

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

#### Part No.

CB11269TA

## **Product Type**

**Transimpedance Amplifiers** 

### **Market Segments**

Inside Data Center

#### **Applications**

• 800G/1.6T SMF Optical Receiver

#### **Features**

- Supports baud rates up to 112 Gbaud
- · Quad-channel monolithic TIA/VGA
- Wide differential electrical gain range
- · High optical bandwidth
- Adjustable AGC output amplitude
- · Optimized noise at BER floor
- · Low power consumption
- · LOS detection available
- On-die temperature sensor
- · Available in die form

## **Description**

The CB11269TA is a quad-channel, single-ended input linear transimpedance/variable-gain amplifier (TIA/VGA) for 200G/Lane optical receivers.

The CB11269TA operates in automatic gain control (AGC) mode, automatically adjusting transimpedance to deliver an output swing set by the customer.

The CB11269TA supports a very wide input optical power range with optimized noise performance at the BER floor. The CB11269TA has high optical bandwidth and it provides an RSSI function to monitor and report average optical input power.

The CB11269TA has solder bumps for photodiodes to be flipped onto the TIA die to reduce the input interface parasites and crosstalk.

The CB11269TA operates from a single +3.3V power supply with a die size of 3.22 mm x 1.45 mm.



To deliver the data infrastructure technology that connects the world, we're building solutions on the most powerful foundation: our partnerships with our customers. Trusted by the world's leading technology companies over 25 years, we move, store, process and secure the world's data with semiconductor solutions designed for our customers' current needs and future ambitions. Through a process of deep collaboration and transparency, we're ultimately changing the way tomorrow's enterprise, cloud, automotive, and carrier architectures transform—for the better.