Description

The HXR8201 Trans-impedance Limiting Amplifier array is a member of IDT’s family of Optical Receiver Transmitter Array (ORTA) products targeted at the short-reach fiber optic links market. Together with a discrete pin detector array, high-capacity and high-availability optical links can be designed for Datacom and enterprise applications. This product is ideal for 25G fan-out module applications.

The 3.3V SiGe device integrates the trans-impedance pre-amplifier, the limiting post-amplifier, and a versatile CML output stage for a single, differential electrical channel.

Features

- 60μApp receiver sensitivity for 10^{-12} BER at 28Gbps
- Better than 2.4mApp overload
- 128mW per channel power consumption
- Adjustable output swing size, pre-emphasis, and signal detect threshold
- Independent, scalable RSSI output
- Optimized for isolated and common cathode photo-detector arrays from multiple vendors
- I²C compatible serial interface
- Suitable for TO can applications
- SFP28+ MSA compatible

Typical Applications

- 28G Ethernet SR Fan-out modules
- 32G Fibre Channel modules
- InfiniBand EDR 25G Transceivers / AOC
- Proprietary multi-channel optical modules

Block Diagram
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