General Description

The HXT5004A 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

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.
- 12 mA burn-in current max.
- QSFP MSA compliant
- InfiniBand QDR/FDR compliant
- 40G Base-SR4 compliant
- Solder bump version available

Ordering Information

Part	Temp Range	Pin-Package
HXT5004A-DNT	0°C to +95°C	Bare Die – Waffle Pack 2.05mm x 1.67mm
HXT5004A-DNT-F8	0°C to +95°C	Bare Die – Tape 2.05mm x 1.67mm

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

Device Diagram

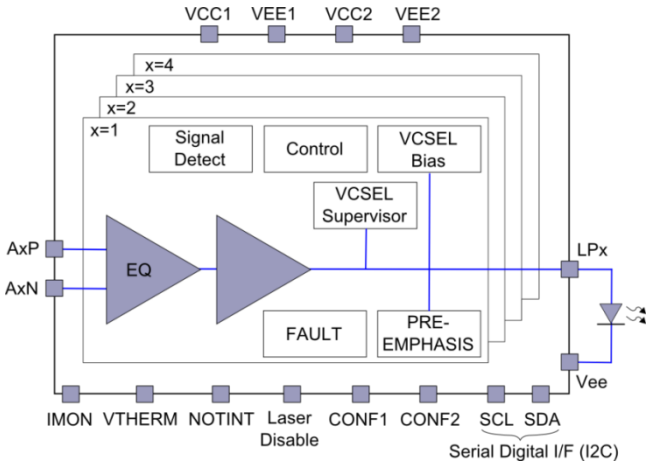

Figure 1: Device diagram

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