

# Manchester Encoder

SERIES: MAE-86

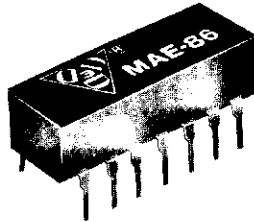
14 pins DIP  
TTL Interfaced

data  
delay  
devices, inc.



## Features:

- T<sup>2</sup>L 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<sub>cc</sub>: 5 Vdc ± 5%.
- Power dissipation: 300 mw max.
- CLK<sub>IN</sub> = 1 × operating data rates
- CLK<sub>IN</sub> 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 ½. 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.

