

## SFP+ 10GBASE-SR/SW, 850nm MMF Transceiver

### Features

- Built-in digital diagnostic functions
- 850nm VCSEL and PIN receiver
- LVTTTL (open collector) digital diagnostic monitoring signals
- Compliant with specifications for IEEE-802.3ae 10Gigabit Ethernet at 10.3Gbps and 10G Fiber Channel at 10.52Gbps
- Conforms to 10Gbps SFP+ Multi-Source Agreement
- Class 1 Laser Safety Conformance
- Compatible with industry standard SFP electrical connector & cage
- Industry standard duplex LC optical connector
- Operates with 50/125  $\mu\text{m}$  multi-mode optical fibers
- Case temperature range : 0°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



## Description

The transceiver is hot pluggable duplex-LC optical transceiver designed for using in 10Gbps serial applications such as SONET OC192/SDH STM64, 10Gigabit Ethernet and 10Gbps Fiber Channel applications. It operates with single +3.3V power supplies. The transceiver conforms to the 10Gbps SFP+ multi-source agreement (MSA).

The transceiver consists of optical subassemblies (OSA) for both transmitter and the receiver, and an electrical subassembly, which is packaged together in a metal enclosure. The TOSA is a high-performance 850nm VCSEL, and the ROSA is high speed PIN detector with a built-in preamplifier.

## Environmental Specifications

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

(\*) not condensing

## Operating Specifications

Parameter	Min.	Typ.	Max.	Unit
Power Voltage	3.1	+3.3	+3.45	V
Power Dissipation		2.4		W
Transmission Distance			300/500	m



## Optical Specifications

Transmitter:

Parameter	Min.	Typ.	Max.	Unit
Input Wavelength	830		870	nm
Average Launch Power	-6		-1	dBm
Extinction Ratio (ER)	3.5			dB
Optical Modulation Amplitude	-5			dBm
Optical Channel Penalty			1	dB
Spectrum			1	nm

Receiver:

Parameter	Min.	Typ.	Max.	Unit
Input Wavelength	830		870	nm
Receiver Sensitivity			-12	dBm
Receiver Sensitivity	0			dBm
LOSA	-25			dBm
Hysteresis	1		4	dB

## Ordering information

Jabil Part Number	Package	Rate	Reach	Other info
JPSP10S3LCC000L85	SFP+	10G	200/500m	DDM/RoHS – Commercial Temperature

## Contact information

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