



Features

- „ Compliant to SFF 8431 SFP+ MSA
- „ Compliant with SFP MSA (INF-8074i)
- „ Support for multi-gigabit data rates up to 10.5Gbps
- „ Support for 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
- „ Temperature Range: 0~ 70 °C
- „ RoHS Compliant

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 equipments

Ordering Information

<i>Part Number</i>	<i>Model Number</i>	<i>Length (M)</i>	<i>AWG</i>	<i>Voltage</i>	<i>Temperature</i>
ESSFP+ X5-P	Twinax Copper	0.5	30	3.3V	0°C to 70 °C
ESSFP+ 01-P	Twinax Copper	1	30	3.3V	0°C to 70 °C
ESSFP+ 03-P	Twinax Copper	3	30	3.3V	0°C to 70 °C
ESSFP+ 05-P	Twinax Copper	5	24	3.3V	0°C to 70 °C
ESSFP+ 07-P	Twinax Copper	7	24	3.3V	0°C to 70 °C
ESSFP+ 07-A	Twinax Copper	7	24	3.3V	0°C to 70 °C
ESSFP+ 10-A	Twinax Copper	10	24	3.3V	0°C to 70 °C

Note: All information contained in this document is subject to change without notice.

Recommended Operating Conditions

Parameter	Symbol	Min.	Max.	Units	Note
Storage Temperature		-40	85	°C	
Operating Case Temperature	T_c	0	70	°C	
Supply Voltage	V_{cc3}	3.14	3.47	V	
Power Dissipation	PD		0.5	W	

Systems

Performance	Media	Operating parameters
10.5 Gbps 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 0.5W

Specifications

Parameter	Symbol	Min	Type	Max	Units	Notes
Electrical Characteristics						
Supply Current	I_{cc}	-	-	100	mA	
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: The supply current includes SFP Module's supply current and test board working current.

Physical Data

Parameter	Description	30AWG	24AWG	Units
Cable Diameter	OD	4.5	6.5	mm
Bend Radius	Minimum Sustained Bend	25	35	mm

Dimensions

