

## 1. General Description

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The EM74HC125; EM74HCT125 is a quad buffer/line driver with 3-state outputs controlled by the output enable inputs ( $\overline{\text{nOE}}$ ). A HIGH on  $\overline{\text{nOE}}$  causes the outputs to assume a high impedance OFF-state. 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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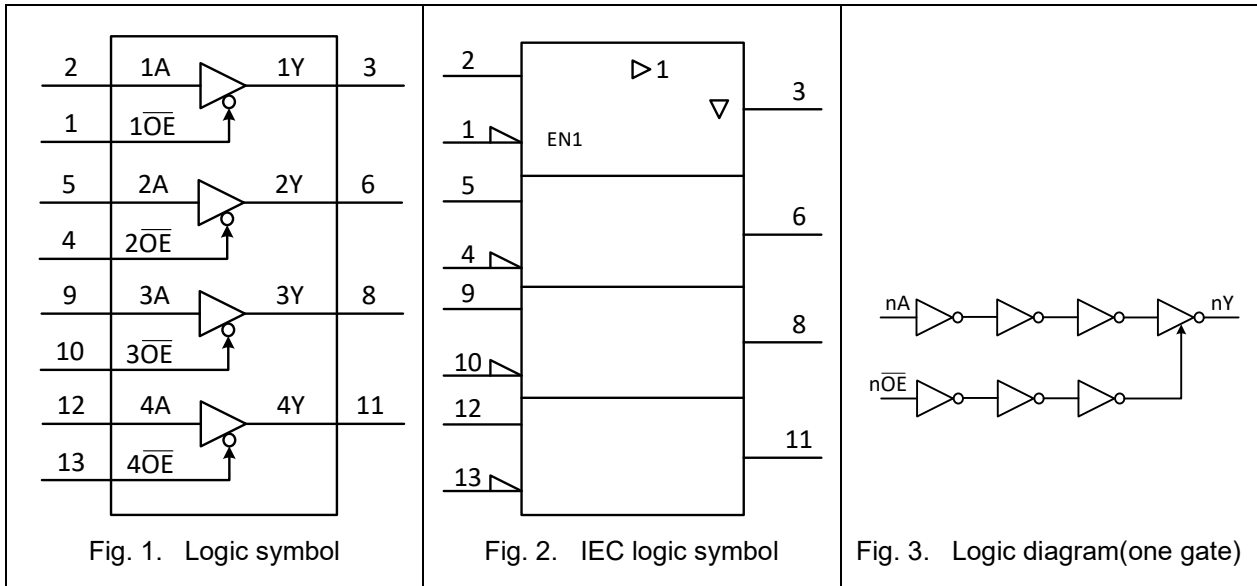
- Wide supply voltage range from 2.0 V to 6.0 V
- High noise immunity
- CMOS low power dissipation
- Latch-up performance exceeds 250 mA
- Complies with JEDEC standards:
  - JESD8C (2.7 V to 3.6 V)
  - JESD7A (2.0 V to 6.0 V)
- Input levels:
  - For EM74HC125: CMOS level
  - For EM74HCT125: TTL level
- 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

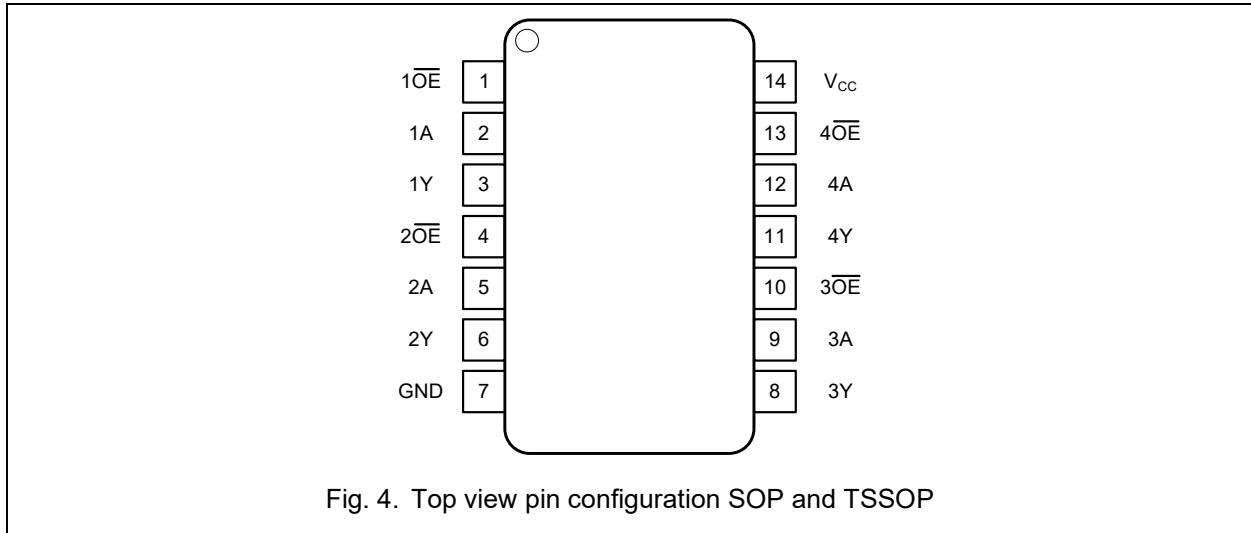
Type number	Package		
	Name	Description	Quantity
EM74HC125D	SOP-14L	plastic small outline package; 14 leads; body width 3.9 mm	3000
EM74HCT125D			
EM74HC125PW	TSSOP-14L	plastic thin shrink small outline package; 14 leads; body width 4.4 mm	3000
EM74HCT125PW			

### 4. Function Diagram



## 5. Pinning Information

### 5.1. Pinning



### 5.2. Pin description

Table 2. Pin description

Symbol	Pin	Description
$1\overline{OE}$ , $2\overline{OE}$ , $3\overline{OE}$ , $4\overline{OE}$	1, 4, 10, 13	Data enable input(active LOW)
1A, 2A, 3A, 4A	2, 5, 9, 12	Data input
1Y, 2Y, 3Y, 4Y	3, 6, 8, 11	Data output
GND	7	Ground (0V)
V <sub>cc</sub>	14	Supply voltage

## 6. Functional Description

Table 3. Function table

H = HIGH voltage level; L = LOW voltage level; X = don't care; Z = high-impedance OFF-state.

Input		Output
$n\overline{OE}$	nA	nY
L	L	L
L	H	H
H	X	Z