

## Product Datasheet

### MC2309130-002-C

#### Mellanox® Compatible 10Gb/s SFP+ Direct Attach Cable Copper, Passive, 2m

##### FEATURES

- Available lengths 0.5m to 10m
- Supports multi-gigabit data rates up to 10.5Gbps
- Supports 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
- Compliant to SFP+ MSA
- Temperature Range: 0~ 70 °C
- ROHS

##### 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 equipment

##### STANDARDS

- Compliant with SFP MSA (INF-8074i)

##### DESCRIPTION

ATGBICS Compatible MC2309130-002-C SFP+ cable is a high-performance, cost effective I/O solution for 10Gb Ethernet and 10G Fiber Channel applications. SFP+ 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 Fiber Channel industry standard.

## Product Datasheet

### Recommended Operating Environment:

| Parameter                   | Symbol | Min  | Typical | Max  | Unit |
|-----------------------------|--------|------|---------|------|------|
| Storage Ambient Temperature |        | -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    |

### Systems

| Performance                        | Media  |
|------------------------------------|--|
| 10.5 Gpbs line speed, full duplex  | Hot-pluggable, industry-standard Small Form-Factor |
| Bit error rate: better than 10E-12 |  |

### Specifications (Tested under recommended operating conditions, unless otherwise noted)

| Parameter                                     | Symbol | Min | Type | Max  | Units | Notes |
|---|--------|-----|------|------|-------|-------|
| Electrical Characteristics                    |        |     |      |      |       |       |
| 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.

## Product Datasheet

### Physical Data

| Parameter             | Description            | 30AWG | 24AWG | Units |
|-----------------------|------------------------|-------|-------|-------|
| <b>Cable Diameter</b> | OD                     | 4.5   | 6.5   | mm    |
| <b>Bend Radius</b>    | Minimum Sustained Bend | 25    | 35    | mm    |

### AWG Information

| Reach @ 10Gb/s (m) | AWG |
|--------------------|-----|
| 0.5                | 30  |
| 1                  | 30  |
| 3                  | 30  |
| 5                  | 24  |
| 7                  | 24  |
| 10                 | 24  |

### Mechanical Information

