

Product Datasheet

MCP21J3-X01AA-C

Mellanox® Compatible 10Gb/s SFP+ Direct Attach Cable Copper, Passive, 1.5m

FEATURES

- Available lengths 0.5m to 10m
- Supports multi-gigabit data rates up to 10.5Gbps
- Supports 1x, 2x, 4x and 8x Fiber Channel data rates
- Hot-pluggable SFP 20PIN footprint
- Serial ID module on MOD (0-2)
- AC coupling of PECL signals
- 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
- Switched fabric I/O such as ultra-high bandwidth switches and routers
- Data center cabling infrastructure
- High density connections among network equipment

STANDARDS

- Compliant with SFP MSA (INF-8074i)

DESCRIPTION

ATGBICS Compatible MCP21J3-X01AA-C SFP+ cable is a high-performance, cost effective I/O solution for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ 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	° C
Operating Case Temperature	T _c	0		+70	° C
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	I _{cc}	-	-	100	mA	1
Transmitter Differential Input Voltage (PECL)	V _{IN}	250	-	1200	mVpp	
Receiver Differential Output Voltage (PECL)	V _O	185	-	1000	mVpp	
Impedance	Z _{cable}	90	100	110	Ohms	
MOD-DEF1, 2	V _{IH}	2.0	-	V _{cc}	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
0.5	30
1	30
3	30
5	24
7	24
10	24

Mechanical Information

