National Semiconductor

DP83251/55 PLAYER™ Device (FDDI Physical Layer Controller)

General Description

The DP83251/DP83255 PLAYER device implements one Physical Layer (PHY) entity as defined by the Fiber Distributed Data Interface (FDDI) ANSI X3T9.5 Standard. The PLAYER device contains NRZ/NRZI and 4B/5B encoders and decoders, serializer/deserializer, framing logic, elasticity buffer, line state detector/generator, link error detector, repeat filter, smoother, and configuration switch.

Features

- Low power CMOS-BIPOLAR process
- Single 5V supply
- Full duplex operation
- Separate management interface (Control Bus)
- Parity on PHY-MAC Interface and Control Bus Interface
- On-chip configuration switch
- Internal and external loopback
- DP83251 for single attach stations
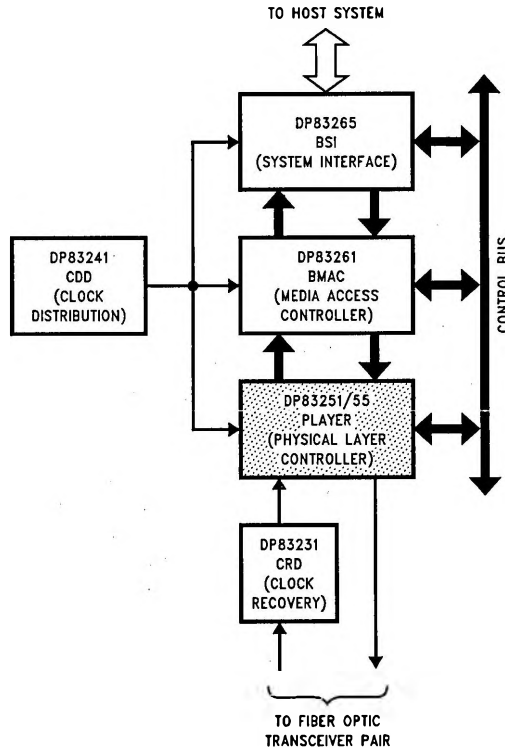- DP83255 for dual attach stations

TO HOST SYSTEM

FIGURE 1-1. FDDI Chip Set Block Diagram

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