wrapped twinax pairs, resulting in low insertion loss and low cross talk.

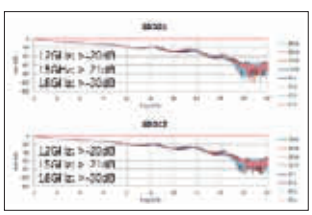
QSFP28 designed for data center, networking and telecommunications markets that require a high speed, reliable cable assembly, this next generation product shares the same mating interface with QSFP+ form factors, making it backward compatible with existing QSFP ports. QSFP28 can be used with current 10G and 14G applications with substantial signal integrity margin.



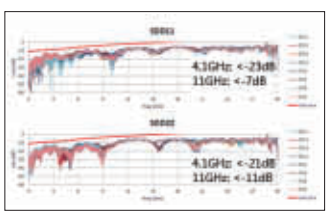
26AWG 3M Differential Impedance
Tr=14 ps@20-80%.



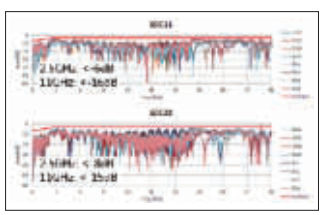
Intra skew
Tr=14 ps@20-80%.



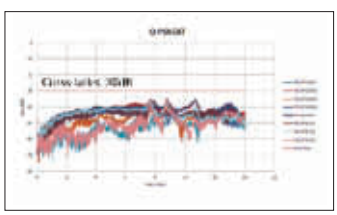
Insertion Loss



Return Loss



Common mode
reflection coefficient



Corss talk (Next)

Performance Specifications:

Electrical				
Parameter	Symbol	Min	Type	Max
Input voltage(V)	Vcc	3.15	3.3	3.45
Clock frequency(kHz)	Fscl			400
Power(mW)				0.001
Current(mA)	Icc			0.1
Data rate(Gbps)		0.010		28G
Operating Temperature(℃)		0		70

Plug	
Back shell Material	Nickel Plated Zinc Diecast
Contact Material	PCB with Gold-Plated Pads
Latch	Positive Latching w/Pull
Insertion Force	QSFP+: 40N Max. SFP+40N Max
Withdrawal Force	QSFP+: 30N Max. SFP+11.5N Max
Retention Force	90N Max
Durability	QSFP+: 250 Cycles Min. SFP+250 Cycles Min.

General	
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/signal Contact
Flammability Rating (Plastics)	UL 94
Green Features	ROHS, Lead-Free
Shield	Braid/Foil

Raw Cable	
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedance	100+/-5 ohms
Construction	Twinaxial
Cable OD	30 AWG=6.90mm(0.271 in) 26 AWG=9.78mm(0.385 in) 24 AWG=9.78mm(0.385 in)
Jacket Type	PVC
Bend Radius	5X Cable OD-Single 10X Cable OD-Repeated

Ordering Information:

100G QSFP28 Copper Cable Assemblies, Passive

Length	Data Rate	P/N	AWG		
1 m	100Gbps	CAB-ZQP/ZQP-P1M	/	26	30
3 m	100Gbps	CAB-ZQP/ZQP-P3M	/	26	/

100G QSFP28 to 4x 25G SFP Copper Cable Assemblies, Passive

Length	Data Rate	P/N	AWG		
1 m	100Gbps	CAB-ZQP/4ZSP-P1M	/	26	30
3 m	100Gbps	CAB-ZQP/4ZSP-P3M	/	26	/

10GTEK TRANSCEIVERS CO., LTD
7 Floor, Anlewuye Building, Shunfeng Road, Baoan District, Shenzhen, P R. of China.
T: +86-755-29988100 E: info@10gtek.com W: www.10gtek.com

10Gtek®