56 Gbaud Quad-Channel, Single-Ended Input, Linear Transimpedance/Variable-Gain Amplifier with 250 µm Input Channel Pitch

Part No.
IN5669TA

Product Type
Transimpedance Amplifiers

Market Segments
Inside Data Centers

Applications
400GbE/800GbE SMF Optical Receiver
400GbE/800GbE MMF Optical Receiver

Description
The IN5669TA is a quad-channel, single-ended input, linear transimpedance/variable-gain amplifier (TIA/VGA) for 400 and 800 GbE for short and long reach optical receivers.

The IN5669TA operates in automatic gain mode. It can adjust its single-ended input transimpedance and delivers an output voltage in AGC mode.

The IN5669TA supports a very wide input optical power range. It has extremely low input referred noise current density and provides linear amplification.

The IN5669TA provides an RSSI function to monitor and report average optical input power.

The IN5669TA operates from a single +3.3 V power supply and is available in die form.

Features
• Supports baud rates up to 56 Gbaud
• Quad-channel monolithic TIA/VGA
• Wide differential electrical gain
• High electrical bandwidth
• Adjustable AGC output amplitude
• Low noise
• Low power consumption
• 250 µm input channel pitch
• Available in die form