32 Gbaud Quad-Channel, High Gain, Linear Transimpedance/Variable-Gain Amplifier

Part No.

IN3254TA

Product Type

Transimpedance Amplifiers

Market Segments

Long Haul/Metro

Applications

100G/200G Coherent Receivers
Class 20 ICR

Features

- Supports baud rates up to 32 Gbaud
- Quad-channel monolithic TIA/VGA
- 500 µm channel pitch
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable output amplitude
- Automatic or manual gain control
- RSSI and output RMS detectors
- SPI and analog control interfaces
- Low power consumption
- Available in die form

Description

The IN3254TA is a quad-channel, high gain, differential linear transimpedance/ variable-gain amplifier (TIA/ VGA) for 100G and 200G coherent detection receivers for metro and long haul networks.

The IN3254TA offers two gain control modes: manual and automatic. In manual mode, the gain is controlled via an external control pin. In automatic (AGC) mode, the gain is automatically adjusted to deliver a constant output voltage.

The IN3254TA has input DC current offset cancellation to accommodate a wide range of local oscillator power levels and support reconfigurable, colorless applications.

The IN3254TA has various monitoring functions including RSSI and output RMS detectors.

All control and monitoring functionality can be accessed digitally via an SPI interface or in the analog domain via an analog switch matrix.

The IN3254TA operates from a +3.3 V power supply and is available in die form.