

## Description

The HXR5112A Transimpedance Limiting Amplifier array is a member of the 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 datacom applications.

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

## Typical Applications

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

## Features

- 20 $\mu$ App receiver sensitivity for 10<sup>-12</sup> BER at 10.3Gbps. Better than 1.0mApp overload
- 66mW per channel power consumption
- Adjustable output swing size and pre-emphasis in limiting 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

## Ordering Information

Part	Temp. Range	Pin-Package
HXR5112A-DNT	0°C to +85°C	Bare Die 2.05mm x 3.65mm
HXR5112A-BNT	0°C to +85°C	Bare Die with solder bump for flip chip assembly

For price, delivery schedules, and to place orders, contact IDT at [www.IDT.com/go/sales](http://www.IDT.com/go/sales).

## Block Diagram

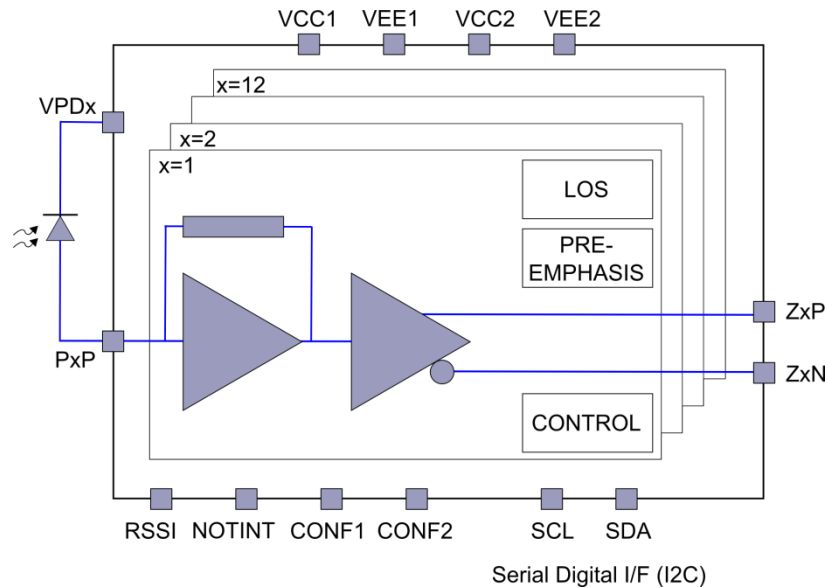


Figure 1. Block Diagram



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