### **General Description**

**IDT** 

The HXR5104A Trans-impedance 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, highavailability optical links can be designed for telecom and datacom applications.

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

## **Applications**

- IEEE 802.3ba Ethernet transceivers
- InfiniBand QDR & FDR active cables
- Proprietary multi-channel optical modules

# **Device Diagram**

### Features

- 20 μApp receiver sensitivity for 10<sup>-12</sup> BER at 10.3 Gbps; better than 1.0 mApp overload
- 66 mW per channel power consumption with low power setting
- Adjustable output swing size and preemphasis mode and signal detect threshold
- Independent 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
HXR5104A-DNT	0°C to +95°C	Bare Die 2.05mm x 1.67mm

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

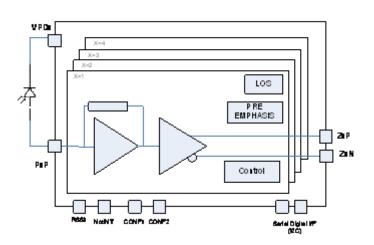


Figure 1: Device diagram



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#### Sales

1-800-345-7015 or 408-284-8200 Fax: 408-284-2775 www.IDT.com/go/sales

#### **Tech Support**

www.IDT.com/go/support

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