General Description

The HXT6112 VCSEL driver array is a key component for compact, robust, low-power optical transmitter modules. In conjunction with the VCSEL array, the chip handles the complete digital-to-optical conversion, including CML input, laser driver, drive control, and supervision. Standard silicon technology and a small number of additional components allow for cost-effective and compact assemblies.

Applications

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

Device Diagram

Features

- Low power consumption of 46mW per channel while delivering 5mA average and 5mA modulation current
- Compatible with common cathode and isolated VCSEL arrays
- 2-wire interface control and symmetric pad design maximize module design flexibility
- 10 mA Average and 10 mA Modulation current max.
- 15mA burn-in current max.
- InfiniBand QDR/FDR compliant

Ordering Information

<table>
<thead>
<tr>
<th>Part</th>
<th>Temp Range</th>
<th>Pin-Package</th>
</tr>
</thead>
<tbody>
<tr>
<td>HXT6112-DNT</td>
<td>0°C to +85°C</td>
<td>Bare Die 2.05mm x 3.65mm</td>
</tr>
<tr>
<td>HXT6112-EVB</td>
<td>Room Temp</td>
<td>Evaluation Board</td>
</tr>
</tbody>
</table>

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

Figure 1: Device diagram
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