Latch/Decoder/Demultiplexer Single 3-to-8 16-Pin PDIP Tube
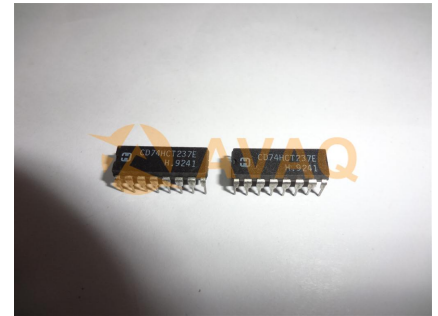
Manufacturer:	Texas Instruments, Inc
Package/Case:	DIP
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Active

Images are for reference only

Inquiry

General Description

The CD74HC137, CD74HCT137, 'HC237, and CD74HCT237 are high speed silicon gate CMOS decoders well suited to memory address decoding or data routing applications. Both circuits feature low power consumption usually associated with CMOS circuitry, yet have speeds comparable to low power Schottky TTL logic.

Both circuits have three binary select inputs (A0, A1 and A2) that can be latched by an active High Latch Enable (LE) signal to isolate the outputs from select-input changes. A "Low" LE makes the output transparent to the input and the circuit functions as a one-of-eight decoder. Two Output Enable inputs (OE\1 and OE0) are provided to simplify cascading and to facilitate demultiplexing. The demultiplexing function is accomplished by using the A0, A1, A2 inputs to select the desired output and using one of the other Output Enable inputs as the data input while holding the other Output Enable input in its active state. In the CD74HC137 and CD74HCT137 the selected output is a "Low"; in the 'HC237 and CD74HCT237 the selected output is a "High".

Key Features

Select One of Eight Data Outputs
Active Low for CD74HC137 and CD74HCT137

Active High for 'HC237 and CD74HCT237

I/O Port or Memory Selector

Two Enable Inputs to Simplify Cascading

Typical Propagation Delay of 13ns at VCC = 5V, 15pF, TA = 25°C (CD74HC237)

Fanout (Over Temperature Range)
Standard Outputs. . . . 10 LSTTL Loads

Bus Driver Outputs. . . . 15 LSTTL Loads

Wide Operating Temperature Range . . . –55°C to 125°C

Balanced Propagation Delay and Transition Times

Significant Power Reduction Compared to LSTTL Logic ICs

HC Types
2V to 6V Operation

High Noise Immunity: NIL = 30%, NIH = 30%, of VCC at VCC = 5V

HCT Types
4.5V to 5.5V Operation

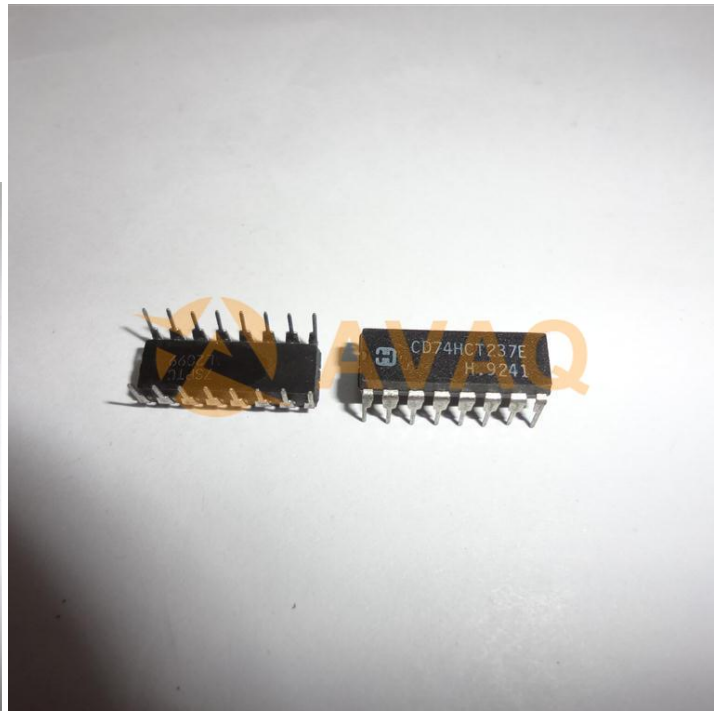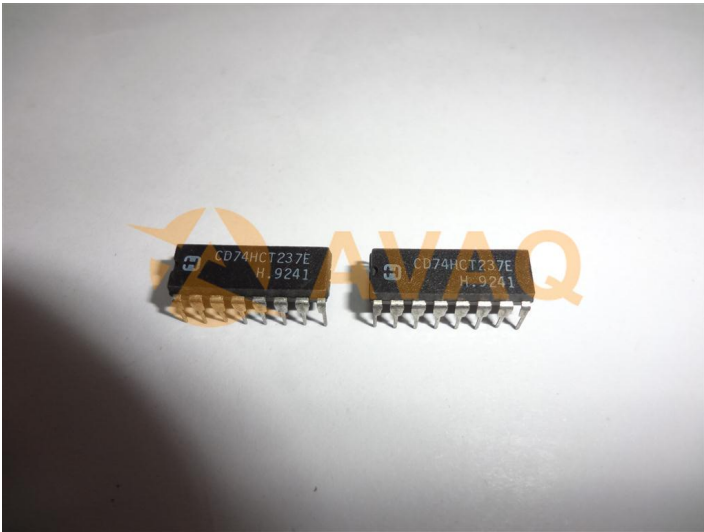Direct LSTTL Input Logic Compatibility, VIL = 0.8V (Max), VIH = 2V (Min)

CMOS Input Compatibility, Il1μA at VOL, VOH

Data sheet acquired from Harris Semiconductor
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Recommended For You

CD4070BE	**CD74HCT138E**	**CD4098BE**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP14	DIP16	DIP

CD74HC08E	**CD74HC4075E**	**CD74ACT74E**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP	DIP	DIP-14

CD74HC75E	**CD4504BE**	**CD4068BE**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP	DIP16	DIP

CD4081BE	**CD4001BE**	**CD4512BE**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP14	DIP14	DIP16

CD4069UBE	**CD74HCT151E**	**CD74HC04M**
Texas Instruments, Inc	Texas Instruments, Inc	Texas Instruments, Inc
DIP14	DIP	SOP14