Features:

- 25-180 MHz clock support
- Up to 1.25 Gbps bandwidth
- Up to 5.0 Gbps data throughput
- Low power CMOS design
- Low swing LVDS devices for low EMI
- PLL requires no external components
- 1.8V/3.3V dual power supply
- Optional transmit pre-emphasis
- 7/10 bit programmable parallel data transmitted per pixel clock per channel
- Rising/falling edge data strobe
- Compatible with TIA/EIA-644 LVDS Standard

General Description:

The MXL-LVDS-TX-4CH is a high performance 4-channel LVDS Serializer implemented using digital CMOS technology. Both the serial and parallel data are organized into four channels. The parallel data can be 7 or 10 bits wide per channel. The input clock is 25MHz to 180MHz. The transmitter is highly integrated and requires no external components. It employs optional pre-emphasis to enable transmission over a longer distance while achieving low BER. 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:

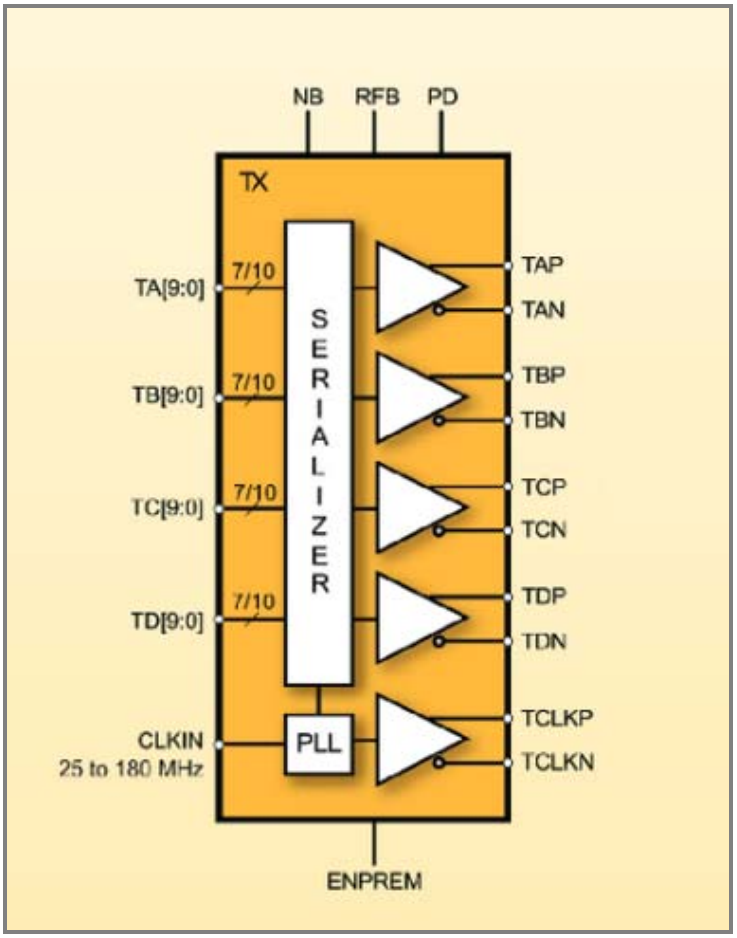

Figure 1: LVDS 4 channel serializer block diagram

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