Description

The HXR14400 Transimpedance Linear Amplifier quad channel array 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 detector array or discrete detectors, 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.

Applications

- Next-generation Ethernet optical receiver modules up to SR
- Proprietary multi-channel small form factor optical modules like CFP8 and QSFP56

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
- QSFP56 MSA compliance
- Optimized for isolated and common cathode photo-detector arrays from multiple vendors

Ordering Information

Part	Temp Range	Pin-Package
HXR14400-DNU	-5°C to +95°C	Die 1.650 x 1.850mm

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

Device Diagram

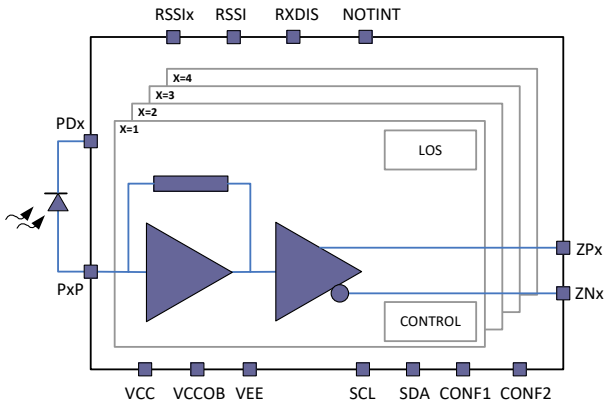


Figure 1: Device diagram

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