Mixed-Signal Excellence

MXL-DPHY-DSITX-T-28HPCP

1 Features

- Supports MIPI Alliance Specification for D-PHY Version 2.5
- Consists of 1 Clock lane and 4 Data lanes
- Supports both low-power mode and high-speed mode with integrated SERDES
- 80 Mbps to 1.5 Gbps data rate per lane without skew calibration in D-PHY mode
- 2.5 Gbps data rate per lane with skew calibration in high-speed D-PHY mode
- 10 Mbps data rate in low-power mode
- Low power dissipation
- Testability support
- Calibrator for resistance termination

2 General Description

The MXL-D-PHY-DSITX-T-28HPCP is a high-frequency, low-power, low-cost, source-synchronous, physical Layer supporting the MIPI Alliance Specification for D-PHY v2.5. The PHY can be configured as a MIPI Master supporting display interface DSI/DSI-2. The PHY supports mobile, IoT, virtual reality, and automotive applications.

3 Block Diagram

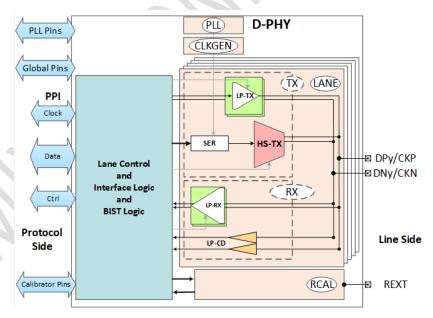


Figure 3-1: MIPI D-PHY Block Diagram