

Product Overview

MM74HC595: 8-Bit Shift Registers with Output Latches

For complete documentation, see the data sheet.

The MM74HC595 high-speed shift register utilizes advanced silicon-gate CMOS technology. This device possesses the high noise immunity and low power consumption of standard CMOS integrated circuits, as well as the ability to drive 15 LS-TTL loads. This device contains an 8-bit serial-in, parallel-out shift register that feeds an 8-bit D-type storage register. The storage register has 8 3-STATE outputs. Separate clocks are provided for both the shift register and the storage register. The shift register has a direct-overriding clear, serial input, and serial output (standard) pins for cascading. Both the shift register and storage register use positive-edge triggered clocks. If both clocks are connected together, the shift register state will always be one clock pulse ahead of the storage register. The 74HC logic family is speed, function, and pin-out compatible with the standard 74LS logic family. All inputs are protected from damage due to static discharge by internal diode clamps to VCC and ground.

Features

- Low Quiescent current: 80µA Maximum (74HC Series)
- Low Input Current: 1µA Maximum
- 8-Bit Serial-In, Parallel-Out Shift Register with Storage
- Wide Operating Voltage Range: 2V-6V
- Cascadable
- Shift Register has Direct Clear
- Guaranteed Shift Frequency: DC to 30MHz

Applications

- This product is general usage and suitable for many different applications.

Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Type	Channels	V _{CC} Min (V)	V _{CC} Max (V)	t _{pd} Max (ns)	I _O Max (mA)	Package Type
MM74HC595M	0.2704	Pb-free	Active	Shift Register	8	2	6	30	5.2	SOIC-16
MM74HC595MTC	0.18	Pb-free Halide free	Active	Shift Register	8	2	6	30	5.2	TSSOP-16
MM74HC595MTCX	0.18	Pb-free Halide free	Active	Shift Register	8	2	6	30	5.2	TSSOP-16
MM74HC595MX	0.222	Pb-free	Active	Shift Register	8	2	6	30	5.2	SOIC-16

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

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