

NS-SFP+DAC-Ax

SFP+ Direct Attach Cables, 1m, 3m, 5m, 7m, 10m Reach

Features

- ◆ Support for multi-gigabit data rates up to 10.5Gbps
- ◆ Data rates backward compatible to 1Gbps
- ◆ Support for 1x, 2x, 4x and 8x Fibre Channel data rates
- ◆ Hot-pluggable SFP 20PIN footprint
- ◆ I/O Connector designed for high-speed differential signal applications
- ◆ Improved Pluggable FormFactor(IPF) compliant for enhanced EMI/EMC performance
- ◆ Low Power Consumption < 0.5W
- ◆ Power Supply: +3.3V
- ◆ Compatible to SFP+ MSA
- ◆ Temperature Range: 0~ 70 °C
- ◆ RoHS Compatible



Applications

- ◆ 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

Product Description

The SFP+ cable assemblies are high performance, cost effective I/O solutions for 10Gb Ethernet and 10G fibre Channel applications. SFP+ copper modules allow hardware manufactures to achieve high port density, configurability and utilization at a very low cast and reduced power budget. The high-speed cable assemblies meet and exceed Gigabit Ethernet and Fibre Channel industry standard requirements for performance and reliability.

Recommended Operating Conditions

Parameter	Symbol	Min	Typical	Max	Unit
Storage Ambient Temperature		-40		+85	°C
Operating Case Temperature	T _c	0		+70	°C
Power Supply Voltage	V _{CC3}	3.14	3.3	3.47	V
Power Dissipation	PD			0.5	W

Systems

Performance	10.5 Gpbs line speed, full duplex Bit error rate: better than 10E-12
Media	Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+) copper cable, available as 1m,3m or 5m.
Operating parameters	Supply voltage: 3.3V Power consumption (per end): max 0.5W

Supported Length

1m, 3m, or 5m typical & customer specific requirements

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	Tow Wire Serial Data	
5	LV-TTL-I	SCL	Tow 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	Reciever Ground	
11		VeeR	Reciever Ground	
12	CML-O	RD-	Reciever Data Inverted	
13	CML-O	RD+	Reciever Data Non-Inverted	
14		VeeR	Reciever Ground	
15		VccR	Reciever 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	

Notes:

1. Signals not supported in SFP+ Copper pulled-down to VeeT with 30K ohms resistor
2. Passive cable assemblies do not support LOS and TX_DIS

