

## DATA SHEET

# SFP+ 10G BASE-BX BIDIRECTIONAL 10 KM TRANSCEIVER

## DESCRIPTION

This transceiver is designed for bidirectional application over 20Km link.

Two codes are available for the two directions:

- Tx 1270 nm / Rx 1330 nm (upstream)
- Tx 1330 nm / Rx 1270 nm (downstream)



## KEY FEATURES

---

Up to 10Km transmission on SMF

---

SFP+ package with LC connector

---

1270nm (1330nm) DFB Laser and PIN photodetector

---

Hot-pluggable SFP+ footprint

---

Up to 10.7Gbps Data Links

---

+3.3V single power supply

---

Power dissipation < 1.5W

---

2-wire interface with integrated Digital Diagnostic monitoring

---

Low EMI and excellent ESD protection

---

Case temperature range : -5°C to 70°C

---

## APPLICATIONS

---

SDH STM-64/SONET OC192 at 9.953Gbps

---

10G Ethernet at 10.3125Gbps

---

10G Fiber channel at 10.5187Gbps

---

OC192 over FEC at 10.709Gbps

---

## COMPLIANCES

---

Compliant with SFF-8472 SFP+ MSA.

---

Compliant to SFP+ SFF-8431 and SFF-8432.

---

RoHS Compliant6

---

## DATA SHEET

# SFP+ 10G BASE-BX BIDIRECTIONAL 10 KM TRANSCEIVER

### ENVIRONMENTAL SPECIFICATIONS

| Parameter             | Min. | Typ.  | Max. | Unit |
|-----------------------|------|-------|------|------|
| Operation Temperature | 0    |       | +70  | °C   |
| Storage Temperature   | -40  | ----- | +85  | °C   |
| Operation Humidity*   | 5    | ----- | 85   | %    |
| Storage Humidity      | 5    | ----- | 95   | %    |

(\*) not condensing

### OPERATING SPECIFICATIONS

| Parameter             | Min. | Typ. | Max. | Unit |
|-----------------------|------|------|------|------|
| Supply Voltage        | 3.1  | +3.3 | +3.5 | V    |
| Power Dissipation     |      |      | 1.5  | W    |
| Transmission Distance |      |      | 10   | Km   |

### OPTICAL SPECIFICATIONS

#### TRANSMITTER

| Parameter                        | Min. | Typ. | Max. | Unit |
|----------------------------------|------|------|------|------|
| Wavelength (Tx1270)              | 1260 | 1270 | 1280 | nm   |
| Wavelength (Tx1330)              | 1310 | 1330 | 1350 | nm   |
| Average Launch Power (each lane) | -4   |      | 1    | dBm  |
| Extinction Ratio (ER)            | 4    |      |      | dB   |
| Spectrum Band Width (RMS)        |      |      | 1    | nm   |
| SMSR                             | 30   |      |      | dB   |

#### RECEIVER

| Parameter                         | Min. | Typ. | Max. | Unit |
|-----------------------------------|------|------|------|------|
| Wavelength (Rx1330)               | 1310 | 1330 | 1350 | nm   |
| Wavelength (Rx1270)               | 1260 | 1270 | 1280 | nm   |
| Receiver Sensitivity              |      |      | -15  | dBm  |
| Input Saturation Power (Overload) | 0    |      |      | Psat |
| LOSA                              | -26  |      |      | dBm  |
| LOSD                              |      |      | -20  | dBm  |
| Hysteresis                        | 0.5  |      | 5    | dB   |

## DATA SHEET

# SFP+ 10G BASE-BX BIDIRECTIONAL 10 KM TRANSCEIVER

---

## ORDERING INFORMATION

| Jabil Part Number | Package | Rate | Reach | Other info                         |
|-------------------|---------|------|-------|------------------------------------|
| JPSB10LRLCC000L23 | SFP+    | 10G  | 10 Km | DDM/RoHS - Tx 1270 nm / Rx 1330 nm |
| JPSB10LRLCC000L32 | SFP+    | 10G  | 10 KM | DDM/RoHS Tx 1330 nm / Rx 1270 nm   |

## CONTACT INFORMATION

**For additional information and evaluation samples order, please contact:**

**Chuck Sinha, Sr. Director of Sales**

Jabil Photonics

5960 Inglewood Dr. Suite 100, Pleasanton, CA

Mobile: 408-505-0955 Email: [Chuck\\_Sinha@Jabil.com](mailto:Chuck_Sinha@Jabil.com)