

## 1 Features

- Consists of 1 Clock lane and up to 4 Data lanes.
- Supports MIPI® Alliance Specification for D-PHY<sup>SM</sup> Version 1.1.
- Supports both high speed and low-power modes.
- 80 Mbps to 1.5 Gbps data rate in high speed mode.
- 10 Mbps data rate in low-power mode.
- Low power dissipation.
- Loopback testability support.
- Optional resistance termination calibrator.

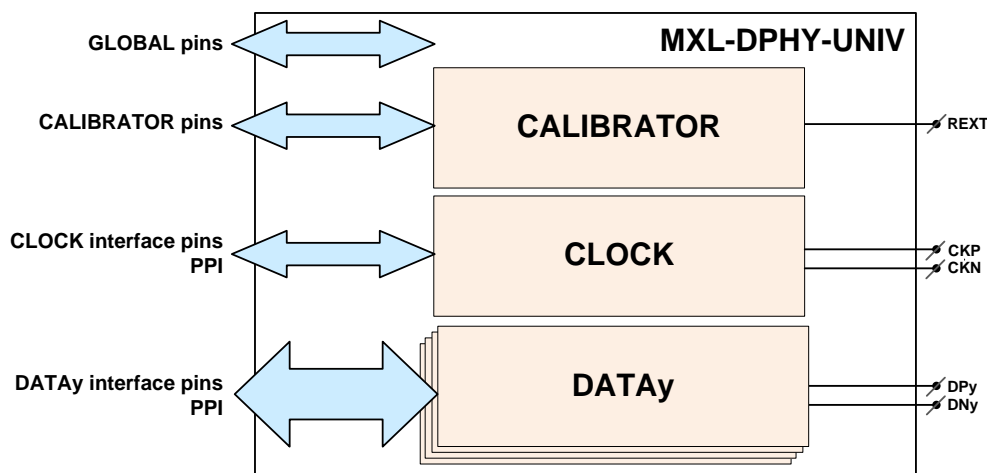
## 2 General Description

The MXL-DPHY-UNIV is a high-frequency low-power, low-cost, source-synchronous, Physical Layer supporting the MIPI Alliance Specification for D-PHY v1.1.

The IP can be configured as a MIPI Master or MIPI Slave optimized for CSI-2<sup>SM</sup> (Camera Serial Interface), and DSI<sup>SM</sup> (Display Serial Interface) applications.

The High-Speed signals have a low voltage swing, while Low-Power signals have large swing. High-Speed functions are used for High-Speed data traffic while low power functions are mostly used for control.

## 3 Block Diagram



**Figure 1: MIPI D-PHY Universal Block Diagram**