

Product Datasheet

XBR-TWX-0101-C

Brocade® Compatible 10Gb/s SFP+ Direct Attach Cable Copper, Active

FEATURES

- Available lengths 1m to 15m
- Supports multi-gigabit data rates up to 10.5Gbps
- Supports 1x, 2x, 4x and 8x Fiber Channel data rates
- Hot-pluggable SFP 20PIN footprint
- I/O Connector designed for high-speed differential signal applications
- EMI/EMC performance
- Low Power Consumption < 0.5W
- Power Supply: +3.3V
- Compliant to SFP+ MSA
- Temperature Range: 0~ 70 °C
- ROHS

APPLICATIONS

- Storage Area Networks (SAN), Network Attached Storage and Storage Servers
- 1G/2G/4G/8G Fiber Channel
- High capacity I/O in Storage Area Networks, Network Attached Storage, and Storage Servers
- Switched fabric I/O such as ultra-high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections between networking equipment

DESCRIPTION

ATGBICS Compatible XBR-TWX-0101 SFP+ Active Copper Cable assemblies are high-performance, cost effective I/O solutions for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ Active copper modules allow hardware manufacturers to achieve high port density, configurability and utilization at a very low cost and to reduce power budget. The high-speed cable assemblies meet and exceed the performance and reliability requirements stipulated by Gigabit Ethernet and Fiber Channel industry standard.

Product Datasheet

Recommended Operating Environment:

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°
Operating Case Temperature	Tc	0		+70	°
Power Supply Voltage	VCC	3.14	3.3	3.47	V
Power Dissipation	PD			0.5	W

Systems

Performance	Media
10.5 Gpbs line speed, full duplex Bit error rate: better than 10E-12	Hot-pluggable, industry-standard Small Form-Factor

Specifications (Tested under recommended operating conditions, unless otherwise noted)

Parameter	Symbol	Min	Type	Max	Units	Notes
Electrical characteristics						
Supply Current	Icc	-	-	100	mA	1
Transmitter Differential Input Voltage (PECL)	VIN	250	-	1200	mVpp	
Receiver Differential Output Voltage (PECL)	VO	185	-	1000	mVpp	
Impedance	Zcable	90	100	110	Ohms	
MOD-DEF1, 2	VIH	2.0	-	Vcc	V	

Note:

1. The supply current includes SFP Module's supply current and test board working current.

Product Datasheet

Physical Data

Parameter	Description	30AWG	24AWG	Units
Cable Diameter	OD	4.5	6.5	mm
Bend Radius	Minimum Sustained Bend	25	35	mm

AWG Information

Reach @ 10Gb/s (m)	AWG
7	28
10	28
12	24
15	24

Product Datasheet

Pin Descriptions

Pin	Logic	Symbol	Name/Description	Notes
1		VeeT	Transmitter Ground	
2	LV-TTL-O	TX_Fault	N/A	1
3	LV-TTL-I	TX_DIS	Transmitter Disable	2
4	LV-TTL-I/O	SDA	Two Wire Serial Data	
5	LV-TTL-I	SCL	Two Wire Serial Clock	
6		MOD_DEF0	Module present, connect to VeeT	
7	LV-TTL-I	RS0	N/A	1
8	LV-TTL-O	LOS	LOS of Signal	2
9	LV-TTL-I	RS1	N/A	1
10		VeeR	Receiver Ground	
11		VeeR	Receiver Ground	
12	CML-O	RD-	Receiver Data Inverted	
13	CML-O	RD+	Receiver Data Non-Inverted	
14		VeeR	Receiver Ground	
15		VccR	Receiver Supply 3.3V	
16		VccT	Transmitter Supply 3.3V	
17		VeeT	Transmitter Ground	
18	CML-I	TD+	Transmitter Data Non-Inverted	
19	CML_I	TD-	Transmitter Data Inverted	
20		VeeT	Transmitter Ground	

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Mechanical Information

