

64 Gbaud Dual-Channel, Differential Input, Linear Transimpedance/Variable-Gain Amplifier

Part No.

IN6450TA

Product Type

Transimpedance Amplifiers

Market Segments

Long Haul/Metro

Applications

400G/600G Coherent Receivers Class 40 ICR

Features

- Supports baud rates up to 64 Gbaud
- · Dual-channel monolithic TIA/VGA
- 625 µm channel pitch
- · Wide differential electrical gain
- · High electrical bandwidth
- · Adjustable output amplitude in AGC mode
- · Automatic or manual gain control
- · Output peak detectors
- · Analog control interface
- Low power consumption
- · Available in die form

Description

The IN6450TA is a dual-channel, differential linear transimpedance/variable-gain amplifier (TIA/VGA) for 400G and 600G coherent detection receivers for long haul and metro networks.

The IN6450TA offers two gain control modes: manual and automatic. In manual mode, the gain is controlled via an external control pin. In automatic mode, the gain is automatically adjusted to deliver a constant output voltage.

The IN6450TA provides linear amplification for a very wide input optical power range.

The IN6450TA includes an adjustable bandwidth feature that allows the user to optimize receiver frequency response for different photodiode and ADC/DSP combinations.

The IN6450TA has an output peak detector monitoring function.

The IN6450TA operates from a single +3.3 V power supply and is available in die form.



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