

HXR6104-DNT Datasheet



DiGi Electronics Part Number	HXR6104-DNT-DG
Manufacturer	Renesas Electronics Corporation
Manufacturer Product Number	HXR6104-DNT
Description	DIE SALE (PRICE IN GOOD DIE)-WAF
Detailed Description	Transimpedance Amplifier IC Ethernet Die

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Manufacturer Product Number:

HXR6104-DNT

Series:

-

Type:

Transimpedance Amplifier

Mounting Type:

Surface Mount

Supplier Device Package:

Die

Manufacturer:

Renesas Electronics Corporation

Product Status:

Active

Applications:

Ethernet

Package / Case:

Die

Base Product Number:

HXR6104

Environmental & Export classification

RoHS Status:

ROHS3 Compliant

REACH Status:

REACH Unaffected

HTSUS:

8542.39.0001

Moisture Sensitivity Level (MSL):

1 (Unlimited)

ECCN:

5A991B1



General Description

The HXR6104 Transimpedance Limiting Amplifier array is a member of IDT's family of Optical Receiver Transmitter Array (ORTA) products targeted at the parallel optical links market. Together with a PIN detector array or discrete detectors, high capacity, high availability optical links can be designed for telecom and datacom applications.

The 3.3V SiGe device integrates the transimpedance pre-amplifier, the limiting post-amplifier and a versatile CML output stage for four optical input channels.

Applications

- IEEE 802.3ba Ethernet Transceivers
- InfiniBand QDR & FDR Active Cables
- Proprietary multi-channel optical modules

Features

- 20 μA_{pp} sensitivity for 10^{-12} BER at 10.3 Gbps
- 60 mW/ch power consumption at low setting
- Automatic gain and threshold control
- 3 mA_{pp} minimum peak to peak overload
- Adjustable CML output stage amplitude
- Adjustable output pre-emphasis amplitude and duration
- Adjustable signal detect threshold & SQUELCH
- Independent RSSI per channel output
- Independent per channel temperature monitor
- Data polarity inversion per channel
- Optimized for isolated and common cathode photo-detector arrays from multiple vendors
- Control lines accessible on both sides of the die
- QSFP MSA compliance

Ordering Information

Part	Temp Range	Pin-Package
HXR6104-DNT	0°C to +85°C	Bare Die 2.05mm x 1.67mm
HXR6104-EVB	Room Temp	Evaluation Board

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

Device Diagram

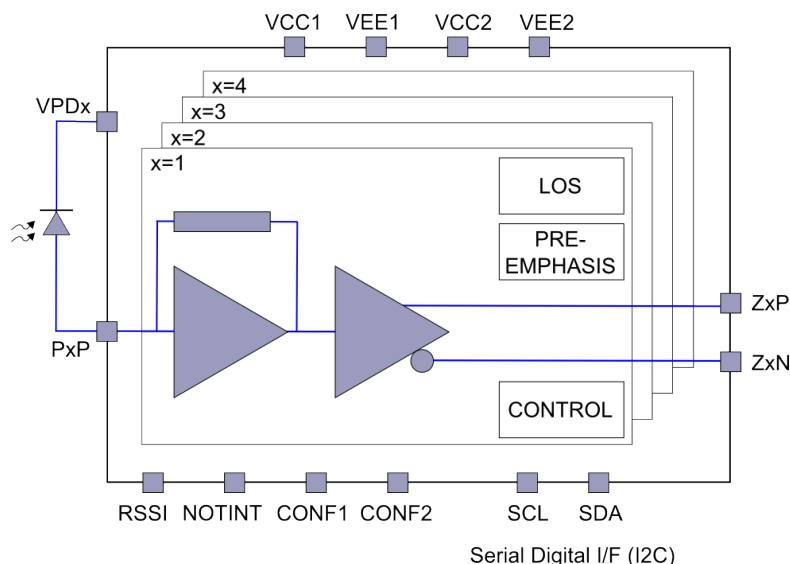


Figure 1: Device diagram

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