



# MM54HC4303 / MM74HC4303 TTL Input Octal TRI-STATE® Flip-Flop With Inverting Outputs

## General Description

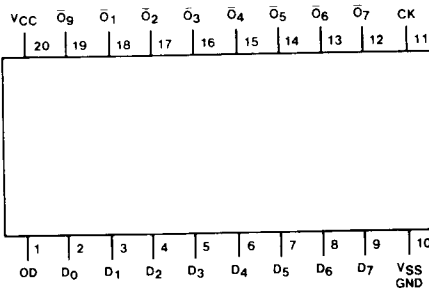
This high speed OCTAL D-TYPE FLIP-FLOP is manufactured with silicon gate CMOS technology. All inputs are compatible with TTL logic levels, recognizing a zero input below 0.8V and a logical one input above 2.0V. It possesses the low power consumption of standard CMOS integrated circuits, as well as the ability to drive 15 LS-TTL loads (12 LS-TTL loads for 54HC). Due to the large output drive capability and the TRI STATE feature, this device is ideally suited for interfacing with bus lines in a bus organized system.

The MM54HC4303/MM74HC4303 is a positive edge triggered flip flop. Data at the D inputs, meeting the setup and

hold time requirements, is inverted and transferred to the Q outputs on the positive going transition of the CLOCK input. When a high logic level is applied to the OUTPUT DISABLE input, all outputs go to a high impedance state, regardless of what signals are present at the other inputs and the state of the storage elements.

The 54HC/74HC logic family is functionally as well as pinout compatible with the standard 54LS/74LS logic family. All inputs are protected from damage due to static discharge by internal diode clamps to V<sub>CC</sub> and ground.

## Connection Diagram



MM54HC4303  
MM74HC4303

## Truth Table

Output Control	Clock	D	Output
L	↑	H	L
L	↑	L	H
L	L	X	O <sub>0</sub>
H	X	X	Z

## Logic Diagram

