

ADAC-SFP10G-xM

10GBase SFP+ Direct Attach Cable

Copper, Active, 1m to 15m Lengths, Commercial Temperature

FEATURES

- Available lengths 1m to 15m
- Supports multi-gigabit data rates up to 10.5Gb/s
- Supports 1x, 2x, 4x and 8x Fibre Channel data rates
- Hot-pluggable SFP 20PIN footprint
- I/O Connector designed for high-speed differential signal applications
- EMI/EMC performance
- Low Power Consumption < 0.5W
- Power Supply: +3.3V
- Compliant to SFP+ MSA
- Commercial Operating Temperature Range: 0°C to 70°C
- RoHS compliant

APPLICATIONS

- Storage Area Networks (SAN), Network Attached Storage and Storage Servers
- 1G/2G/4G/8G Fibre Channel
- 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 centre cabling infrastructure
- High density connections between networking equipment

DESCRIPTION

ATGBICS ADAC-SFP10-xM Active Copper Cable is a high-performance, cost effective I/O solution for 10Gb Ethernet and 10G Fibre Channel applications. SFP+ active 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 Fibre Channel industry standard.

RECOMMENDED OPERATING ENVIRONMENT

Parameter	Symbol	Min	Typical	Max	Unit
Storage Temperature	Ts	-40	-	+85	°C
Operating Case Temperature	Tc	0	-	+70	°C
Power Supply Voltage	VCC	3.14	3.3	3.47	V
Power Dissipation	PD	-	-	0.5	W

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Min	Typical	Max	Unit	Note
Supply Current	Icc	-	-	100	mA	1
Transmitter Differential Input Voltage (PECL)	VIN	250	-	1200	mVpp	
Receiver Differential Output Voltage (PECL)	VO	185	-	1000	mVpp	
Impedance	Zcable	90	100	110	Ohms	
MOD-DEF1, 2	VIH	2.0	-	Vcc	V	

Note:

1. The supply current includes SFP Module's supply current and test board working current.

PHYSICAL CHARACTERISTICS

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

AWG INFORMATION

Reach @ 10Gbps (m)	AWG
7	28
10	28
12	24
15	24

PIN DESCRIPTION

Pin	Logic	Symbol	Name/Description
1		VeeT	Transmitter Ground
2	LV-TTL-O	TX_Fault	N/A
3	LV-TTL-I	TX_DIS	Transmitter Disable
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
8	LV-TTL-O	LOS	LOS of Signal
9	LV-TTL-I	RS1	N/A
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

MECHANICAL DIMENSIONS (UNITS: mm)

