

## 1. General Description

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The EM74HC4075; EM74HCT4075 is a triple 3-input OR 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

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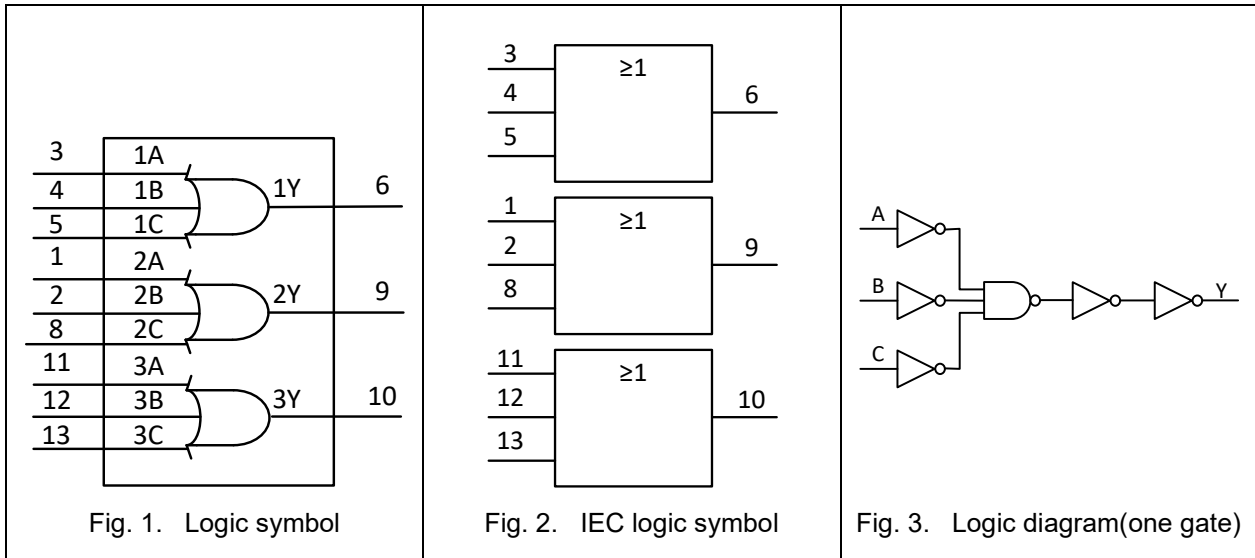
- Wide supply voltage range from 2.0 V to 6.0 V
- High noise immunity
- CMOS low power dissipation
- Latch-up performance exceeds 250 mA
- Complies with JEDEC standards:
  - JESD8C (2.7 V to 3.6 V)
  - JESD7A (2.0 V to 6.0 V)
- Input levels:
  - For EM74HC4075: CMOS level
  - For EM74HCT4075: TTL level
- ESD protection:
  - HBM ANSI/ESDA/JEDEC JS-001 Class 2 exceeds 3500 V
  - CDM ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 2000 V
- Multiple package options

### 3. Ordering Information

Table 1. Ordering information

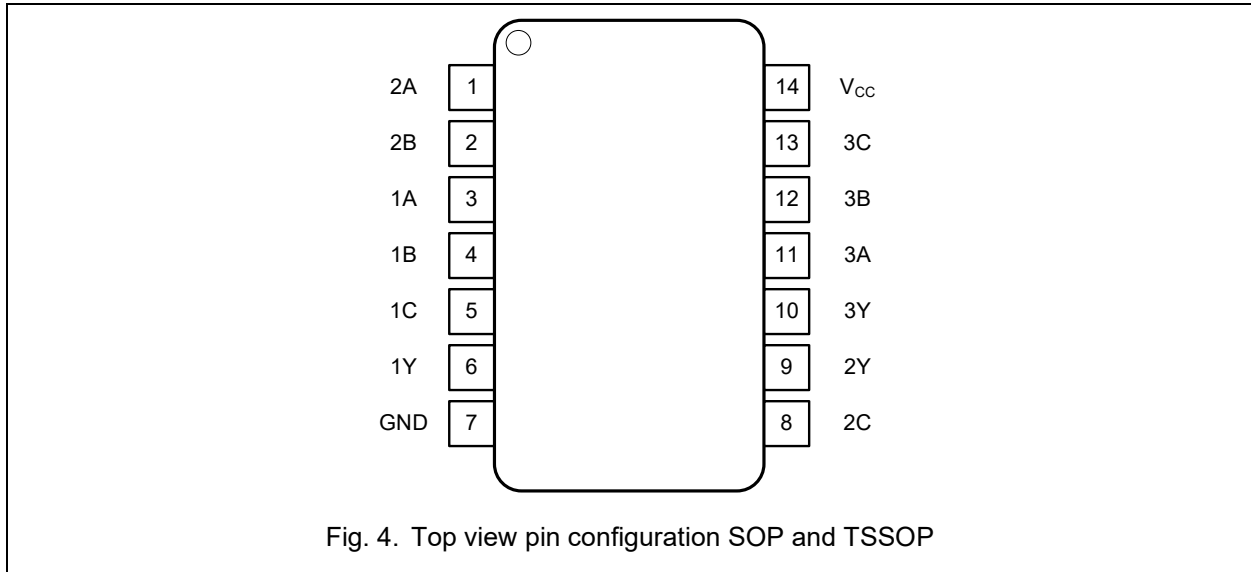
Type number	Package		
	Name	Description	Quantity
EM74HC4075D	SOP-14L	plastic small outline package; 14 leads; body width 3.9 mm	3000
EM74HCT4075D			
EM74HC4075PW	TSSOP-14L	plastic thin shrink small outline package; 14 leads; body width 4.4 mm	3000
EM74HCT4075PW			

### 4. Function Diagram



## 5. Pinning Information

### 5.1. Pinning



### 5.2. Pin description

Table 2. Pin description

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