

74LS1811

Bit Stream Manager

Encoder/Decoder
Preliminary Specification

Logic Products

DESCRIPTION

The 74LS1811 Encoder/Decoder (Figure 1) supports disk drive and data communications devices that require fast and reliable data separation capabilities. Although ideally suited for use with the 74LS1812 Serializer/Deserializer, the 74LS1811 is a flexible device which can be implemented in a variety of design applications.

Encoding is possible in FM, MFM, or Differential Manchester formats, making the 74LS1811 invaluable in designs requiring single density disk recording, double density disk recording, or in data communications applications. Included on-chip is a phase-comparator which can be bypassed; this feature is particularly useful in applications that use a complete external phase lock loop.

FEATURES

- FM, MFM, and Differential Manchester encoding/decoding
- Precompensation in MFM write mode
- Built-in phase comparator
- Single 5-volt power supply
- Selectable encoding violation generation/detection formats
- Data Rates:
 - FM 16MHz
 - MFM 20MHz
 - DM 20MHz

PIN CONFIGURATION

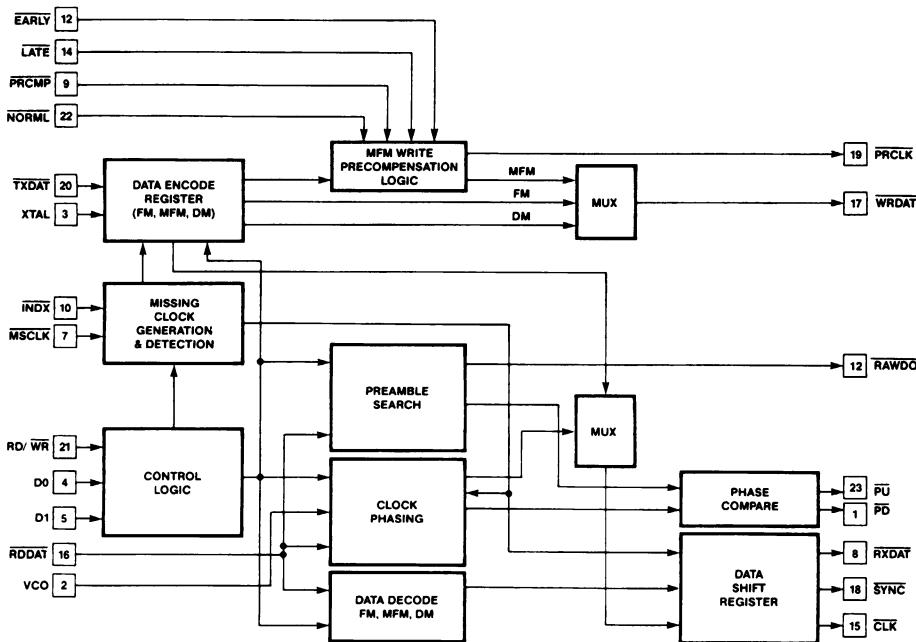
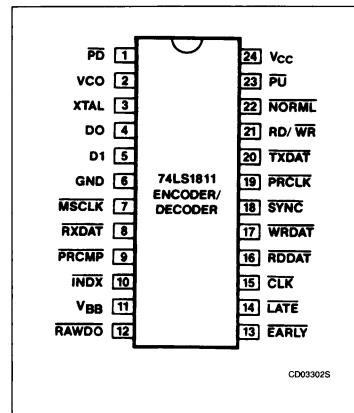


Figure 1. 74LS1811 Encoder/Decoder Block Diagram