

1. General Description

The EM74HC10; EM74HCT10 is a triple 3-input NAND gate. Inputs include clamp diodes. This enables the use of current limiting resistors to interface inputs to voltages in excess of V_{CC} .

2. Features and Benefits

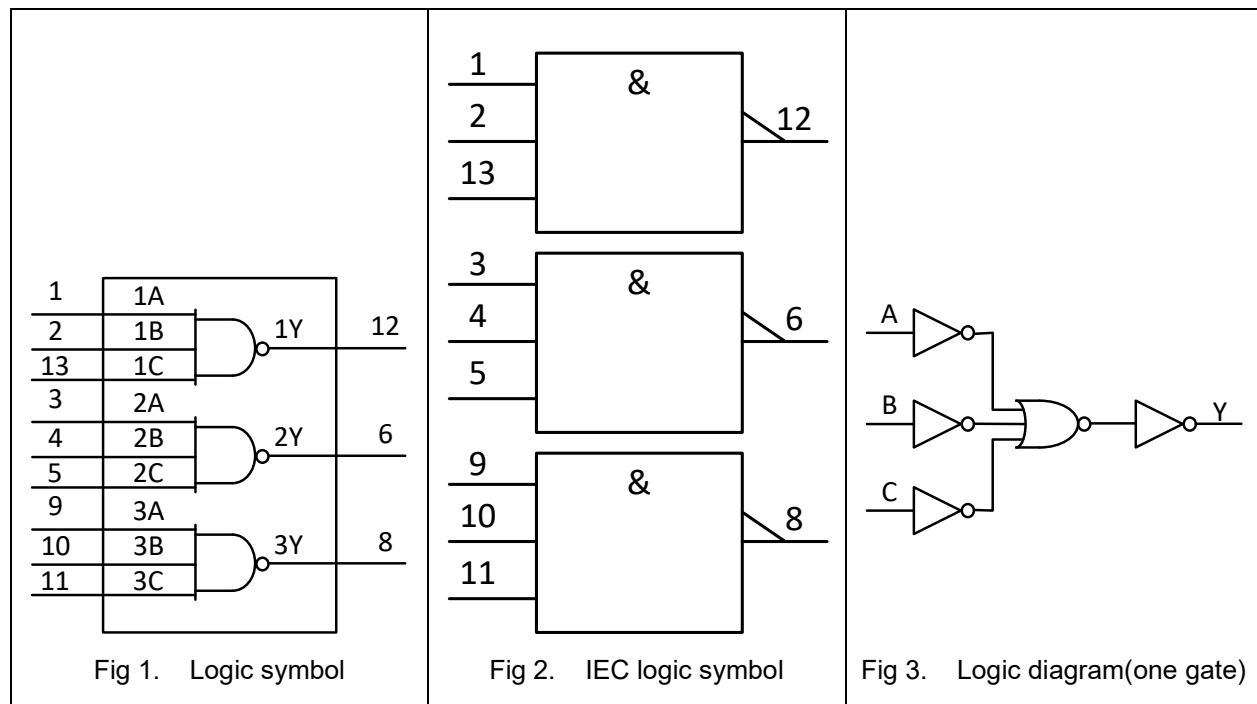
- Wide operating voltage 2.0 V to 6.0 V
- Latch-up performance exceeds 100 mA
- Input levels:
 - For EM74HC10: CMOS level
 - For EM74HCT10: TTL level
- Complies with JEDEC standard JESD7A
- ESD protection:
 - HBM JESD22-A114F exceeds 2000 V
 - MM JESD22-A115-A exceeds 200 V
- Multiple package options
- Specified from -40 °C to +85 °C and from -40 °C to +125 °C

3. Ordering Information

Table 1. Ordering information

Type number	Package		Quantity
	Name	Description	
EM74HC10D	SOP-14L	plastic small outline package; 14 leads; body width 3.9 mm	3000
EM74HCT10D			
EM74HC10PW	TSSOP-14L	plastic thin shrink small outline package; 14 leads; body width 4.4 mm	3000
EM74HCT10PW			

4. Function Diagram



5. Pinning Information

5.1. Pin map

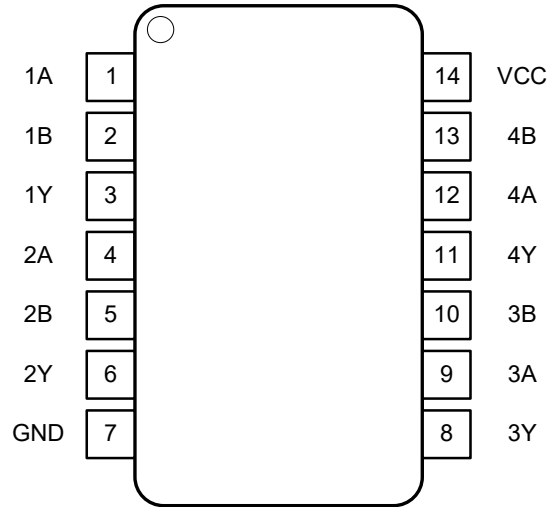


Fig 4. Top view pin configuration SOP and TSSOP

5.2. Pin description

Table 2. Pin description

Symbol	Pin	Description
1A, 2A, 3A	1, 3, 9	Data input
1B, 2B, 3B	2, 4, 10	Data input
1C, 2C, 3C	13, 5, 11	Data input
1Y, 2Y, 3Y	12, 6, 8	Data output
GND	7	Ground (0V)
VCC	14	Supply voltage

6. Functional Description

Table 3. Function table

H = HIGH voltage level; L = LOW voltage level; X = don't care.