

Features:

- 25-165 MHz clock support
- Up to 1250 Mbps bandwidth/channel
- Up to 10.0 Gbps data throughput
- Low power CMOS design
- LVDS for low EMI
- PLL requires no external components
- Core Voltage & 1.8V dual power supply
- 7/10 bit serial data transmitted per pixel clock per channel
- Rising/falling edge data strobe
- Compatible with TIA/EIA-644 LVDS Standard

General Description:

The 28FDSOI-LVDS-1250-8CH-TX-PLL is a high performance 8-channel LVDS Serializer implemented using digital CMOS technology. Both the serial and parallel data are organized into eight channels. The parallel data is 7 or 10 bits wide per channel. The input clock is 25MHz to 165MHz. The serializer is highly integrated and requires no external components. The circuit is designed in a modular fashion and desensitized to process variations. This facilitates process migration, and results in a robust design.

Block Diagram:

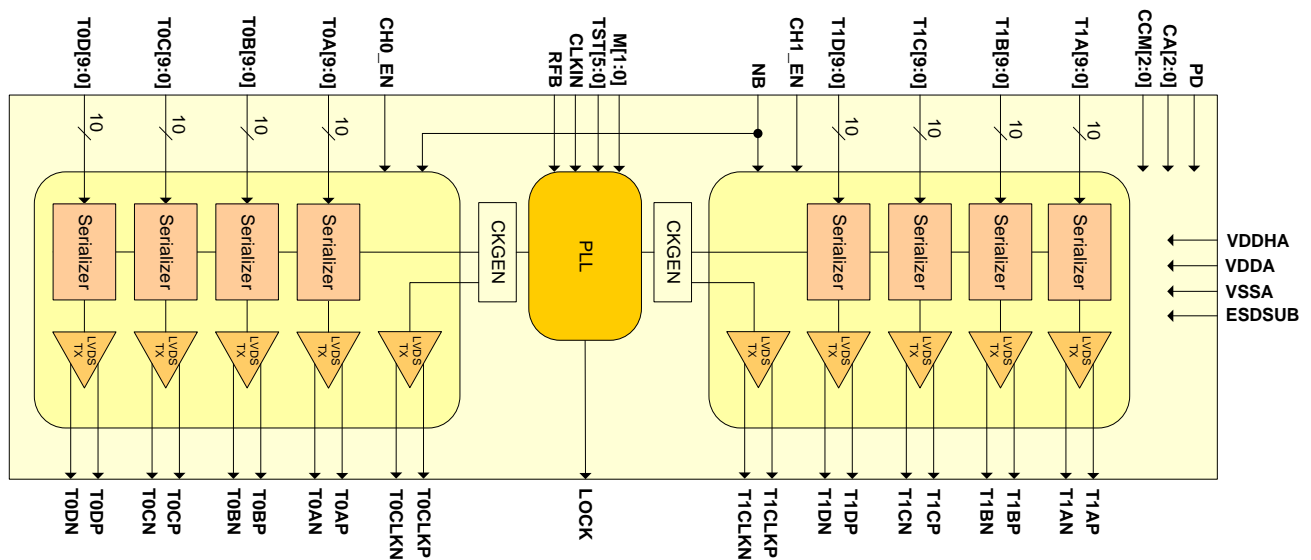


Figure 1 - LVDS 8-Channel Serializer block diagram