

## 1 Features

- Supports MIPI Alliance Specification for D-PHY Version 2.5
- Consists of 1 Clock lane and 4 Data lanes
- Embedded, high performance, and highly programmable PLL
- PLL supports SSC mode, Fractional mode, and Integer mode
- 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
- 4.5 Gbps data rate per lane with skew calibration in high speed D-PHY mode
- Supports High Speed TX De-emphasis Equalization
- 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-N07 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

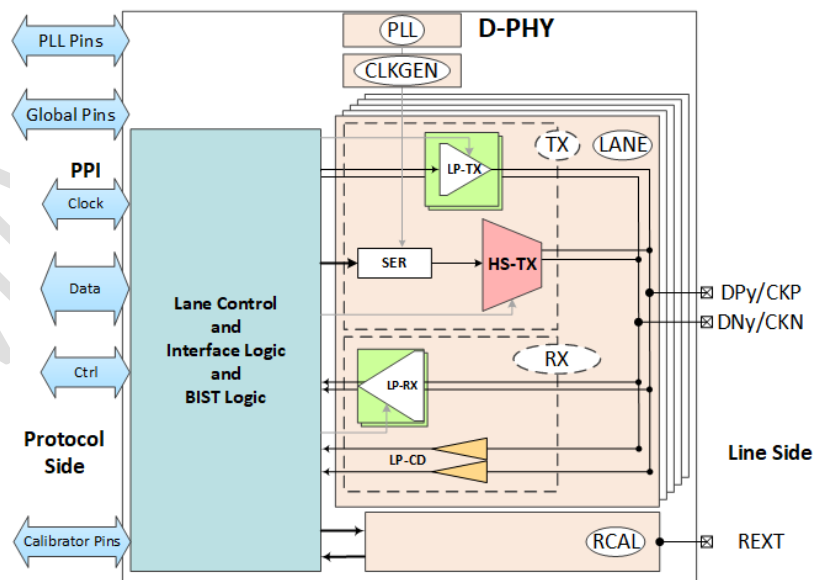


Figure 3-1: MIPI D-PHY Block Diagram