


Encoder/Decoder 5V 20-Pin SOIC W Tube

Manufacturer:	Renesas Technology Corp
Package/Case:	SOP20
Product Type:	Communication & Networking ICs
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The HD-6409/883 Manchester Encoder-Decoder (MED) is a high speed, low power device manufactured using selfaligned silicon gate technology. The device is intended for use in serial data communication, and can be operated in either of two modes. In the converter mode, the MED converts Nonreturn-to-Zero code (NRZ) into Manchester code and decodes Manchester code into Nonreturn-to-Zero code. For serial data communication, Manchester code does not have some of the deficiencies inherent in Nonreturn-to-Zero code. For instance, use of the MED on a serial line eliminates DC components, provides clock recovery, and gives a relatively high degree of noise immunity. Because the MED converts the most commonly used code (NRZ) to Manchester code, the advantages of using Manchester code are easily realized in a serial data link. In the Repeater mode, the MED accepts Manchester code input and reconstructs it with a recovered clock. This minimizes the effects of noise on a serial data link. A digital phase lock loop generates the recovered clock. A maximum data rate of 1MHz requires only 50mW of power. Manchester code is used in magnetic tape recording and in fiber optic communication, and generally is used where data accuracy is imperative. Because it frames blocks of data, the HD-6409/883 easily interfaces to protocol controllers.

Key Features

Converter or Repeater Mode

Independent Manchester encoder and decoder operation

Static to 1Mbps data rate ensured

Low bit error rate

Digital PLL clock recovery

On-chip oscillator

Low operating power: 50mW Typical at +5V

Pb-Free (RoHS Compliant)

Recommended For You

HD9P6409-9

Renesas Technology Corp
SOP20

HD74LS283P

Renesas Technology Corp
DIP

HD74LS83AP

Renesas Technology Corp
DIP16

HD74AC280FPEL

Renesas Technology Corp
SOP

HD74HC280FP

Renesas Technology Corp
SOP

HD74AC283FPEL

Renesas Technology Corp
SOP-16

HD74AC283ARPEL

Renesas Technology Corp
144-LQFP20x20

HD3-6409-9Z

Renesas Technology Corp
TapeCye

HD74AC280P

Renesas Technology Corp
DIP14

HD1-6408-9

Renesas Technology Corp
CDIP24

HD74HC283FPEL

Renesas Technology Corp
SOP(5.2)

HD74LS280FP

Renesas Technology Corp
SOP

HD74HC283P

Renesas Technology Corp
DIP

HD74HC280FPEL

Renesas Technology Corp
SOP5.2

HD74LS283FPEL

Renesas Technology Corp
SOP5.2