HSGQ EPON SFP

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Variants

Px20+ 5db Px20+++ 9db Px20++ 7db

Details

- ## Description

This 1490nm DFB EPON OLT SFP transceiver is designed to transmit and receive optical data over single mode optical fiber for link length 20km.

The transmitter input and receiver output impedance is 100 Ohms differential. Data lines are internally AC coupled.

The module provides differential termination and reduce differential to common mode conversion for quality signal termination and low EMI.

The transmitter converts 1.25Gbit/s serial CML electrical data into serial optical data compliant with the 10GBASE-LR standard. An open collector compatible Transmit Disable (Tx_Dis) is provided. A logic “1,” or no connection on this pin will disable the laser from transmitting. A logic “0” on this pin provides normal operation. The transmitter has an internal automatic power control loop (APC) to ensure constant optical power output across supply voltage and temperature variations. An open collector

compatibleTransmitFault(TFault)isprovided.TX_Faultisamoduleoutput contact that when high, indicates that the module transmitter has detected a fault condition related to laser operation or safety. The TX_Fault output contact is an open drain/collector and shall be pulled up to the Vcc_Host in the host with a resistor in the range 4.7-10 k?.

TX_Disable is a module input contact. When TX_Disable is asserted high or left open, the SFP+ module transmitter output shall be turned off. This contact shall be pulled up to VccT with a 4.7 k? to 10 k? resistor The receiver converts 1.25Gbit/s serial optical data into serial PECL electrical data. An open collector compatible Loss of Signal is provided. Rx_LOS when high indicates an optical signal level below that specified in the relevant standard. The Rx_LOS contact is an open drain/collector output and shall be pulled up to Vcc_Host in the host with a resistor in the range 4.7-10 k?, or with an active termination. Power supply filtering is recommended for both the transmitter and receiver. The Rx_LOS signal is intended as a preliminary indication to the system in which the SFP is installed that the received signal strength is below the specified range. Such an indication typically points to non-installed cables, broken cables, or a disabled, failing or a powered off transmitter at the far end of the cable.

Features

- 1.25Gb/s serial optical interface compliant to 802.3AH specifications small form factor pluggable module “SFP”
- 1490 nm DFB transmitter, 1310 nm APD photo detector BURST receiver
- 2-wire interface for management specifications compliant with SFF 8472 digital diagnostic monitoring interface for optical transceivers
- Operating case temperature: 0 to 70 °C or-40 to 85 °C
- All-metal housing for superior EMI performance
- Low power consumption
- Cost effective OLT solution,
- RoHS compliant