SFP+ Series

ETU-LINK
Optical Communication System

SFP+

ESPCAA92-3xxCXX

10G SFP+ to 10G SFP+ Direct Attach Active Copper Cables

➢ Support for multi-gigabit data rates up to10 Gb/s

➢ Data rates backward compatible to 1 Gb/s

➢ Hot-pluggable SFP 20PIN footprint

➢ Improved Pluggable Form Factor(IPF)

➢ compliant for enhanced EMI/EMC performance

➢ Low Power Consumption   < 0.2W

➢ Power Supply :+3.3V

➢ Compatible to SFP+ MSA

➢ Compatible to SFF-8431,SFF8432

➢ 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

Description

The SFP+ active cable assemblies are high performance, cost effective I/O solutions for10Gb Ethernet and 10G Fiber 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 Fiber 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	Tc	0		+70	°C
Power Supply Voltage	Vcc3	3.14	3.3	3.47	V
Power Dissipation	PD			0.2	W

Systems Requirements

Performance	Media	Operating parameters
10.5Gpbs line speed, full duplex Bit error rate: better than 10E-12	Hot-pluggable, industry-standard Small Form-Factor Pluggable (SFP+) copper cable, available as 1m, 3m or 5m.	Supply voltage: 3.3V Power consumption(per end): max 0.2W

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	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	

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

Mechanical Dimensions

Important Notice

Performance figures, data and any illustrative material provided in this data sheet are typical and must be specifically confirmed in writing by company before they become applicable to any particular order or contract. In accordance with company 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 company or others. Further details are available from any company sales representative.

Ordering information

Part Number	ESPCAA92-3xxCXX														
Length（meter）	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Wire gauge（AWG）	30	30	30	24	24	24	24	24	24	24	24	24	24	24	24

Regulatory Compliance

Feature	Reference	Performance
Electrostatic discharge（ESD）	IEC/EN 61000-4-2	Compatible with standards
Electromagnetic Interference (EMI)	FCC Part 15 Class B EN 55022 Class B (CISPR 22A)	Compatible with standards
Laser Eye Safety	FDA 21CFR 1040.10, 1040.11 IEC/EN 60825-1, 2	Class 1 laser product
Component Recognition	IEC/EN 60950, UL	Compatible with standards
ROHS	2002/95/EC	Compatible with standards
EMC	EN61000-3	Compatible with standards

Compatibility Test

In order to ensure the product compatibility, our products will be tested on the switch before shipment. Our modules can compatible with many mainstream brand switches, such as Cisco, Juniper, Extreme, Brocade, IBM, H3C, HP, Huawei, D-Link, Mikrotik, ZTE, TP-Link...

Our test equipment: VOLKTEK MEN-4110, HP 2530-8G, CRS226-24G-25+RM, Catalyst 2960G Series, Catalyst 3850 XS 10G SFP+, Catalyst 3750-E Series, HUAWEI S5700Series, H3C S3100V2 Series, Juniper-EX4200, etc.

Cisco Catalyst 3850

HUAWEI S5700

H3C S3100V2

HP J9264AR

Juniper EX 4200

Alcatal 6850E-U24X

Mikrotik CR5226-24G-25+RM

Cisco Catalyst 2960G

Volktek MEN-4110

Product Production Process

Quality Assurance

Continuous introduction of new equipment, produced by strict standards, strict quality inspection, to guarantee the high quality standard of each product.
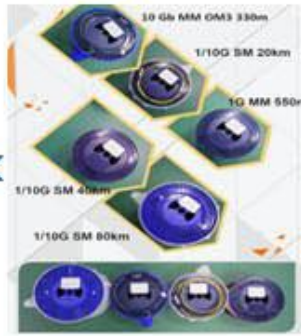

Standardized Production Line

Professional Welding

Assembling

Aging Testing

Distance Testing

Cleaning end face

Product Initial Test

Switch Testing

Product Final Test

Packaging

Individual package.

Company: ETU-Link Technology Co., LTD
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Addresses and phone number also have been listed at www.etulinktechnology.com.
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