

# MIPI<sup>®</sup> UNIVERSAL D-PHY<sup>SM</sup> IP

### Mixed-Signal Excellence

# MXL-DPHY-UNIV-U-040LP

## **1** Features

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- Consists of 1 Clock lane and up to 4 Data lanes
- Supports the MIPI Standard 1.1 for D-PHY
- Supports both high speed and low-power modes
- 80 Mbps to 1.5Gbps data rate in high speed mode
- 10 Mbps data rate in low-power mode
- High Speed Serializers and Deserializers included
- Low power dissipation

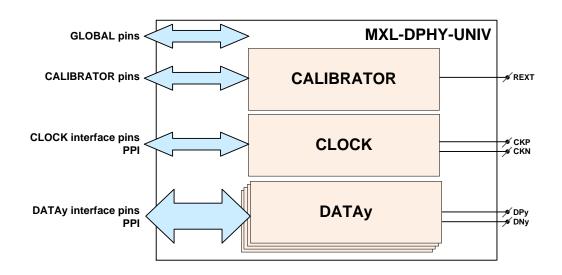
**Block Diagram** 

- Loopback testability support
- Optional resistance termination calibrator

## 2 General Description

The MXL-DPHY-UNIV is a highfrequency low-power, low-cost, source-synchronous, Physical Layer that supports the MIPI<sup>®</sup> Alliance Standard for D-PHY. The IP can be configured as a MIPI Master or MIPI Slave optimized for camera interface (CSI-2) and display (DSI) 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.



#### Figure 1:MIPI D-PHYUniversalBlock Diagram

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