

## Product Datasheet

### CBL-00239-C

### Voltaire Compatible 10Gb/s SFP+ Direct Attach Cable Copper, Passive, 1m

#### **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 CBL-00239-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  | Тс     | 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 | Туре | Max  | Units | Notes |
|--|--------|-----|------|------|-------|-------|
| Electrical Characteristics                       |        |     |      |      |       |       |
| Supply Current                                   | lcc    | -   | -    | 100  | mA    | 1     |
| Transmitter Differential<br>Input Voltage (PECL) | VIN    | 250 | -    | 1200 | mVpp  |       |
| Receiver Differential<br>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 |
|----------------|---------------------------|-------|-------|-------|
| Cable Diameter | OD                        | 4.5   | 6.5   | mm    |
| Bend Radius    | Minimum Sustained<br>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**

