Description

The HXR14100 single channel Transimpedance Linear Amplifier is a member of the family of Optical Receiver Transmitter Array (ORTA) products for PAM4 modulation format targeted at the parallel optical links market. Together with a PIN discrete detector, a high capacity, high availability optical link can be designed for the next generation Ethernet and datacom applications.

The 3.3V SiGe device integrates the linear transimpedance pre-amplifier, the linear post-amplifier and a versatile CML output stage for four optical channels.

Typical Applications

- Next-generation Ethernet optical receiver modules up to SR
- Proprietary multi-channel small form factor optical modules like SFP56

Features

- High receiver sensitivity for 56Gbps PAM4 signal
- Up to 3 mApp overload
- Independent, per channel RSSI
- Up to 5kΩ typical differential gain
- Up to 500mVppd output voltage swing and adjustable output swing
- Linear operation with internal AGC
- 158mW per channel power consumption
- SFP56 MSA compliance
- Optimized for isolated and common cathode photo-detector arrays from multiple vendors

Ordering Information

Part No.	Temperature Range	Pin-Package
HXR14100-DNU	-5°C to +95°C	Die 1.350 x 1.120mm

For price, delivery schedules, and to place orders, please contact IDT: www.IDT.com/go/sales

Device Diagram

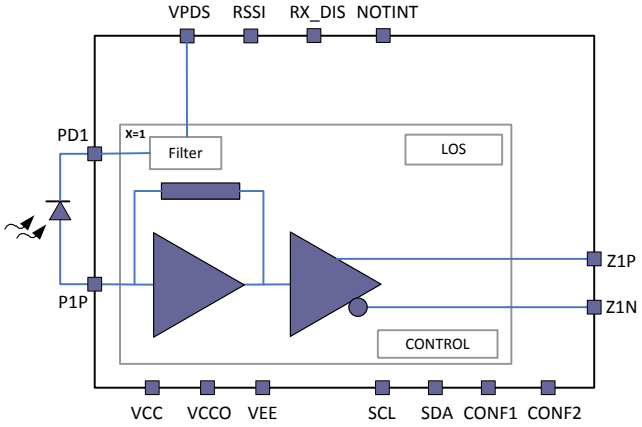


Figure 1: Device diagram