Low-voltage optical receiver

With built-in amplifiers, driver electronics, adjustable gain and filter settings, and LabVIEW(TM) compatibility, our optical receivers and detectors simplify the chores associated with the electronic ...

We report the fastest (15 Gb/s) and lowest voltage (2.4V) all-silicon-based optical receiver to date. The receiver consists of a lateral, interdigitated, germanium-on-silicon-on-insulator (Ge-on ...

In this work, a compact low-power optical receiver that scales well with technology has been designed to explore the potential of optical signaling for future chip-to-chip and on-chip communication.

This paper presents the design and measurement results of an inductor-less and power-efficient 25-Gb/s optical receiver in 65-nm TSMC technology. Furthermore, the design and ...

Abstract - This paper presents an optimized design methodology for an inductor-less 28-Gb/s NRZ optical receiver (ORx) analog front-end (AFE) using the Berkeley Analog Generator (BAG) in 28-nm ...

This paper presents a novel power-efficient topology for receivers in short-range LiDAR sensors. Conventionally, LiDAR sensors exploit complex time-to-digital converters (TDCs) for time-of-flight ...

After outlining the design principles for low-power optical transmitter (Tx) and receiver (Rx) design, we present a comprehensive design of a low-power optical transceiver chipset ...

In this paper, we proposed a new inductorless inverter-based front-end for 10 Gb/s optical receivers. The main channel of the circuit is based on the inverter cascaded structure, and the ...

An optical receiver employs an all-inverter-based front-end design that provides maximum transconductance for a given power supply and allows for ultra-low power consumption.

This is the super mini version of the mr03 analog optical transmitter system, with low power consumption and operating frequency up to 12 GHz with optical power monitoring.

Web: https://www.prospettivacasa.eu