

MIPI[®] DigRF M-PHYTM IP

MXL-M-PHY-DIGRF

Features:

- Supports the MIPI Standard for M-PHY, Draft Specification v0.90.00-r02 and DigRF v4 V1.10.00.0.04
- Dual-simplex point-to-point interface with ultra low voltage differential signaling
- Slew-rate control for EMI reduction
- Supports HS mode (GEAR 1-2, A & B)
- Supports LS mode (Sys-Burst)
- 1.25-3Gbps data rate in HS mode
- 19.2-52Mbps data rate in LS mode
- Suitable for copper and optical media
- Mixel's Logarithmic approach efficiently supports large number of different configurations
- Low power dissipation

General Description:

The MXL-M-PHY-DIGRF is a high-frequency low-power, low-cost, Physical Layer IP that supports the MIPI[®] Alliance Standard for M-PHY and DigRF. The IP can be used as a physical layer for the Baseband to RFIC interface. It supports the DigRF v4 standard.

By using efficient BURST mode operation with scalable speeds, significant power savings can be obtained.

Selection of signal slew rate and amplitude allows reduction of EMI/RFI, while maintaining low bit error rates. The core employs Mixel's Logarithmic approach, enabling efficient implementation of multiple configurations.



Block Diagrams:

Figure 1 - Block Diagram of MXL-M-PHY-DIGRF

Preliminary information Subject to change Without notice Proprietary & Confidential Mixel, Inc. 97 E. Brokaw Road, Suite 250, San Jose, CA 95112 Ph.: (408) 436-8500, Fax: (408) 436-8400 www.mixel.com P. 1 of 42 Rev 0.9