

## 1.25Gbps BiDi LC 20Km SFP Transceiver

### CLSFPGEBD131520D

#### Product Features:

- Up to 1.25Gbps data links
- 20km with 9/125μm SMF
- 1310nm FP /1550nm DFB laser/ PIN receiver
- Simplex LC Connector
- Hot-pluggable SFP footprint
- Single 3.3V power supply
- Operating temperature: 0°C to 70°C
- RoHS

#### Functional Characteristics (Optical)

The following tables list the performance specifications for the various functional blocks of the integrated optical transceiver module.

Table 1 – Transmitter Optical Specifications

| Parameter                               | Symbol           | Min. | Typical | Max. | Unit | Notes |
|-----------------------------------------|------------------|------|---------|------|------|-------|
| Centre Wavelength<br>(CLSFPGEBD131520D) | $\lambda_c$      | 1290 | 1310    | 1330 | nm   |       |
| Spectral Width (RMS)                    | $\sigma$         |      |         | 4    | nm   |       |
| Average Output Power                    | P <sub>out</sub> | -9   |         | -3   | dBm  |       |
| Extinction Ratio                        | ER               | 9    |         |      | dB   |       |
| Optical Rise/Fall Time                  | tr/ta            |      |         | 2    | ns   |       |

Table 2 – Receiver Optical Specifications

| Parameter            | Symbol           | Min. | Typical | Max. | Unit | Notes |
|----------------------|------------------|------|---------|------|------|-------|
| Receiver Sensitivity | PIN              |      |         | -19  | dBm  |       |
| Receiver Overload    | P <sub>MAX</sub> | -2   |         |      | dBm  |       |
| LOS De-Assert        | LOSD             |      |         | -30  | dBm  |       |
| LOS Assert           | LOSA             | -35  |         |      | dBm  |       |
| LOS Hysteresis       |                  | 0.5  |         | 4.5  | dB   |       |



## Ordering Information

Table 3 - Ordering Information

| Part No.         | Data Rate | DDM | TX/RX         | Fiber Type | Dist. | Temp.  | Optical Interface |
|------------------|-----------|-----|---------------|------------|-------|--------|-------------------|
| CLSFPGEBD131520D | 1.25Gbps  | yes | 1310nm/1550nm | SMF        | 20km  | 0~70°C | BiDi LC           |

## CONTACT:

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