

1 Features

- Consists of 1 Clock lane and 4 Data lanes.
- Supports MIPI Alliance Specification for D-PHY Version 2.1
- 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 testing and ATB support.
- Resistance termination calibrator.

2 General Description

The MXL-DPHY-CSI2-RX+ is a high-frequency low-power, low-cost, source-synchronous, Physical Layer supporting the MIPI Alliance Specification for D-PHY v2.1, which is backward compatible with MIPI Specification for D-PHY v1.1. The IP is configured as a MIPI Slave optimized for CSI-2SM (Camera 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

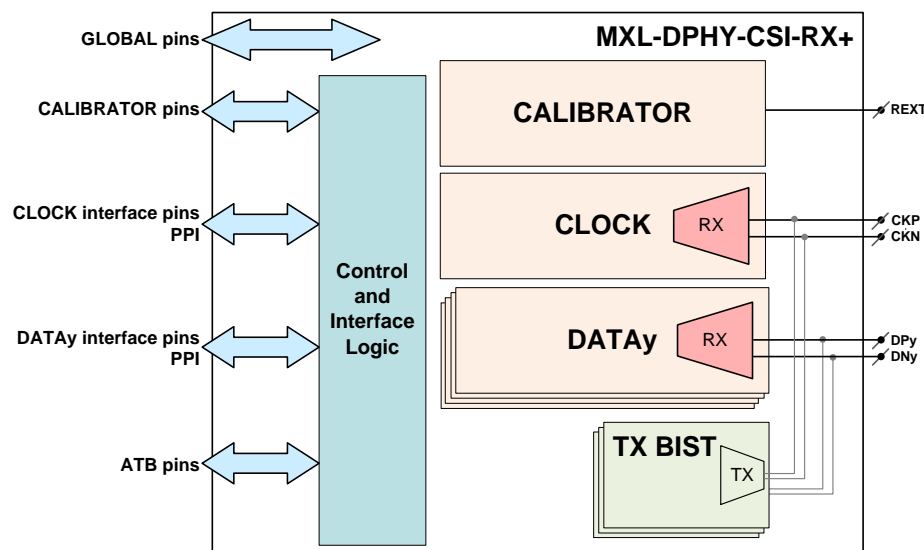


Figure 1: MIPI D-PHY Block Diagram