

Product Overview

MC14490: Hex Bounce Eliminator

For complete documentation, see the data sheet.

The MC14490 is constructed with complementary MOS enhancement mode devices, and is used for the elimination of extraneous level changes that result when interfacing with mechanical contacts. The digital contact bounce eliminator circuit takes an input signal from a bouncing contact and generates a clean digital signal four clock periods after the input has stabilized. The bounce eliminator circuit will remove bounce on both the "make" and the "break" of a contact closure. The clock for operation of the MC14490 is derived from an internal R-C oscillator which requires only an external capacitor to adjust for the desired operating frequency (bounce delay). The clock may also be driven from an external clock source or the oscillator of another MC14490 (see Figure 5). NOTE: Immediately after power-up, the outputs of the MC14490 are in indeterminate states.

Features

- Diode Protection on All Inputs
- Six Debouncers Per Package
- Internal Pullups on All Data Inputs
- Can Be Used as a Digital Integrator, System Synchronizer, or Delay Line
- Internal Oscillator (R-C), or External Clock Source
- TTL Compatible Data Inputs/Outputs
- Single Line Input, Debounces Both "Make" and "Break" Contacts
- Does Not Require "Form C" (Single Pole Double Throw) Input Signal
- Cascadable for Longer Time Delays
- Schmitt Trigger on Clock Input (Pin 7)

For more features, see the data sheet

Part Electrical Specifications

Product	Compliance	Status	Type	V _{CC} Min (V)	V _{CC} Max (V)	t _{pd} Max (ns)	P _D Max (W)	I _O Max (mA)	Package Type
MC14490DWG	Pb-free Halide free	Active	Bounce Eliminator	3	18	320	0.5	9	SOIC-16W
MC14490DWR2G	Pb-free Halide free	Active	Bounce Eliminator	3	18	320	0.5	9	SOIC-16W
NLV14490DWG	AEC Qualified PPAP Capable Pb-free Halide free	Active	Bounce Eliminator	3	18	320	0.5	9	SOIC-16W
NLV14490DWR2G	AEC Qualified PPAP Capable Pb-free Halide free	Active	Bounce Eliminator	3	18	320	0.5	9	SOIC-16W

For more information please contact your local sales support at www.onsemi.com.

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