MN74HCT4538/MN74HCT4538S (Under Development)

Dual Precision Retriggerable Monostable Multivibrator (TTL Input)

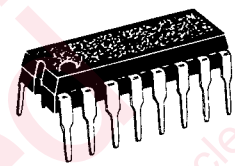
■ Outline

The MN74HCT4538/MN74HCT4538S is a resettable and retriggerable monostable multivibrator. This multivibrator is triggerable at the rising edge of the A input and at the falling edge of the B input. A wide and accurate range of the output pulse width is obtainable since the output pulse width and the accuracy are decided by the time constants of the external condenser C_{ext} and the external resistor R_{ext}.

Owing to the silicon gate CMOS process, this multivibrator has realized low power consumption and high noise immunity equivalent to those of a standard CMOS and the operation speed as high as of an LS TTL, and can directly ten LS TTL inputs.

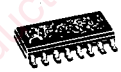
To protect the input and output against electrostatic breakdown, a resistor and a diode are used for the V_{CC} and the GND. The pin configuration and the function are the same as those of the standard 54LS/74LS logic family.

P-3



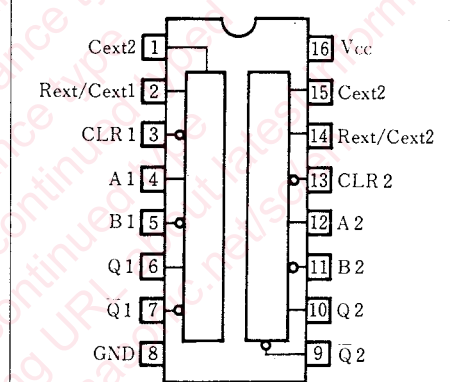
16-pin plastic DIL package

P-4



16-pin PANAFLAT package (SO-16D)

Pin Configuration



■ Truth Table

Input			Output	
CLEAR	A	B	Q	$\overline{Q}$
L	×	×	L	H
H	L	↘	⎍	⎍
H	↗	H	⎍	⎍

Note) H : High level
L : Low level
× : "H" or "L" either will do.
↘ : Trading from "H" to "L"
↗ : Leading from "L" to "H"
⎍ : One piece of "H" level pulse
⎍ : One piece of "L" level pulse

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