

MM74HC373 3-STATE Octal D-Type Latch

General Description

The MM74HC373 high speed octal D-type latches utilize advanced silicon-gate CMOS technology. They possess the high noise immunity and low power consumption of standard CMOS integrated circuits, as well as the ability to drive 15 LS-TTL loads. Due to the large output drive capability and the 3-STATE feature, these devices are ideally suited for interfacing with bus lines in a bus organized system.

When the LATCH ENABLE input is HIGH, the Q outputs will follow the D inputs. When the LATCH ENABLE goes LOW, data at the D inputs will be retained at the outputs until LATCH ENABLE returns HIGH again. When a high logic level is applied to the OUTPUT CONTROL 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 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 V_{CC} and ground.

Features

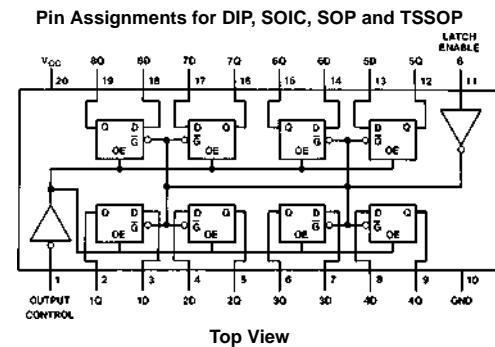
- Typical propagation delay: 18 ns
- Wide operating voltage range: 2 to 6 volts
- Low input current: 1 μ A maximum
- Low quiescent current: 80 μ A maximum (74 Series)
- Output drive capability: 15 LS-TTL loads

Ordering Code:

Order Number	Package Number	Package Description
MM74HC373WM	M20B	20-Lead Small Outline Integrated Circuit (SOIC), JEDEC MS-013, 0.300" Wide
MM74HC373SJ	M20D	20-Lead Small Outline Package (SOP), EIAJ TYPE II, 5.3mm Wide
MM74HC373MTC	MTC20	20-Lead Thin Shrink Small Outline Package (TSSOP), JEDEC MO-153, 4.4mm Wide
MM74HC373N	N20A	20-Lead Plastic Dual-In-Line Package (PDIP), JEDEC MS-001, 0.300" Wide

Devices also available in Tape and Reel. Specify by appending the suffix letter "X" to the ordering code.

Connection Diagram



Truth Table

Output Control	Latch Enable	Data	373 Output
L	H	H	H
L	H	L	L
L	L	X	Q_0
H	X	X	Z

H = HIGH Level
L = LOW Level
 Q_0 = Level of output before steady-state input conditions were established.
Z = High Impedance