10G SFP+ Passive Copper Cable

Features

- Wire AWG:AWG30,AWG28,AWG26,AWG24
- Cable type:Passive Copper Twinax Cable
- Up to 10.3125Gbps data rate
- Low power consumption<0.5W
- Power supply:+3.3V
- Small diameter cable design
- Hot pluggable
- Operating case temperature: 0~+70°C
- RoHS compliant

Applications

- High-speed storage area networks
- Custom high-speed data pipes
- LTE optical repeater application

Compliance

- 1/2/4/8G Fibre Channel
- Compliant with MSA SFF-8472
- Compliant with MSA SFF-8431、SFF-8432

Description

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

Specification

Table1-Absolute Maximum Ratings

Parameter	Symbol	Min	Max	Unit
Storage Temperature	Ts	-40	+85	℃
Operating Case Temperature	Tc	0	+70	℃
Supply Voltage	Vcc	0	3.6	V
Relative Humidity	RH	5	95	%

Table2-Performance Specification

Electrical	
Min.Dielectric Withstand Voltage	300VDC
Insulation Resistance	1000 Mohms
Current Rating	0.5 Amp Min/Signal Contact
General	
Flammability Rating	UL94V-0
Green Features	RoHS,Lead-Free
Shield	Braid/Foil
Marking	Mfg Name,Part#,Date Code
Plug	
Backshell Material	Nickel-Plated Zinc Diecast
Contact Material	PCBwith Gold-Plated Pads
Latch	Positive Latching w/Pull
Insertion Force	30N Max
Withdrawal Force	20N Max
Retention Force	90N Max
Cable	
Conductor	Solid
Wire Gauge	AWG30,AWG28,AWG26,AWG24
Impedance	100±5ohms
Cable OD	AWG30:4.2mmA
	AWG28:4.7mmA
	AWG26:5.2mmA
	AWG24:6.0mmA

Table3-Electrical Characteristics

Test Type	Test Item	24AWG	26AWG	28AWG	30AWG
Electrical Characteristics	Differential impedance	100±5Ω@TDR	100±5Ω	100±5Ω	100±5Ω @TDR
	Mutual capacitance	14pF/ft nominal	14pF/ft nominal	14pF/ft nominal	14pF/ft nominal
	Time delay	1.31ns/ft nominal,(4.3ns/m) nominal	1.35ns/ft nominal	1.35ns/ft nominal	1.35ns/ft nominal,(4.3ns/m) nominal
	Time delays kew(within pairs)	80ps/10m maximum	120ps/8.5m maximum	120ps/7m maximum	50ps/5.5m maximum
	Time delays kew(between pairs)	350ps/10m maximum	500ps/8.5m maximum	500ps/7m maximum	350ps/5.5m maximum
	Attenuation	10dB/10m maximum@1.25Ghz	10dB/8.5m maximum@1.25Ghz	10dB/7m maximum@1.25Ghz	8.4dB/5.5m maximum@1.25Ghz
	Conductor DC Resistance	0.026Ω/ft maximum@20°C	0.04Ω /ft maximum@20° C	0.06Ω /ft maximum@20° C	0.01Ω /ft maximum@20° C

Pin Description

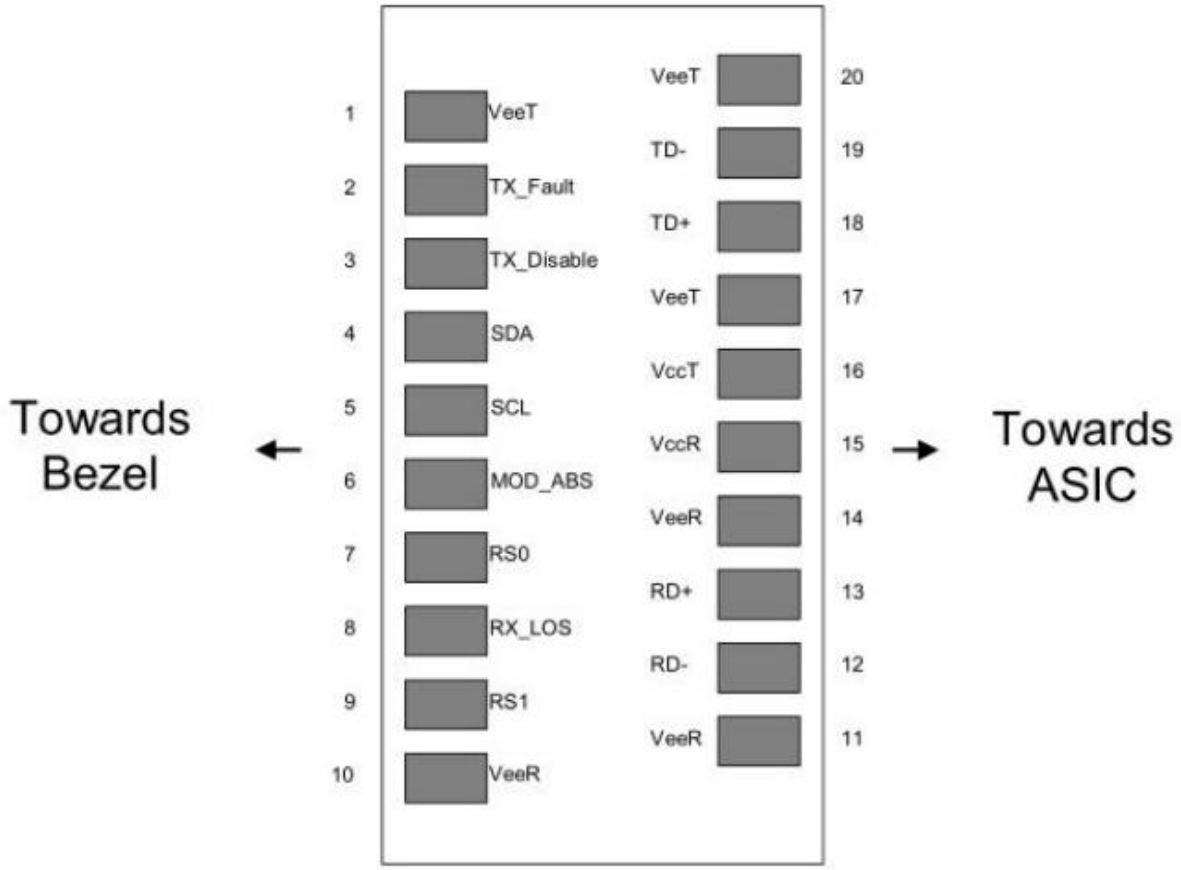

Figure1 Pin View

Table 4-Pin Function Definitions

PIN	Symbol	Name / Description	Power Sequence Order	Note
1	VeeT	Module Transmitter Ground	1st	
2	TX_Fault	N/A	3rd	
3	TX_Dis	Transmitter Disable	3rd	
4	SDA	Tow Wire Serial Data 5LV	3rd	
5	SCL	TowWire Serial Clock	3rd	
6	MOD_ABS	Module present,connect to VeeT	3rd	
7	RS0	N/A	3rd	
8	RX_LOS	LOS of Signal	3rd	
9	RS1	N/A	3rd	
10	VeeR	Module Receiver Ground	1st	
11	VeeR	Module Receiver Ground	1st	
12	RD-	Receiver Inverted Data Output	3rd	
13	RD+	Receiver Data Output	3rd	

14	VeeR	Module Receiver Ground	1st	
15	VccR	Module Receiver 3.3 V Supply	2nd	
16	VccT	Module Receiver 3.3 V Supply	2nd	
17	VeeT	Module Transmitter Ground	1st	
18	TD+	Transmitter Non-Inverted Data Input	3rd	
19	TD-	Transmitter Inverted Data Input	3rd	
20	VeeT	Module Transmitter Ground	1st	

Monitoring Specification

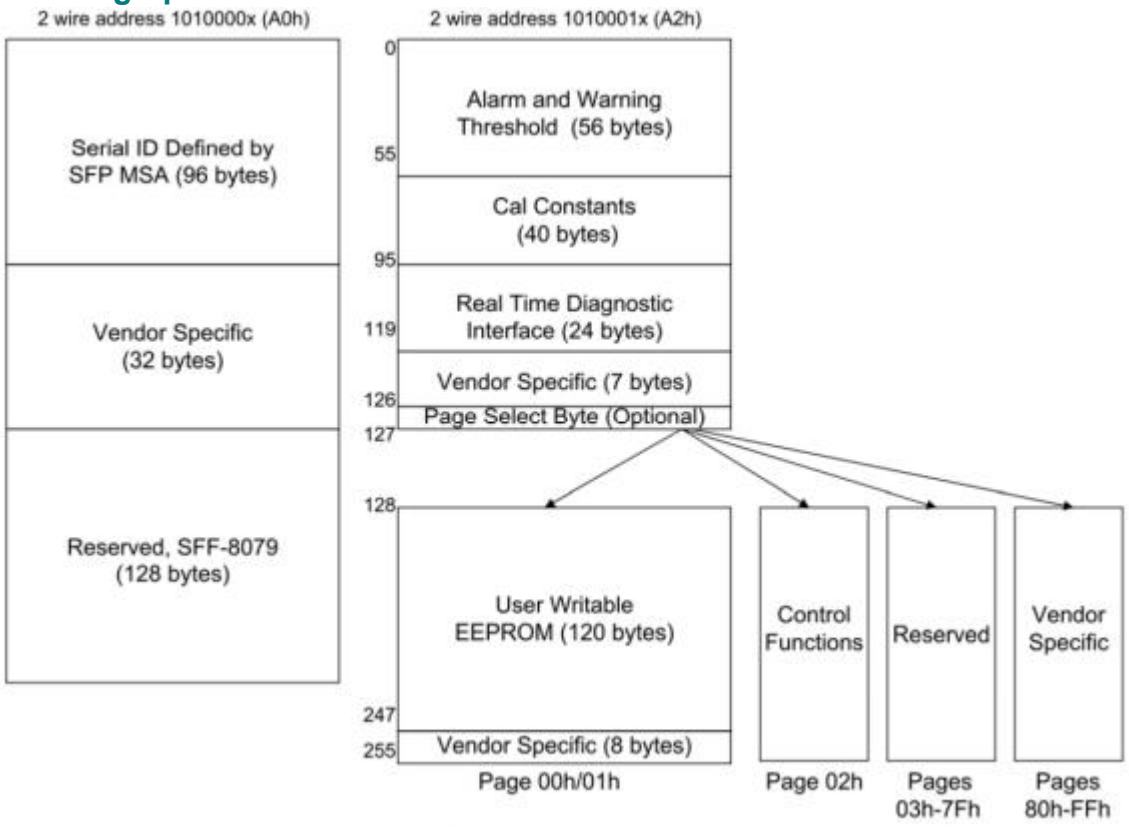

Figure2 Memory Map

Regulatory Compliance

Table5-RatingsRegulatory		
Feature	**Test Method**	**Performance**
Electrostatic Discharge (ESD) to the Electrical Pins	MIL-STD-883C Method 3015.7	Class 1(>2000 Volts)
Electromagnetic Interference(EMI)	FCC Class B	Compliant with Standards
	CENELEC EN55022 Class B	
	CISPR22 ITE Class B	
RF Immunity(RFI)	IEC61000-4-3	Typically Show no Measurable Effect from a 10V/m Field Swept from 80 to 1000MHz
RoHS Compliance	RoHS Directive 2011/65/EU and it's Amendment Directives 6/6	RoHS 6/6 compliant

Caution

All adjustments have been done at the factory before the shipment of the devices. No maintenance and user serviceable part is required. Tampering with and modifying the performance of the device will result in voided product warranty.

Contact Information

Naddod Networking Technology Co.,Ltd.

Address: 302, Building F1, Optics Valley Software Park, Guanshan 1st Road East Lake High-tech Zone, Wuhan ,P.R.China

Tel:4000698860

Tel:027-59728168

Email:marketing@naddod.com

Website: www.naddod.com