

Manchester Encoder

SERIES: MAE-86

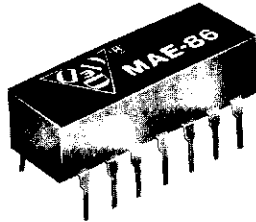
14 pins DIP
TTL Interfaced

data
delay
devices, inc.



Features:

- T²L input & outputs.
- 14 pins DIP.
- Data rates to 30 MB/S.



Application:

- Local Area Network (LAN) interfaces.
- Ethernet Bus interfaces.
- IEEE 802 LAN interfaces.
- Fiber optic data links.
- Multidrop Bus interfaces.

Specifications:

- Operating temperature: 0° to 70°C.
- Temperature coefficient: 100 PPM/°C.
- Supply voltage V_{cc}: 5 Vdc ± 5%.
- Power dissipation: 300 mw max.
- CLK_{IN} = 1 × operating data rates
- CLK_{IN} duty cycle = 50%
- DC parameters: See TTL-Standard Schottky Logic Table on Page 6.

Description:

An innovating design approach has been used in this Manchester Encoder to reduce the system clock frequency by 1/2. The reduction in system clock eliminates many high frequency problems in PC board lay-out and cross-talk.

Most commercially available Manchester Encoders require an input clock frequency (CLK IN) of twice the operating data rates. In the MAE-86 Manchester Encoder the (CLK IN) input clock is equal to the operating data rates.

One single unit covers the complete range of operating data rate up to 25 MB/S. Its low profile, standard 14 pins DIP package and low power consumption makes it completely compatible with Schottky TTL circuitry.

