

Mixed-Signal Excellence

# MIPI<sup>®</sup> C-PHY<sup>sm</sup>/D-PHY<sup>sm</sup> MASTER IP

#### MXL-CPHY-DPHY-CSI2-TX+-T-065LP

### **1** Features

- Dual mode PHY can support C-PHY<sup>SM</sup> and D-PHY<sup>SM</sup>
- Supports MIPI Specification for D-PHY Version 2.1
- 80 Mbps to 1.5 Gbps data rate in high speed D-PHY mode
- One Data Lane in D-PHY mode
- Supports MIPI Specification for C-PHY Version 1.2
- 80 Msps to 1.5 Gsps data rate in high speed C-PHY mode
- One Lane in C-PHY mode
- 10 Mbps data rate in low-power mode
- Low power dissipation
- Testability support

# 2 General Description

The MXL-CPHY-DPHY-CSI2-TX+ is a high-frequency low-power, low-cost, sourcesynchronous, physical Layer. The PHY is configured as a MIPI Master supporting camera interface CSI-2. 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

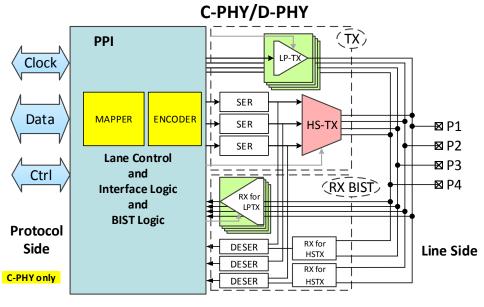


Figure 1: CD-PHY TX+ Overview

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