

# 56 Gbaud Quad-Channel, Single-Ended Input, Linear Transimpedance/Variable-Gain Amplifier with 750 $\mu\text{m}$ Input Channel Pitch, Flip Chip

**Part No.**

IN5664FC

**Product Type**

Transimpedance Amplifiers

**Market Segments**

Inside Data Centers

**Applications**

400G Optical Receivers

**Features**

- Supports baud rates up to 56 Gbaud
- Quad-channel monolithic TIA/VGA
- 750  $\mu\text{m}$  channel pitch
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable output amplitude in AGC mode
- Low noise
- Low power consumption
- I2C serial interface supported
- Available in flip chip form

**Description**

The IN5664FC is a quad-channel, single-ended input, linear transimpedance/ variable-gain amplifier (TIA/ VGA) for 400G optical receivers.

The IN5664FC operates in automatic gain mode. It can adjust its single-ended input transimpedance and delivers an output voltage in AGC mode.

The IN5664FC supports a very wide input optical power range. It has extremely low input referred noise current density and provides linear amplification.

The IN5664FC provides an RSSI function to monitor and report average optical input power.

The IN5664FC operates from a single +3.3 V power supply and is available in flip chip form.