

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

**Part No.**

IN5661TA

**Product Type**

Transimpedance Amplifiers

**Market Segments**

Inside Data Centers

**Applications**

100G Optical Receivers

**Features**

- Supports baud rates up to 56 Gbaud
- Single-channel monolithic TIA/VGA
- Wide differential electrical gain
- High electrical bandwidth
- Adjustable AGC output amplitude
- Low noise
- Low power consumption
- I2C serial interface supported
- Available in die form

**Description**

The IN5661TA is a single-channel, single-ended input, linear transimpedance/ variable-gain amplifier (TIA/ VGA) for 100G optical receivers.

The IN5661TA operates in automatic gain mode. It can adjust its single-ended input transimpedance and delivers an output voltage in AGC mode.

The IN5661TA supports a very wide input optical power range. It has extremely low input referred noise current density and provides linear amplification.

The IN5661TA provides an RSSI function to monitor and report average optical input power.

The IN5661TA operates from a single +3.3 V power supply and is available in die form.