

General Description

The HXR6204 Transimpedance Limiting Amplifier array is a member of IDT's family of Optical Receiver Transmitter Array (ORTA) products targeted at the parallel optical links market. Together with a PIN detector array or discrete detectors, high-capacity, high-availability optical links can be designed for telecom and datacom applications.

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

Applications

- 100G Ethernet SR4 modules
- InfiniBand EDR 100G transceivers
- InfiniBand EDR 100G active cables
- Proprietary multi-channel 100G optical modules

Features

- 60 μ App receiver sensitivity for 10^{-12} BER at 28Gbps
- Better than 2.4 mApp overload
- 187mW per channel power consumption
- Adjustable output swing size and pre-emphasis in limiting mode and signal detect threshold
- Independent, per channel RSSI
- Optimized for isolated and common cathode photo-detector arrays from multiple vendors
- Control lines accessible on both sides of the chip
- QSFP MSA compliance

Ordering Information

Part	Temp Range	Pin-Package
HXR6204-DNT	0°C to +85°C	Bare Die* 1.950mm x 1.575mm
HXR6204-EVB	Room temp	Evaluation Board

* Die design size; actual die size may be slightly larger

Device Diagram

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

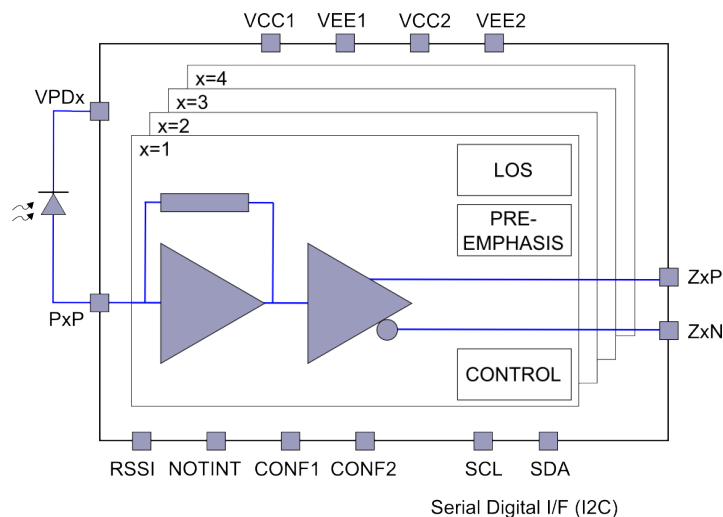


Figure 1: Device diagram

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