56 Gbaud Low Power Quad-Channel Single-Ended Input Linear TIA/VGA

Part No.

CB5670TA

Product Type

Transimpedance Amplifiers

Market Segments

Inside Data Center

Applications

400GbE/800GbE SMF DSP Transceiver
400GbE/800GbE TRO Transceiver
400GbE/800GbE LPO Transceiver

Features

- Supports baud rates up to 56 Gbaud
- Quad-channel monolithic TIA/VGA
- Wide differential electrical gain range
- High optical bandwidth
- Adjustable AGC output amplitude
- Low noise
- Low power consumption
- Loss of Signal detection
- On-die temperature sensor
- Input channel pitch: 750 µm

Description

The CB5670TA is a quad-channel, single-ended input linear transimpedance/variable-gain amplifier (TIA/VGA) for 400 GbE-DR4 and FR4, or 800GbE-DR8, or 2xFR4 optical receivers.

The CB5670TA operates in automatic gain control (AGC) mode, automatically adjusting transimpedance to deliver an output swing set by the customer.

The CB5670TA supports a very wide input optical power range with optimized noise performance at the BER floor. The CB5670TA has high optical bandwidth, and it provides an RSSI function to monitor and report average optical input power.

The CB5670TA operates from a single +3.3V power supply with a die size of 3.223 mm x 1.220 mm.