AVAQ

Monostable Multivibrator Dual-Element -55°C 125°C 16-Pin PDIP Tube

Manufacturer:	Texas Instruments, Inc
Package/Case:	DIP
Product Type:	Logic ICs
RoHS:	RoHS Compliant/Lead free RoHS
Lifecycle:	Active
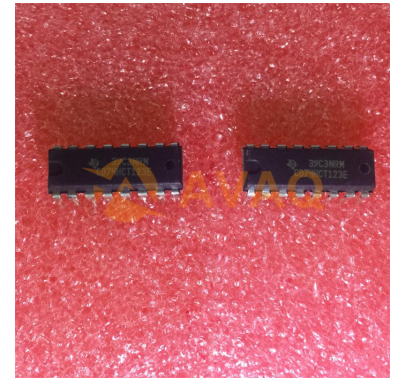
Images are for reference only

Inquiry

General Description

The 'HC123, 'HCT123, CD74HC423 and CD74HCT423 are dual monostable multivibrators with resets. They are all retriggerable and differ only in that the 123 types can be triggered by a negative to positive reset pulse; whereas the 423 types do not have this feature. An external resistor (RX) and an external capacitor (CX) control the timing and the accuracy for the circuit. Adjustment of Rx and CX provides a wide range of output pulse widths from the Q and Q\ terminals. Pulse triggering on the A\ and B inputs occur at a particular voltage level and is not related to the rise and fall times of the trigger pulses.

Once triggered, the output pulse width may be extended by retriggering inputs A\ and B. The output pulse can beterminated by a LOW level on the Reset (R) pin. Trailing edge triggering (A)\ and leading edge triggering (B) inputs are provided for triggering from either edge of the input pulse. If either Mono is not used each input on the unused device (A\, B, and R\) must be terminated high or low.

The minimum value of external resistance, Rx is typically 5k. The minimum value external capacitance, CX, is 0pF. The calculation for the pulse width is tW = 0.45 RXCX at VCC = 5V.

Key Features

Overriding Reset Terminates Output Pulse

Triggering From the Leading or Trailing Edge

Q and Q\ Buffered Outputs

Separate Resets

Wide Range of Output-Pulse Widths

Schmitt Trigger on Both A\ and B Inputs

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

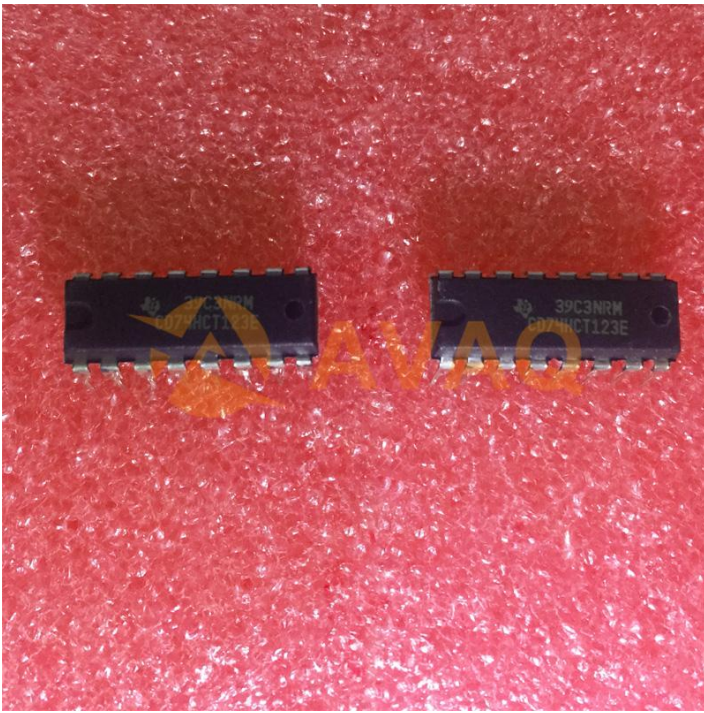Direct LSTTL Input Logic Compatibility, VIL = 0.8V (Max), VIH = 2V (Min)

CMOS Input Compatibility, Il1µA at VOL, VOH

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Recommended For You

CD4070BE

Texas Instruments, Inc

DIP14

CD74HCT138E

Texas Instruments, Inc

DIP16

CD4098BE

Texas Instruments, Inc

DIP

CD74HC08E

Texas Instruments, Inc

DIP

CD74HC4075E

Texas Instruments, Inc

DIP

CD74ACT74E

Texas Instruments, Inc

DIP-14

CD74HC75E

Texas Instruments, Inc

DIP

CD4504BE

Texas Instruments, Inc

DIP16

CD4068BE

Texas Instruments, Inc

DIP

CD4081BE

Texas Instruments, Inc

DIP14

CD4001BE

Texas Instruments, Inc

DIP14

CD4512BE

Texas Instruments, Inc

DIP16

CD4069UBE

Texas Instruments, Inc

DIP14

CD74HCT151E

Texas Instruments, Inc

DIP

CD74HC04M

Texas Instruments, Inc

SOP14