

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

Part No.

IN3252TA

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
- Dual-channel monolithic TIA/VGA
- 500 µm channel pitch
- · Wide differential electrical gain
- · High electrical bandwidth
- · Adjustable output amplitude
- · Automatic or manual gain control
- · Peak detector output
- Output control
- Low power consumption
- · Available in die form

Description

The IN3252TA is a dual-channel, high gain, differential linear transimpedance/variable-gain amplifier (TIA/VGA) for 100G and 200G coherent detection receivers for long haul and metro networks.

The IN3252TA 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 IN3252TA includes an adjustable bandwidth feature that allows the user to optimize receiver frequency response for different photodiode and ADC/DSP combinations

The IN3252TA has input DC current offset cancellation to accommodate a wide range of local oscillator power levels and support reconfigurable, colorless applications.

The IN3252TA operates from a +3.3 V power supply and is available in die form.



To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies for 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.