

# 28 Gbaud Quad-Channel, Single-Ended Input, Linear Transimpedance/Variable-Gain Amplifier

**Part No.**

IN2865TA

**Product Type**

Transimpedance Amplifiers

**Market Segments**

Inside Data Centers

**Applications**

200G/400G Optical Receivers

**Features**

- Supports baud rates up to 28 Gbaud
- Quad-channel monolithic TIA/VGA
- 250  $\mu\text{m}$  channel pitch
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable output amplitude in AGC mode
- Low noise
- Low power consumption
- Available in Mirrored (MTA) layout to support 8-channel module configurations
- Available in die form

**Description**

The IN2865TA/MTA is a quad-channel, single-ended input, linear transimpedance/variable-gain amplifier (TIA/VGA) for 200G and 400G optical receivers.

The IN2865TA/MTA operates in automatic gain mode. It can adjust its single-ended input transimpedance and delivers an output voltage in AGC mode.

The IN2865TA/MTA supports a very wide input optical power range. It has extremely low input referred noise current density and provides linear amplification.

The IN2865TA/MTA provides an RSSI function to monitor and report average optical input power.

The IN2865TA/MTA operates from a single +3.3 V power supply and is available in die form. Both Straight (TA) and Mirrored (MTA) orientation are supported for the 400G module design.