

## 1. General Description

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The EM74AHC1G126 and EM74AHCT1G126 are single buffer/line drivers with 3-state outputs. Inputs are overvoltage tolerant. This feature allows the use of these devices as translators in mixed voltage environments.

## 2. Features and Benefits

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- Wide supply voltage range from 2.0 V to 5.5 V
- Overvoltage tolerant inputs to 5.5 V
- High noise immunity
- CMOS low power dissipation
- Latch-up performance exceeds 200 mA
- Symmetrical output impedance
- Balanced propagation delays
- Input levels:
  - For EM74AHC1G126: CMOS level
  - For EM74AHCT1G126: TTL level
- ESD protection:
  - HBM ANSI/ESDA/JEDEC JS-001 Class 3A exceeds 7000 V
  - CDM ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 2000 V
- Multiple package options

## EM74AHC1G126; EM74AHCT1G126

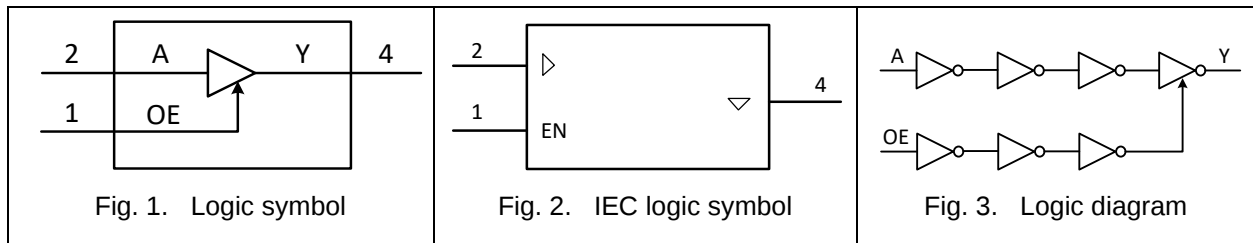
Bus buffer/line driver; 3-state

### 3. Ordering Information

Table 1. Ordering information

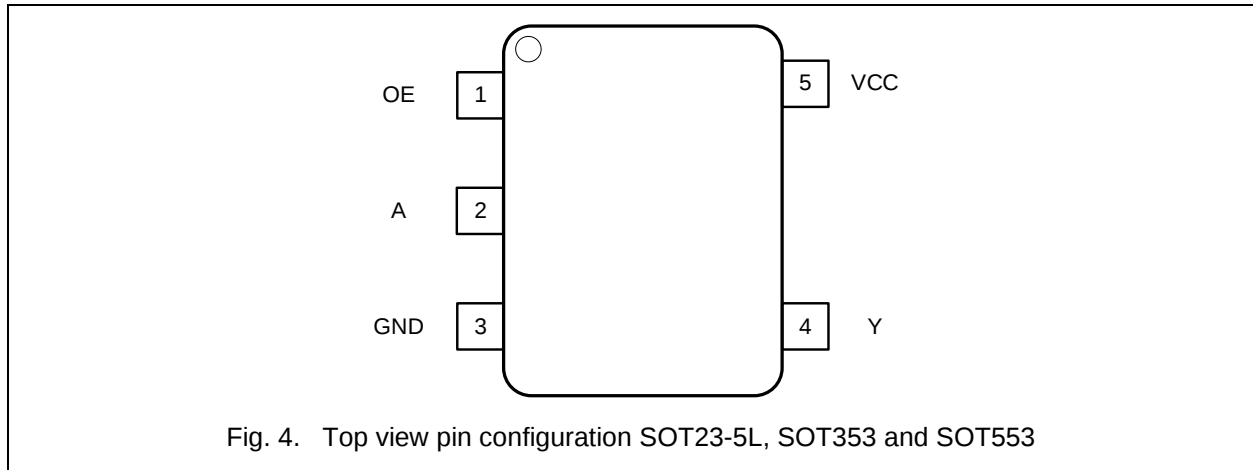
| Type number      | Topside marking | Package  |                                                              |          |
|------------------|-----------------|----------|--------------------------------------------------------------|----------|
|                  |                 | Name     | Description                                                  | Quantity |
| EM74AHC1G126GV   | AQYW            | SOT23-5L | SOT23 package, 5 pins 2.92 mm × 1.6 mm; 1.25 mm (Max) height | 3000     |
| EM74AHCT1G126GV  | CQYW            |          |                                                              |          |
| EM74AHC1G126GW   | AQYW            | SOT353   | SOT353 package, 5 pins 2.1 mm × 1.25 mm; 1.1 mm (Max) height | 3000     |
| EM74AHCT1G126GW  | CQYW            |          |                                                              |          |
| EM74AHC1G126DRL  | AQYW            | SOT553   | SOT553 package, 5 pins 1.6 mm × 1.2 mm; 0.6 mm (Max) height  | 3000     |
| EM74AHCT1G126DRL | CQYW            |          |                                                              |          |

### 4. Function Diagram



## 5. Pinning Information

### 5.1. Pinning



### 5.2. Pin description

**Table 2. Pin description**

| Symbol          | Pin | Description         |
|-----------------|-----|---------------------|
| OE              | 1   | Output enable input |
| A               | 2   | Data input          |
| GND             | 3   | Ground (0V)         |
| Y               | 4   | Data output         |
| V <sub>CC</sub> | 5   | 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 |
|-------|---|--------|
| OE    | A | Y      |
| H     | L | L      |
| H     | H | H      |
| L     | X | Z      |