

## Receiver and Transmitter drivers for Low-Voltage Differential Signaling

### 1.Features

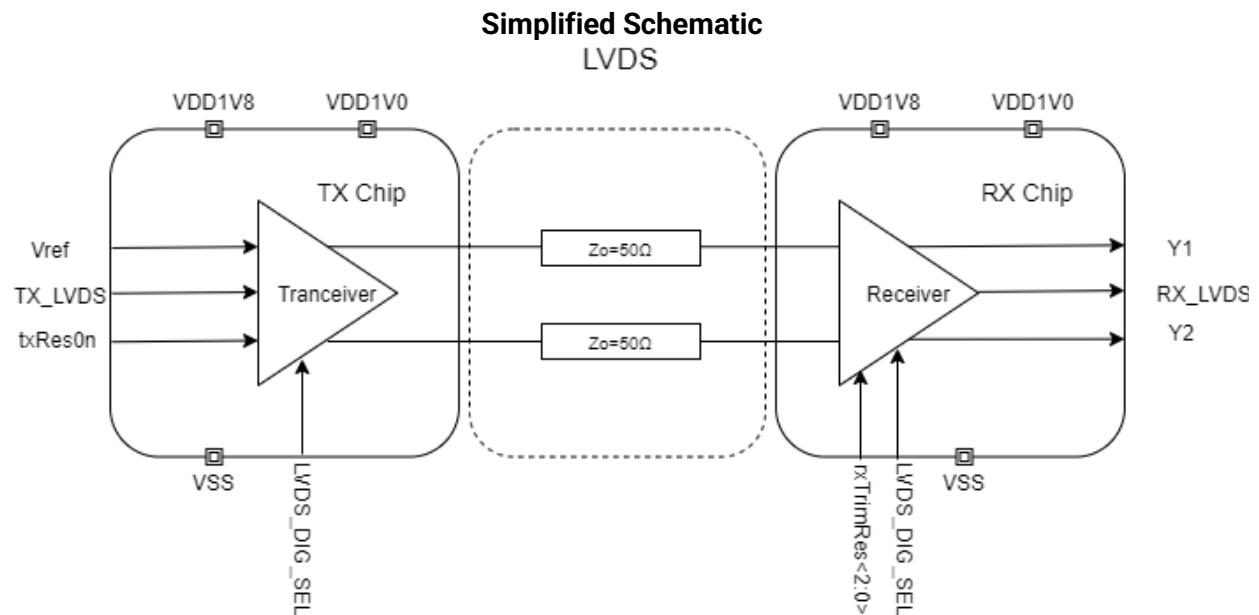
High Speed up to 1GHZ  
 TX common mode tracking  
 TX driver consumption 28mW  
 RX driver consumption 5.1mW

### 2.Applications

High Speed Data Transmission

### 3.Description

The WE1GLVDS transceiver consists of a TX single ended to differential low voltage signal output buffer capable of driving up to 6mA with DC level tracking and a RX differential low voltage signal buffer to single ended driver. The RX differential input has a programmable resistor for matching input impedance. The Tx path has the option to operate with a 400Ohms differential resistance for optimum line matching. The LVDS transceiver is presented in the following schematic view and the specified block diagrams of the transmitter and receiver circuits have been implemented in 45RFSOI (option 18) technology as illustrated in section 7.



#### 4.Availability

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GF 45RFSOI

#### 5.Deliverables

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GDSII, Database, Measurement results, Verilog Functional/Timing models





#### About weasic

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**Weasic Microelectronics S.A.** designs, develops, and markets high quality complex analog and RF IP for the wired and the wireless communications industries, helping semiconductor and system companies to shrink the product design cycle. Weasic, silicon verified, IP is designed in the state-of-the-art CMOS and SiGe processes and can be easily ported and customized to serve the development of transceivers for 5G communications, Mobile Backhaul, RADAR sensors and 802.11.\* applications.

#### Contact us

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