Description

The HXR6101 Trans-impedance Limiting Amplifier is targeted at the optical links market. Together with a PIN detector, high-capacity, high-availability optical links can be designed for datacom applications.

The 3.3V SiGe device integrates the trans-impedance pre-amplifier, the limiting post-amplifier and a versatile CML output stage for a single 16 Gbps channel.

Typical Applications

- IEEE 802.3ae Ethernet transceivers
- InfiniBand QDR & FDR active cables
- Proprietary optical modules

Features

- 20 µApp receiver sensitivity for 10^{-12} BER at 10.3 Gbps
- Better than 3 mApp overload
- 60 mW power consumption with low power setting
- Adjustable output swing size and pre-emphasis mode and signal detect threshold
- A/D read-out of temperature, RSSI information

Ordering Information

Part	Temp Range	Pin-Package
HXR6101-DNT	0°C to +85°C	Bare Die 750um x 750um
HXR6101-EVB	Room Temp	Evaluation Board

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

Block Diagram

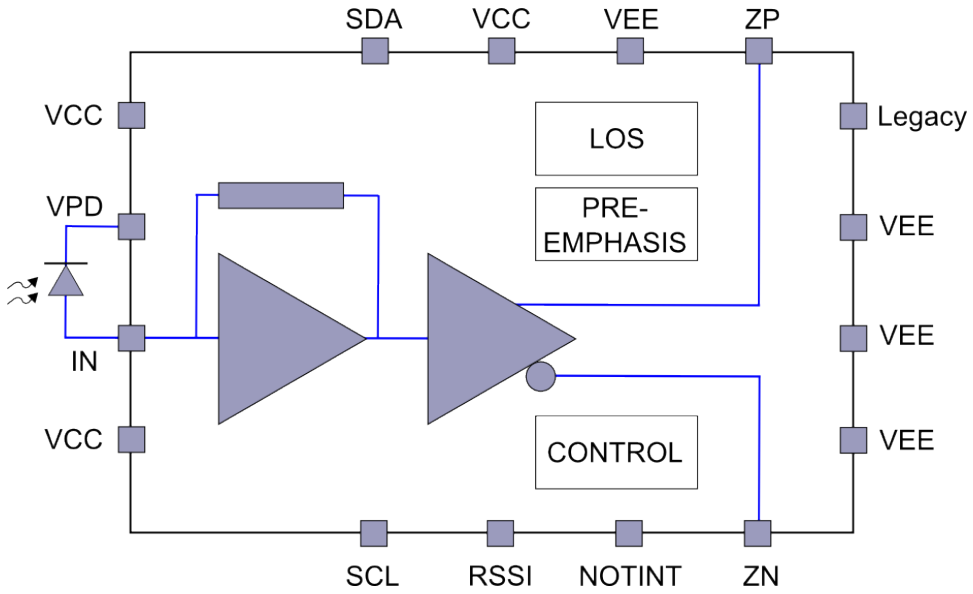


Figure 1: Block Diagram

© 2019 Renesas Electronics Corporation