PRELIMINARY



DP83265 BSI™ Device (FDDI System Interface)

General Description

The DP83265 BSI device implements an interface between the National FDDI BMAC™ device and a host system. It provides a multi-frame, MAC-level interface to one or more MAC Users.

The BSI device accepts MAC User requests to receive and transmit multiple frames (Service Data Units). On reception (Indicate), it receives the byte stream from the BMAC device, packs it into 32-bit words and writes it to memory. On transmission (Request), it unpacks the 32-bit wide memory data and sends it a byte at a time to the BMAC device. The host software and the BSI device communicate via registers, descriptors, and an attention/notify scheme using clustered interrupts.

Features

- 32-bit wide Address/Data path with byte parity
- Programmable transfer burst sizes of 4 or 8 32-bit words
- Interfaces to low-cost DRAMs or directly to system bus
- 2 Output and 3 Input Channels
- Supports Header/Info splitting
- Bridging support
- Efficient data structures
- Programmable Big or Little Endian alignment
- Full Duplex data path allows transmission to self
- Confirmation status batching services
- Receive frame filtering services
- Operates from 12.5 MHz to 25 MHz synchronously with host system

