

DP83220 CDL™ Twisted Pair FDDI Transceiver Device

General Description

The Copper Data Link (CDL) Transceiver is an integrated circuit designed to interface directly with the National Semiconductor FDDI Chip Set or other FDDI PHY silicon, allowing low cost FDDI compatible data links over copper based media. The DP83220 Transceiver, with the proper compensation selected, will allow links of up to 100 meters over both Shielded Twisted Pair (STP) and Datagrade unshielded Twisted Pair (DTP). CDL surpasses a Bit Error Rate (BER) of $< 1 \times 10^{-12}$ over both STP and DTP. The CDL is designed to meet the SDDI specification for FDDI transmission across Type 1 STP cable when used in conjunction with the appropriate transformer/filter module from Pulse Engineering.

Features

- Fully compatible with current FDDI PHY standard
- Fully compatible with the SDDI PMD specification
- Requires a single +5V supply
- Isolated TX and RX power supplies for minimum noise coupling
- Allows use of Type 1 STP and Category 5 DTP cables
- No Transmit Clock required
- Loopback feature for board diagnostics
- Link Detect input provided

Block Diagram

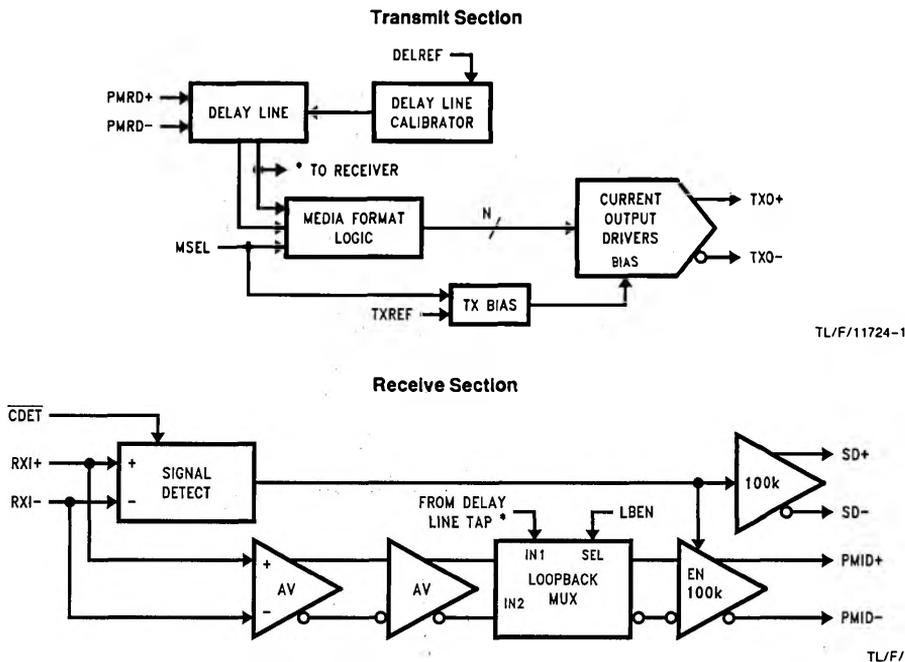


FIGURE 1. DP83220 Transceiver Block Diagram