SFP+ passive 10G Twinaxial Direct Attach Cable

Description

The BlueLAN© SC353501JXMXX SFP+ Direct Attach Cable is a low-power, low-cost and low-latency solution for short interconnections between devices in data centers. Choose the most popular connection for 10G SFP+ data links with up to 10 Meter length.

BlueLAN© SFP+ Direct Attach Cables deliver the most flexible and scalable solution for today's demands in data center environments.

BlueLAN© SFP+ Direct Attach Cables are 100% compliant with SFP+ Multi-Source Agreement (MSA).

Applications

- ✓ 10GBase-CR
- ✓ Ethernet / Fiber Channel
- ✓ Switch to Switch Interface
- ✓ Router/Server Interface
- ✓ Other links

Features

- ✓ 10Gb/s serial optical interface, backward compatible to 1Gb/s
- ✓ Go Green and reduce OPEX:
  Maximum 15 mW power consumption
- ✓ Hot-pluggable SFP+ footprint compliant to SFF-8431
- ✓ 100 Ohm differential impedance
- ✓ Available in following length (Meter):
  1, 3, 5, 7, 10
- ✓ AC coupled input and outputs
- ✓ Custom EEPROM signature
- ✓ Nickel plated zinc diecast enclosure, for lower EMI
- ✓ RoHS compliant and lead-free
- ✓ Single +3.3V power supply
- ✓ Case operating temperature

  Commercial: 0°C to +70°C
  Industrial: -40°C to +85°C

Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended.

Warranty

Every BlueLAN© Direct Attach Cable comes with a 15 year replacement warranty and lifetime support.

For a warranty inquiry, please contact your CBO sales representative.

This warranty only covers the first user of the equipment.

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by CBO before they become applicable to any particular order or contract. In accordance with the CBO 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 CBO or others.

Further details are available from any CBO sales representative.

Installation

Before installation attach an ESD-preventive wrist to ensure not to damage the Direct Attach Cable or hardware.

BlueLAN© SC353501JXMXX can be installed in any Small Form Factor Pluggable+ (SFP+) port. You can install the SC353501JXMXX regardless if the system is powered on or off, because it is hot-swappable.

Insert each connector of the Direct Attach Cable into the SFP+ port of your devices.

You can now use your link.

Order Information

Part No.	Length	Temperature	AWG
SC353501J1M30	1 Meter	0°C – 70°C	30
SC353501J3M30	3 Meter	0°C – 70°C	30
SC353501J5M30	5 Meter	0°C – 70°C	30
SC353501J1M28	1 Meter	0°C – 70°C	28
SC353501J3M28	3 Meter	0°C – 70°C	28
SC353501J5M28	5 Meter	0°C – 70°C	28
SC353501J7M28	7 Meter	0°C – 70°C	28
SC353501J1M24	1 Meter	0°C – 70°C	24
SC353501J3M24	3 Meter	0°C – 70°C	24
SC353501J5M24	5 Meter	0°C – 70°C	24
SC353501J7M24	7 Meter	0°C – 70°C	24
SC353501J10M24	10 Meter	0°C – 70°C	24
SC353501J1M30IN	1 Meter	-40°C – 85°C	30
SC353501J3M30IN	3 Meter	-40°C – 85°C	30
SC353501J5M30IN	5 Meter	-40°C – 85°C	30
SC353501J1M28IN	1 Meter	-40°C – 85°C	28
SC353501J3M28IN	3 Meter	-40°C – 85°C	28
SC353501J5M28IN	5 Meter	-40°C – 85°C	28
SC353501J7M28IN	7 Meter	-40°C – 85°C	28
SC353501J1M24IN	1 Meter	-40°C – 85°C	24
SC353501J3M24IN	3 Meter	-40°C – 85°C	24
SC353501J5M24IN	5 Meter	-40°C – 85°C	24
SC353501J7M24IN	7 Meter	-40°C – 85°C	24
SC353501J10M24IN	10 Meter	-40°C – 85°C	24

Regulatory Compliance

Feature	Standard	Co.
Electrostatic Discharge (ESD)	- IEC/EN 61000-4- 2	✓
Electromagnetic Interference (EMI)	- FCC Part 15 Class B EN 55022 - Class B (CISPR 22A)	✓
Component Recognition	- IEC/EN 60950, UL	✓
RoHS	- 2002/95/EC	✓
EMC	- EN61000-3	✓

1. General Information

Parameter	Value
Min. Dielectric Withstand Voltage	300 VDC
Insulation Resistance	100 Mega Ohm
Mega Ohm Current Rating	0.5 Amp Min/Signal Contact
Flammability Rating	UL 94 V-0

2. Raw Cable Characteristics

Parameter	Value
Conductor	Solid
Wire Gauge	30 AWG to 24 AWG
Impedance	100± Ohm
Construction	Twinaxial
Cable Diameter	30 AWG = 4.2mm 28 AWG = 4.7mm 24 AWG = 6.2mm
Jacket Type	PVC
Bend Radius	5X Cable Diameter

3. Plug Characteristics

Parameter	Value
Back shell Material	Nickel Plated Zinc Diecast
Contact	PCB with Gold-Plated Pads
Latch	Positive latching with pull
Insertion Force	40N maximum
Withdrawal Force	11.5N maximum
Retention Force	90N maximum
Durability	50 Cycles minimum

4. Electrical Interface Characteristics

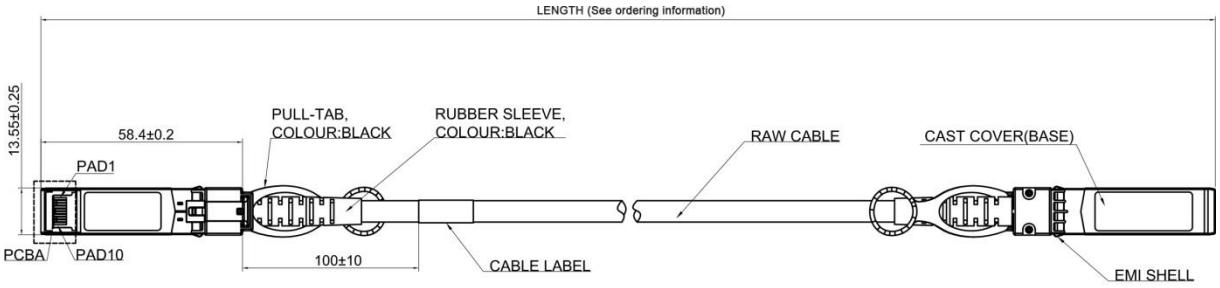
Parameter	Symbol	Min.	Typ.	Max.	Unit	Note
Power Supply Voltage	Vcc	3.15	3.3	3.45	V	
Power Supply Current	Icc			0.1	mA	
Power Total				15	mW	
Clock frequency	Fscl			400	kHz	
Data rate		0.010		10.3125	Gbps	
Bit Error Rate				10^{-12}		

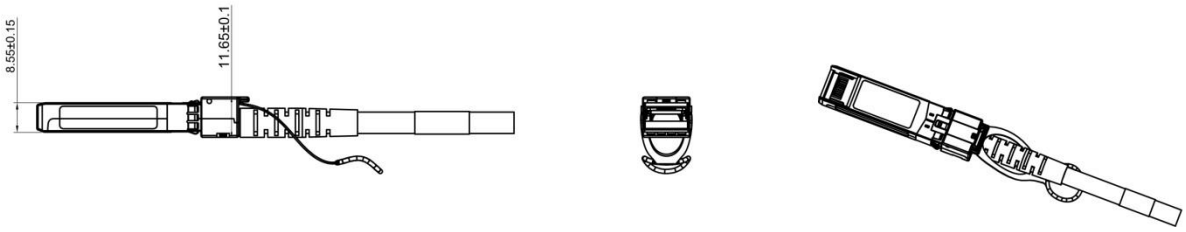
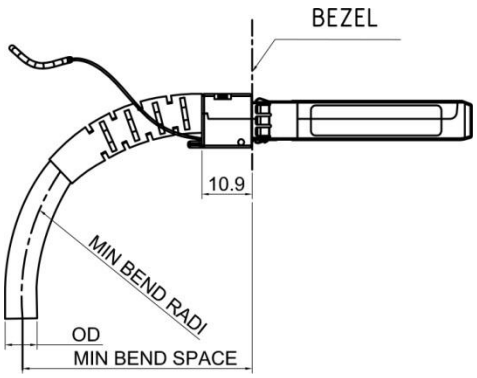
5. EEPROM Information

The SFP MSA defines a 256-byte memory map in EEPROM describing the transceivers capabilities, standard interfaces, manufacturer, and other information, which is accessible over a 2 wire serial interface at the 8-bit address 1010000X (A0h).

Data Address	Field Size (Bytes)	Name of Field	Contents (Hex)	Description
0	1	Identifier	XX	Formfactor
1	1	Ext. Identifier	XX	
2	1	Connector	XX	
3-10	8	Transceiver	XX XX XX XX XX XX XX XX	Transmittter Code
11	1	Encoding	XX	
12	1	BR, Nominal	XX	Transceiver Speed
13	1	Reserved	00	
14	1	Length (9µm) km	XX	Max. link length in KM
15	1	Length (9µm) 100m	XX	Max. link length in M
16	1	Length (50µm) 10m	XX	Max. link length in M
17	1	Length(62.5µm)10m	XX	Max. link length in M
18	1	Length (Copper)	XX	Max. link length in M
29	1	Reserved	00	
30-35	16	Vendor name	XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX	Vendor name - OEM
36	1	Reserved	00	
37-39	3	Vendor OUI	XX XX XX	
40-55	16	Vendor PN	XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX	Product Number - depending on Part
56-59	4	Vendor rev	XX XX XX XX	Vendor revision
60-61	2	Wavelength	XX XX	Transceiver Wavelength
62	1	Reserved	00	
63	1	CC BASE	XX	Checksum of bytes 0-62
64-65	2	Options	XX XX	
66	1	BR, max	XX	
67	1	BR, min	XX	
68-83	16	Vendor SN	XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX XX	Part serial number
84-91	8	Vendor date code	XX XX XX XX XX XX 20 20	Year, Month, Day
92	1	Diagnostic type	XX	Diagnostics
93	1	Enhanced option	XX	Diagnostics
94	1	SFF-8472	XX	Diagnostics
95	1	CC_EXT	XX	Checksum of bytes 64-94
96-255	160	Vendor Specific		

6. Mechanical Specifications (Unit: mm)





Bend Radi			
AWG	Diameter	Bend Radius min. (mm)	Bend Space min.
30	4.20	21.00	31.90
28	4.70	23.50	34.31
24	6.30	33.00	43.90