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

<table>
<thead>
<tr>
<th>Part</th>
<th>Temp Range</th>
<th>Pin-Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HXR6101-DNT</td>
<td>0°C to +85°C</td>
<td>Bare Die 750um x 750um</td>
</tr>
<tr>
<td>HXR6101-EVB</td>
<td>Room Temp</td>
<td>Evaluation Board</td>
</tr>
</tbody>
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For price, delivery schedules, and to place orders, please contact IDT: [www.IDT.com/go/sales](http://www.IDT.com/go/sales)

Block Diagram

Figure 1: Block Diagram
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