

HXT45110-3

112Gbps Linear EML Driver

The HXT45110-3 is a single-channel linear EML driver die, which is a member of the optical receiver transmitter array (ORTA) products family. In conjunction with an EML, a compact linear transmitter can be designed for the next generation of 100G and 200G/400G optical small form factor (SFF) transceivers.

The device is a low-power, high-performance, single channel linear driver die with differential input and single-ended output consisting of one 56Gbaud broadband amplifier channel, which is designed for 112Gbps PAM4 EML based transceivers. This design enables it to drive a linear output voltage of 2.0Vpp, which is needed to up to 10km transmission and to drive Silicon Photonic modulators.

Applications

- 100GBASE-DR/FR/LR transmitters
- 100G QSFP56 -DR, -FR, and -LR optical transceiver modules

Features

- Data rate up to 56Gbaud PAM-4 applications
- Linear output voltage of 2.0Vpp
- Low power consumption of 280mW
- > 45GHz bandwidth
- > 10dB dynamic range of gain control
- Peaking on/off control
- Linear operation with less than 3% total harmonic distortion

Table 1. Ordering Information

Part Number	Shipping Packaging	Temperature
HXT45110-3-DNU	1000 × 1100 × 100 μm Die (WFP)	-5°C to +100°C
HXT45110-3-EVB		Room Temp.

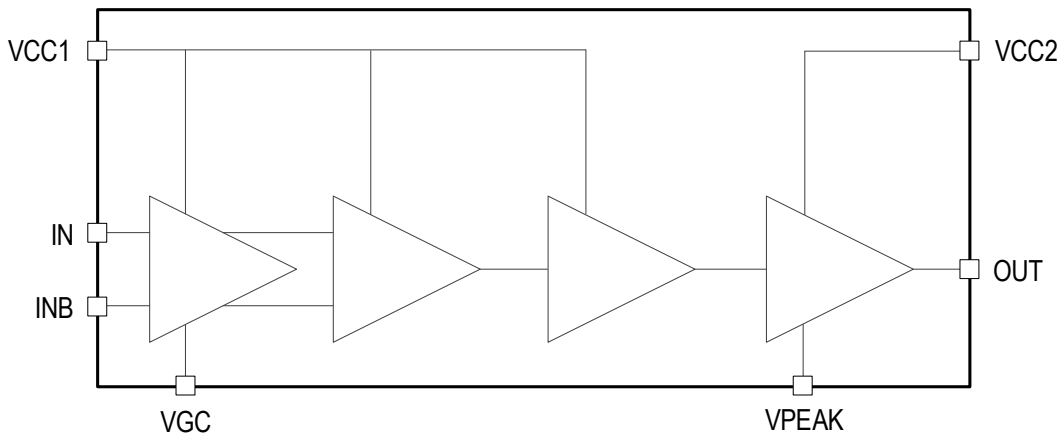


Figure 1. Block Diagram

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