

# 74HC237

## 3-to-8 line decoder, demultiplexer with address latches

Rev. 6 — 23 August 2012

Product data sheet

### 1. General description

The 74HC237 is a high-speed Si-gate CMOS device and is pin compatible with low-power Schottky TTL (LSTTL). The 74HC237 is specified in compliance with JEDEC standard no. 7A.

The 74HC237 is a 3-to-8 line decoder, demultiplexer with latches at the three address inputs (An). The 74HC237 essentially combines the 3-to-8 decoder function with a 3-bit storage latch. When the latch is enabled ( $\overline{LE} = \text{LOW}$ ), the 74HC237 acts as a 3-to-8 active LOW decoder. When the latch enable ( $\overline{LE}$ ) goes from LOW-to-HIGH, the last data present at the inputs before this transition, is stored in the latches. Further address changes are ignored as long as  $\overline{LE}$  remains HIGH. The output enable input ( $\overline{E1}$  and E2) controls the state of the outputs independent of the address inputs or latch operation. All outputs are HIGH unless  $\overline{E1}$  is LOW and E2 is HIGH. The 74HC237 is ideally suited for implementing non-overlapping decoders in 3-state systems and strobed (stored address) applications in bus-oriented systems.

### 2. Features and benefits

- Combines 3-to-8 decoder with 3-bit latch
- Multiple input enable for easy expansion or independent controls
- Active HIGH mutually exclusive outputs
- Low-power dissipation
- ESD protection:
  - ◆ HBM JESD22-A114F exceeds 2 000 V
  - ◆ MM JESD22-A115-A exceeds 200 V
- Multiple package options
- Specified from  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  and from  $-40\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$

### 3. Ordering information

Table 1. Ordering information

| Type number | Package   |        |   |          |
|-------------|---|--------|---|----------|
|             | Temperature range   | Name   | Description   | Version  |
| 74HC237N    | $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ | DIP16  | plastic dual in-line package; 16 leads (300 mil)                  | SOT38-4  |
| 74HC237D    | $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ | SO16   | plastic small outline package; 16 leads; body width 3.9 mm        | SOT109-1 |
| 74HC237DB   | $-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$ | SSOP16 | plastic shrink small outline package; 16 leads; body width 5.3 mm | SOT338-1 |



### 4. Functional diagram

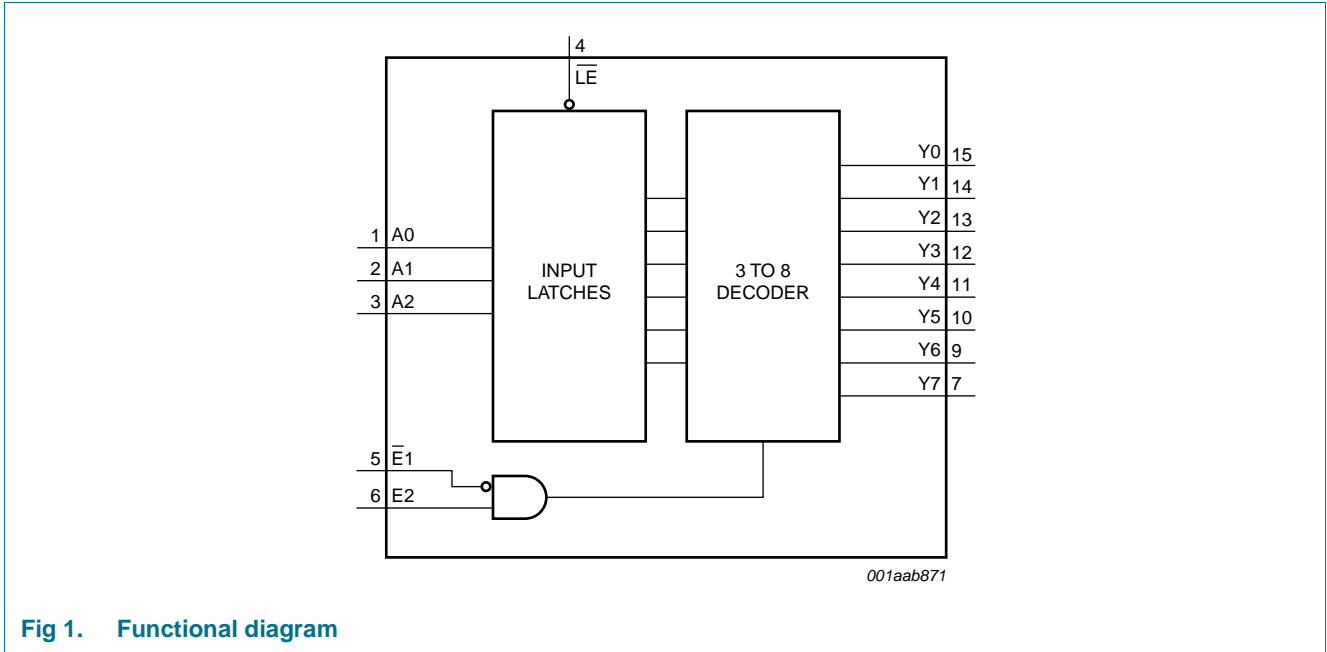


Fig 1. Functional diagram

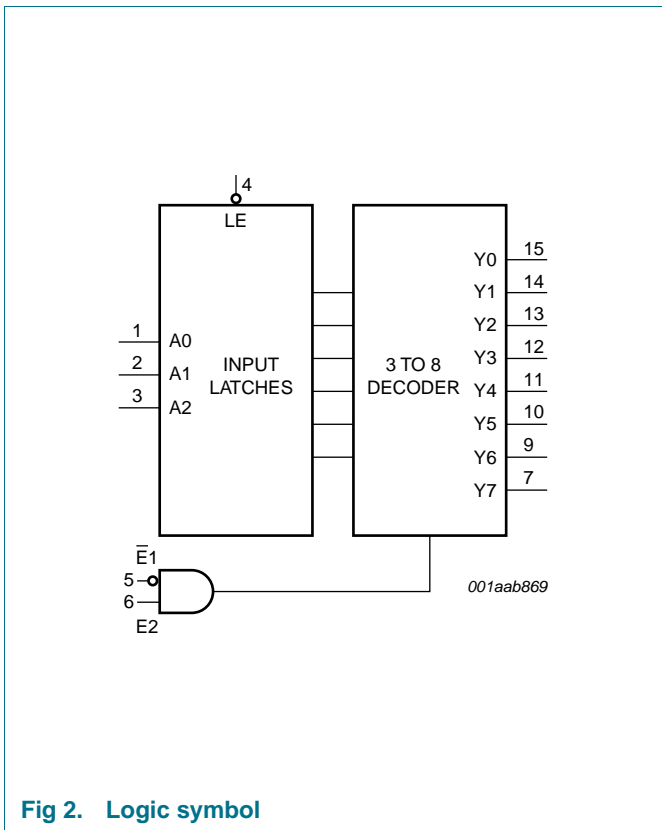


Fig 2. Logic symbol

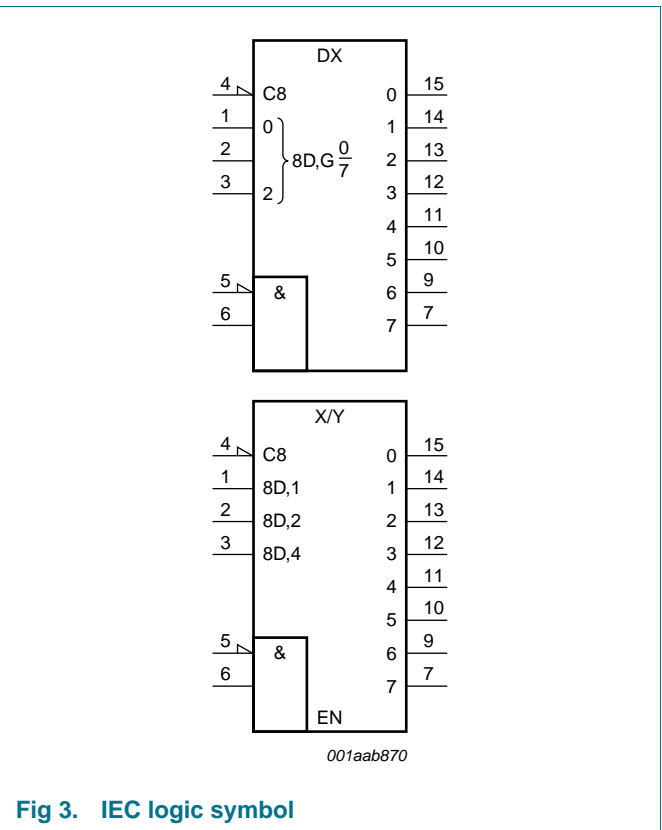


Fig 3. IEC logic symbol

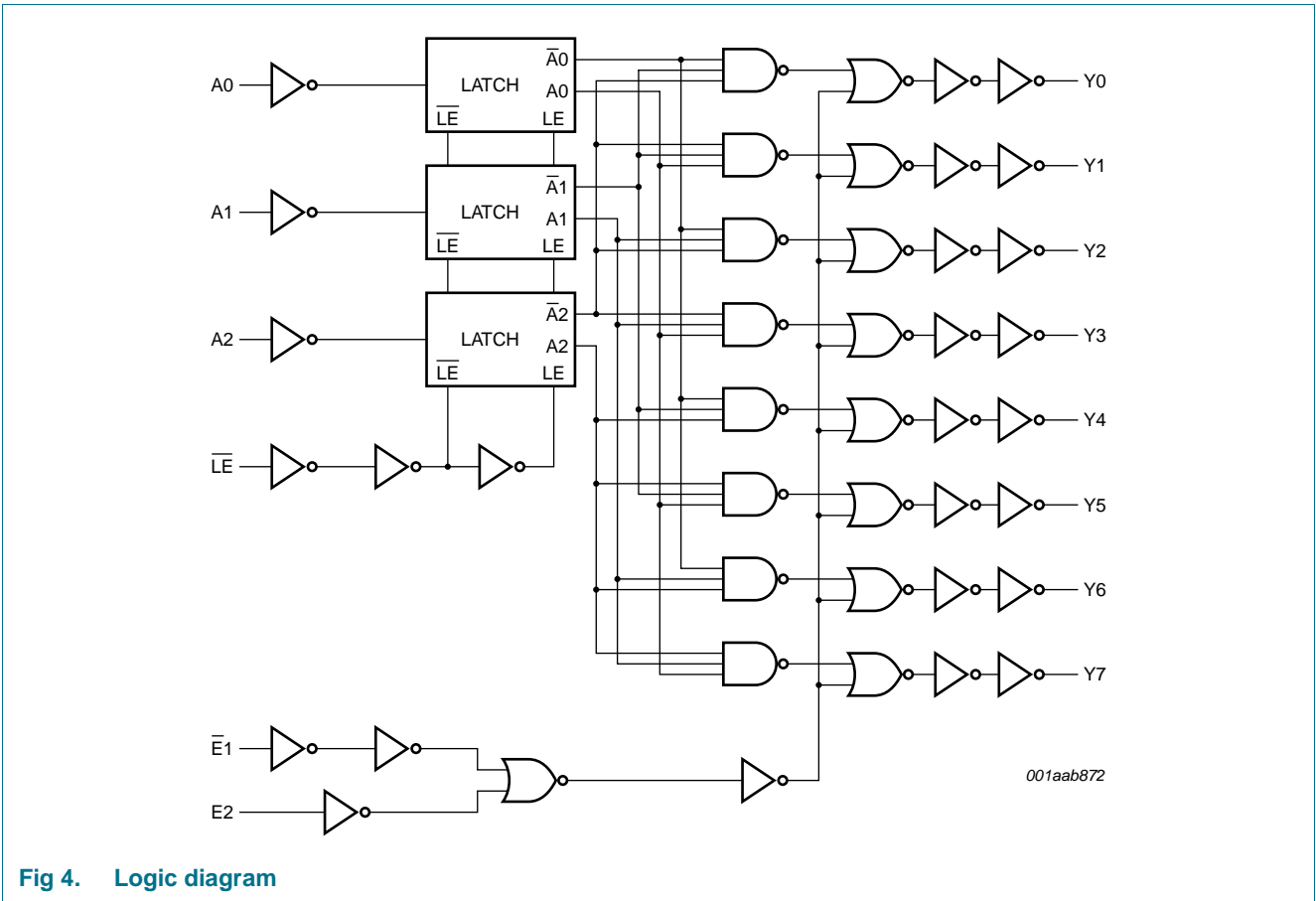


Fig 4. Logic diagram

## 5. Pinning information

### 5.1 Pinning

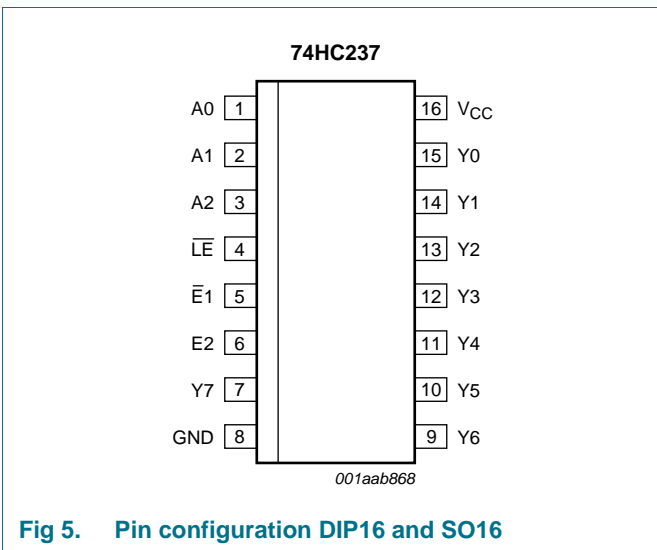


Fig 5. Pin configuration DIP16 and SO16

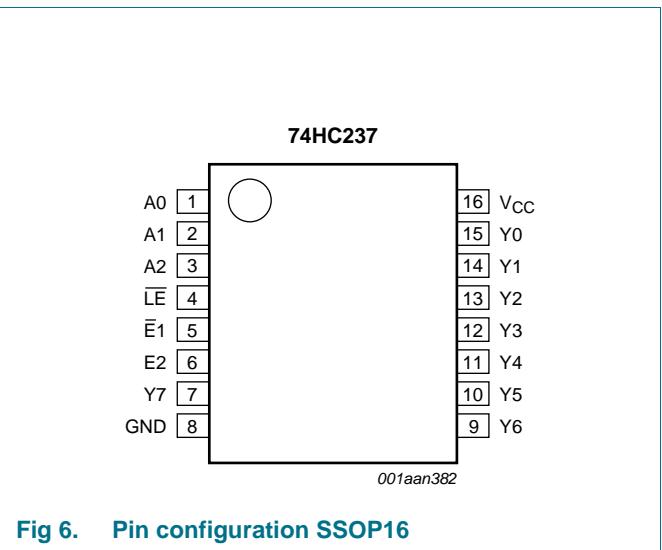


Fig 6. Pin configuration SSOP16

## 5.2 Pin description

Table 2. Pin description

| Symbol          | Pin                          | Description                       |
|-----------------|------------------------------|-----------------------------------|
| A0 to A2        | 1, 2, 3                      | data input                        |
| $\overline{LE}$ | 4                            | latch enable input (active LOW)   |
| $\overline{E1}$ | 5                            | data enable input 1 (active LOW)  |
| E2              | 6                            | data enable input 2 (active HIGH) |
| Y0 to Y7        | 15, 14, 13, 12, 11, 10, 9, 7 | output                            |
| GND             | 8                            | ground (0 V)                      |
| V <sub>CC</sub> | 16                           | supply voltage                    |

## 6. Functional description

Table 3: Function table

| Enable          |                 |    | Input |    |    | Output |    |    |    |    |    |    |    |
|-----------------|-----------------|----|-------|----|----|--------|----|----|----|----|----|----|----|
| $\overline{LE}$ | $\overline{E1}$ | E2 | A0    | A1 | A2 | Y0     | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 |
| H               | L               | H  | X     | X  | X  | stable |    |    |    |    |    |    |    |
| X               | H               | X  | X     | X  | X  | L      | L  | L  | L  | L  | L  | L  | L  |
| X               | X               | L  | X     | X  | X  | L      | L  | L  | L  | L  | L  | L  | L  |
| L               | L               | H  | L     | L  | L  | H      | L  | L  | L  | L  | L  | L  | L  |
|                 |                 |    | H     | L  | L  | L      | H  | L  | L  | L  | L  | L  | L  |
|                 |                 |    | L     | H  | L  | L      | L  | H  | L  | L  | L  | L  | L  |
|                 |                 |    | H     | H  | L  | L      | L  | L  | H  | L  | L  | L  | L  |
|                 |                 |    | L     | L  | H  | L      | L  | L  | L  | H  | L  | L  | L  |
|                 |                 |    | H     | L  | H  | L      | L  | L  | L  | L  | H  | L  | L  |
|                 |                 |    | L     | H  | H  | L      | L  | L  | L  | L  | L  | H  | L  |
|                 |                 |    | H     | H  | H  | L      | L  | L  | L  | L  | L  | L  | L  |

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

## 7. Limiting values

Table 4. Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

| Symbol           | Parameter               | Conditions  | Min  | Max  | Unit |    |
|------------------|-------------------------|---|------|------|------|----|
| V <sub>CC</sub>  | supply voltage          |   | -0.5 | +7   | V    |    |
| I <sub>IK</sub>  | input clamping current  | V <sub>I</sub> < -0.5 V or V <sub>I</sub> > V <sub>CC</sub> + 0.5 V | -    | ±20  | mA   |    |
| I <sub>OK</sub>  | output clamping current | V <sub>O</sub> < -0.5 V or V <sub>O</sub> > V <sub>CC</sub> + 0.5 V | -    | ±20  | mA   |    |
| I <sub>O</sub>   | output current          | V <sub>O</sub> = -0.5 V to (V <sub>CC</sub> + 0.5 V)                | -    | ±25  | mA   |    |
| I <sub>CC</sub>  | supply current          |   | -    | +50  | mA   |    |
| I <sub>GND</sub> | ground current          |   | -    | -50  | mA   |    |
| T <sub>stg</sub> | storage temperature     |   | -65  | +150 | °C   |    |
| P <sub>tot</sub> | total power dissipation | DIP16 package   | [1]  | -    | 750  | mW |
|                  |                         | SO16 and SSOP16 packages  | [2]  | -    | 500  | mW |

- [1] For DIP16 package:  $P_{tot}$  derates linearly with 12 mW/K above 70 °C.
- [2] For SO16 package:  $P_{tot}$  derates linearly with 8 mW/K above 70 °C.  
For SSOP16 package:  $P_{tot}$  derates linearly with 5.5 mW/K above 60 °C.

## 8. Recommended operating conditions

**Table 5. Recommended operating conditions**

*Voltages are referenced to GND (ground = 0 V)*

| Symbol              | Parameter                           | Conditions              | Min | Typ  | Max      | Unit |
|---------------------|-------------------------------------|-------------------------|-----|------|----------|------|
| $V_{CC}$            | supply voltage                      |                         | 2.0 | 5.0  | 6.0      | V    |
| $V_I$               | input voltage                       |                         | 0   | -    | $V_{CC}$ | V    |
| $V_O$               | output voltage                      |                         | 0   | -    | $V_{CC}$ | V    |
| $T_{amb}$           | ambient temperature                 |                         | -40 | +25  | +125     | °C   |
| $\Delta t/\Delta V$ | input transition rise and fall rate | $V_{CC} = 2.0\text{ V}$ | -   | -    | 625      | ns/V |
|                     |                                     | $V_{CC} = 4.5\text{ V}$ | -   | 1.67 | 139      | ns/V |
|                     |                                     | $V_{CC} = 6.0\text{ V}$ | -   | -    | 83       | ns/V |

## 9. Static characteristics

**Table 6. Static characteristics**

*At recommended operating conditions; voltages are referenced to GND (ground = 0 V).*

| Symbol   | Parameter                 | Conditions  | $T_{amb} = 25\text{ °C}$ |      |      | $T_{amb} = -40\text{ °C to }+85\text{ °C}$ |      | $T_{amb} = -40\text{ °C to }+125\text{ °C}$ |      | Unit |
|----------|---------------------------|---|--------------------------|------|------|--|------|---|------|------|
|          |                           |   | Min                      | Typ  | Max  | Min  | Max  | Min   | Max  |      |
| $V_{IH}$ | HIGH-level input voltage  | $V_{CC} = 2.0\text{ V}$                               | 1.5                      | 1.2  | -    | 1.5  | -    | 1.5   | -    | V    |
|          |                           | $V_{CC} = 4.5\text{ V}$                               | 3.15                     | 2.4  | -    | 3.15                                       | -    | 3.15  | -    | V    |
|          |                           | $V_{CC} = 6.0\text{ V}$                               | 4.2                      | 3.2  | -    | 4.2  | -    | 4.2   | -    | V    |
| $V_{IL}$ | LOW-level input voltage   | $V_{CC} = 2.0\text{ V}$                               | -                        | 0.8  | 0.5  | -  | 0.5  | -   | 0.5  | V    |
|          |                           | $V_{CC} = 4.5\text{ V}$                               | -                        | 2.1  | 1.35 | -  | 1.35 | -   | 1.35 | V    |
|          |                           | $V_{CC} = 6.0\text{ V}$                               | -                        | 2.8  | 1.8  | -  | 1.8  | -   | 1.8  | V    |
| $V_{OH}$ | HIGH-level output voltage | $V_I = V_{IH}$ or $V_{IL}$                            |                          |      |      |  |      |   |      |      |
|          |                           | $I_O = -20\text{ }\mu\text{A}; V_{CC} = 2.0\text{ V}$ | 1.9                      | 2.0  | -    | 1.9  | -    | 1.9   | -    | V    |
|          |                           | $I_O = -20\text{ }\mu\text{A}; V_{CC} = 4.5\text{ V}$ | 4.4                      | 4.5  | -    | 4.4  | -    | 4.4   | -    | V    |
|          |                           | $I_O = -20\text{ }\mu\text{A}; V_{CC} = 6.0\text{ V}$ | 5.9                      | 6.0  | -    | 5.9  | -    | 5.9   | -    | V    |
|          |                           | $I_O = -4.0\text{ mA}; V_{CC} = 4.5\text{ V}$         | 3.98                     | 4.32 | -    | 3.84                                       | -    | 3.7   | -    | V    |
|          |                           | $I_O = -5.2\text{ mA}; V_{CC} = 6.0\text{ V}$         | 5.48                     | 5.81 | -    | 5.34                                       | -    | 5.2   | -    | V    |
| $V_{OL}$ | LOW-level output voltage  | $V_I = V_{IH}$ or $V_{IL}$                            |                          |      |      |  |      |   |      |      |
|          |                           | $I_O = 20\text{ }\mu\text{A}; V_{CC} = 2.0\text{ V}$  | -                        | 0    | 0.1  | -  | 0.1  | -   | 0.1  | V    |
|          |                           | $I_O = 20\text{ }\mu\text{A}; V_{CC} = 4.5\text{ V}$  | -                        | 0    | 0.1  | -  | 0.1  | -   | 0.1  | V    |
|          |                           | $I_O = 20\text{ }\mu\text{A}; V_{CC} = 6.0\text{ V}$  | -                        | 0    | 0.1  | -  | 0.1  | -   | 0.1  | V    |
|          |                           | $I_O = 4.0\text{ mA}; V_{CC} = 4.5\text{ V}$          | -                        | 0.15 | 0.26 | -  | 0.33 | -   | 0.4  | V    |
|          |                           | $I_O = 5.2\text{ mA}; V_{CC} = 6.0\text{ V}$          | -                        | 0.16 | 0.26 | -  | 0.33 | -   | 0.4  | V    |

**Table 6. Static characteristics ...continued**

At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

| Symbol          | Parameter             | Conditions  | T <sub>amb</sub> = 25 °C |     |      | T <sub>amb</sub> = -40 °C to +85 °C |      | T <sub>amb</sub> = -40 °C to +125 °C |      | Unit |
|-----------------|-----------------------|---|--------------------------|-----|------|-------------------------------------|------|--------------------------------------|------|------|
|                 |                       |   | Min                      | Typ | Max  | Min                                 | Max  | Min                                  | Max  |      |
| I <sub>I</sub>  | input leakage current | V <sub>I</sub> = V <sub>CC</sub> or GND;<br>V <sub>CC</sub> = 6.0 V                       | -                        | -   | ±0.1 | -                                   | ±1.0 | -                                    | ±1.0 | μA   |
| I <sub>CC</sub> | supply current        | V <sub>I</sub> = V <sub>CC</sub> or GND; I <sub>O</sub> = 0 A;<br>V <sub>CC</sub> = 6.0 V | -                        | -   | 8.0  | -                                   | 80   | -                                    | 160  | μA   |
| C <sub>I</sub>  | input capacitance     |   | -                        | 3.5 | -    | -                                   | -    | -                                    | -    | pF   |

## 10. Dynamic characteristics

**Table 7. Dynamic characteristics**

Voltages are referenced to GND (ground = 0 V); C<sub>L</sub> = 50 pF unless otherwise specified; for test circuit see [Figure 10](#).

| Symbol  | Parameter         | Conditions  | T <sub>amb</sub> = 25 °C |  |     | T <sub>amb</sub> = -40 °C to +85 °C |     | T <sub>amb</sub> = -40 °C to +125 °C |     | Unit |
|---|-------------------|---|--------------------------|--|-----|-------------------------------------|-----|--------------------------------------|-----|------|
|   |                   |   | Min                      | Typ  | Max | Min                                 | Max | Min                                  | Max |      |
| t <sub>pd</sub>   | propagation delay | An to Y <sub>n</sub> ; see <a href="#">Figure 7</a> <sup>[1]</sup>              |                          |  |     |                                     |     |                                      |     |      |
|   |                   | V <sub>CC</sub> = 2.0 V   | -                        | 52   | 160 | -                                   | 200 | -                                    | 240 | ns   |
|   |                   | V <sub>CC</sub> = 4.5 V   | -                        | 19   | 32  | -                                   | 40  | -                                    | 48  | ns   |
|   |                   | V <sub>CC</sub> = 5 V; C <sub>L</sub> = 15 pF                                   | -                        | 16   | -   | -                                   | -   | -                                    | -   | ns   |
|   |                   | V <sub>CC</sub> = 6.0 V   | -                        | 15   | 27  | -                                   | 34  | -                                    | 41  | ns   |
|   |                   | $\overline{LE}$ to Y <sub>n</sub> ; see <a href="#">Figure 7</a> <sup>[1]</sup> |                          |  |     |                                     |     |                                      |     |      |
|   |                   | V <sub>CC</sub> = 2.0 V   | -                        | 61   | 190 | -                                   | 240 | -                                    | 285 | ns   |
|   |                   | V <sub>CC</sub> = 4.5 V   | -                        | 22   | 38  | -                                   | 48  | -                                    | 57  | ns   |
|   |                   | V <sub>CC</sub> = 5 V; C <sub>L</sub> = 15 pF                                   | -                        | 19   | -   | -                                   | -   | -                                    | -   | ns   |
|   |                   | V <sub>CC</sub> = 6.0 V   | -                        | 18   | 32  | -                                   | 41  | -                                    | 48  | ns   |
|   |                   | $\overline{E1}$ to Y <sub>n</sub> ; see <a href="#">Figure 8</a> <sup>[1]</sup> |                          |  |     |                                     |     |                                      |     |      |
|   |                   | V <sub>CC</sub> = 2.0 V   | -                        | 47   | 145 | -                                   | 180 | -                                    | 220 | ns   |
|   |                   | V <sub>CC</sub> = 4.5 V   | -                        | 17   | 29  | -                                   | 36  | -                                    | 44  | ns   |
|   |                   | V <sub>CC</sub> = 5 V; C <sub>L</sub> = 15 pF                                   | -                        | 14   | -   | -                                   | -   | -                                    | -   | ns   |
|   |                   | V <sub>CC</sub> = 6.0 V   | -                        | 14   | 25  | -                                   | 31  | -                                    | 38  | ns   |
|   |                   | t <sub>t</sub>  | transition time          | E2 to Y <sub>n</sub> ; see <a href="#">Figure 7</a> <sup>[1]</sup> |     |                                     |     |                                      |     |      |
| V <sub>CC</sub> = 2.0 V   | -                 |   |                          | 47   | 145 | -                                   | 180 | -                                    | 220 | ns   |
| V <sub>CC</sub> = 4.5 V   | -                 |   |                          | 17   | 29  | -                                   | 36  | -                                    | 44  | ns   |
| V <sub>CC</sub> = 5 V; C <sub>L</sub> = 15 pF   | -                 |   |                          | 14   | -   | -                                   | -   | -                                    | -   | ns   |
| V <sub>CC</sub> = 6.0 V   | -                 |   |                          | 14   | 25  | -                                   | 31  | -                                    | 38  | ns   |
| Y <sub>n</sub> ; see <a href="#">Figure 7</a> and <a href="#">Figure 8</a> <sup>[2]</sup> |                   |   |                          |  |     |                                     |     |                                      |     |      |
| V <sub>CC</sub> = 2.0 V   | -                 |   |                          | 19   | 75  | -                                   | 95  | -                                    | 110 | ns   |
| V <sub>CC</sub> = 4.5 V   | -                 |   |                          | 7  | 15  | -                                   | 19  | -                                    | 22  | ns   |
| V <sub>CC</sub> = 6.0 V   | -                 | 6   | 13                       | -  | 16  | -                                   | 19  | ns                                   |     |      |

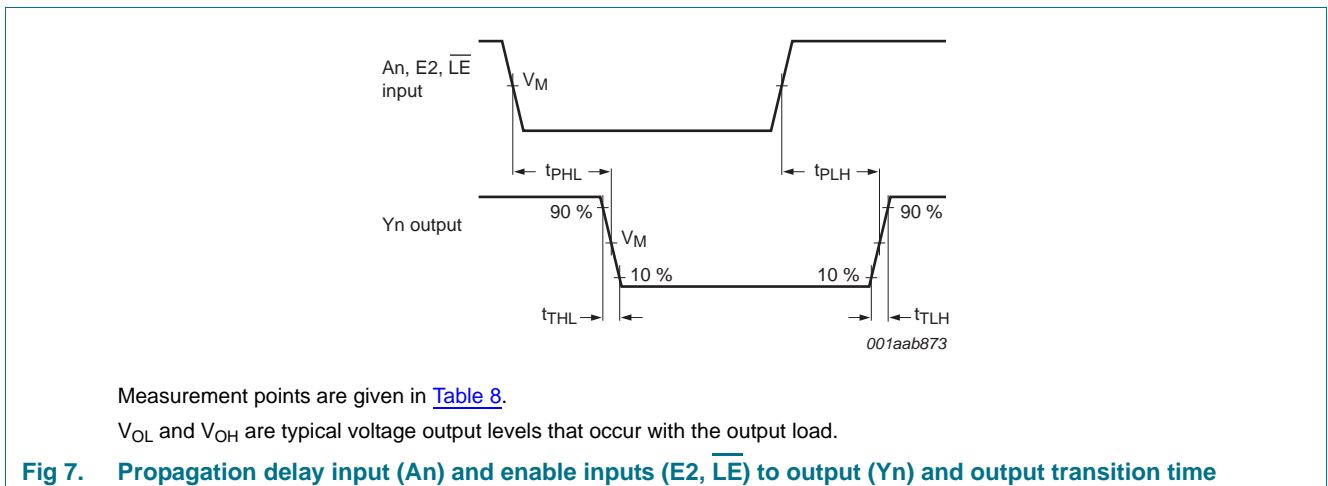
**Table 7. Dynamic characteristics ...continued**

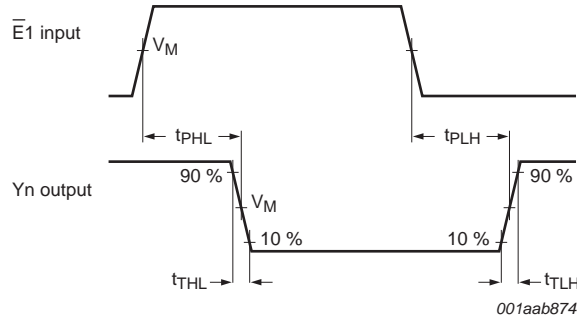
Voltages are referenced to GND (ground = 0 V);  $C_L = 50$  pF unless otherwise specified; for test circuit see [Figure 10](#).

| Symbol   | Parameter                     | Conditions  | $T_{amb} = 25\text{ }^{\circ}\text{C}$ |     |     | $T_{amb} = -40\text{ }^{\circ}\text{C}$<br>to $+85\text{ }^{\circ}\text{C}$ |     | $T_{amb} = -40\text{ }^{\circ}\text{C}$<br>to $+125\text{ }^{\circ}\text{C}$ |     | Unit |
|----------|-------------------------------|---|--|-----|-----|---|-----|--|-----|------|
|          |                               |   | Min                                    | Typ | Max | Min   | Max | Min  | Max |      |
| $t_W$    | pulse width                   | $\overline{LE}$ HIGH; see <a href="#">Figure 9</a>                        |  |     |     |   |     |  |     |      |
|          |                               | $V_{CC} = 2.0\text{ V}$   | 50                                     | 11  | -   | 65  | -   | 75   | -   | ns   |
|          |                               | $V_{CC} = 4.5\text{ V}$   | 10                                     | 4   | -   | 13  | -   | 15   | -   | ns   |
|          |                               | $V_{CC} = 6.0\text{ V}$   | 9                                      | 3   | -   | 11  | -   | 13   | -   | ns   |
| $t_{su}$ | set-up time                   | An to $\overline{LE}$ ; see <a href="#">Figure 9</a>                      |  |     |     |   |     |  |     |      |
|          |                               | $V_{CC} = 2.0\text{ V}$   | 50                                     | 6   | -   | 65  | -   | 75   | -   | ns   |
|          |                               | $V_{CC} = 4.5\text{ V}$   | 10                                     | 2   | -   | 13  | -   | 15   | -   | ns   |
|          |                               | $V_{CC} = 6.0\text{ V}$   | 9                                      | 2   | -   | 11  | -   | 13   | -   | ns   |
| $t_h$    | hold time                     | An to $\overline{LE}$ ; see <a href="#">Figure 9</a>                      |  |     |     |   |     |  |     |      |
|          |                               | $V_{CC} = 2.0\text{ V}$   | 30                                     | 3   | -   | 40  | -   | 45   | -   | ns   |
|          |                               | $V_{CC} = 4.5\text{ V}$   | 6                                      | 1   | -   | 8   | -   | 9  | -   | ns   |
|          |                               | $V_{CC} = 6.0\text{ V}$   | 5                                      | 1   | -   | 7   | -   | 8  | -   | ns   |
| $C_{PD}$ | power dissipation capacitance | $C_L = 50\text{ pF}$ ; $f = 1\text{ MHz}$ ; $V_1 = \text{GND to } V_{CC}$ | [3]                                    | -   | 60  | -   | -   | -  | -   | pF   |

- [1]  $t_{pd}$  is the same as  $t_{PLH}$  and  $t_{PHL}$ .
- [2]  $t_t$  is the same as  $t_{THL}$  and  $t_{TLH}$ .
- [3]  $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu\text{W}$ ).  
 $P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \sum(C_L \times V_{CC}^2 \times f_o)$  where:  
 $f_i$  = input frequency in MHz;  
 $f_o$  = output frequency in MHz;  
 $C_L$  = output load capacitance in pF;  
 $V_{CC}$  = supply voltage in V;  
 $N$  = number of inputs switching;  
 $\sum(C_L \times V_{CC}^2 \times f_o)$  = sum of outputs.

## 11. Waveforms

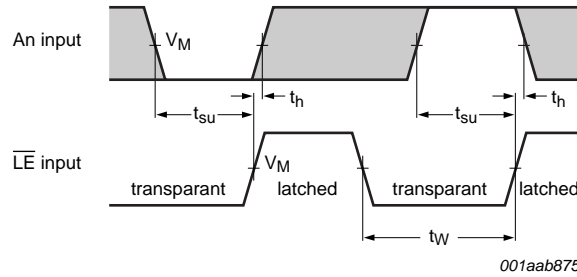




Measurement points are given in [Table 8](#).

$V_{OL}$  and  $V_{OH}$  are typical voltage output levels that occur with the output load.

**Fig 8. Propagation enable inputs ( $\bar{E}1$ ) to output ( $Yn$ ) and output transition time**



Measurement points are given in [Table 8](#).

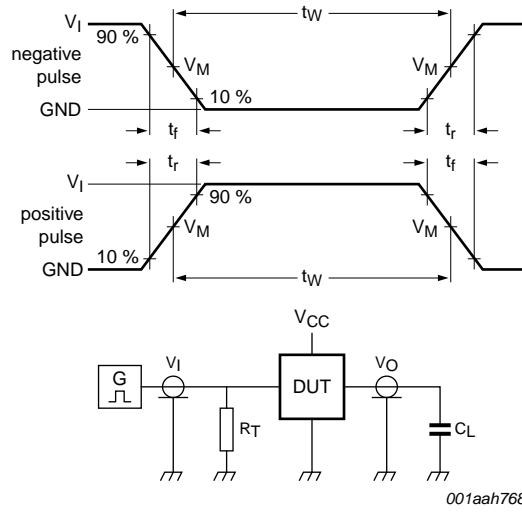
$V_{OL}$  and  $V_{OH}$  are typical voltage output levels that occur with the output load.

**Fig 9. The data input ( $A_n$ ) to latch enable input ( $\bar{LE}$ ) set-up times, latch enable input ( $\bar{LE}$ ) to data input ( $A_n$ ) hold times and latch enable input ( $\bar{LE}$ ) pulse width**

**Table 8. Measurement points**

| Type    | Input       | Output      |
|---------|-------------|-------------|
|         | $V_M$       | $V_M$       |
| 74HC237 | $0.5V_{CC}$ | $0.5V_{CC}$ |





Test data is given in [Table 9](#).

Definitions test circuit:

$R_T$  = Termination resistance should be equal to output impedance  $Z_o$  of the pulse generator.

$C_L$  = Load capacitance including jig and probe capacitance.

$R_L$  = Load resistance.

S1 = Test selection switch.

**Fig 10. Test circuit for measuring switching times**

**Table 9. Test data**

| Type    | Input    |            | Load         | Test               |
|---------|----------|------------|--------------|--------------------|
|         | $V_I$    | $t_r, t_f$ | $C_L$        |                    |
| 74HC237 | $V_{CC}$ | 6.0 ns     | 15 pF, 50 pF | $t_{PLH}, t_{PHL}$ |

## 12. Application information

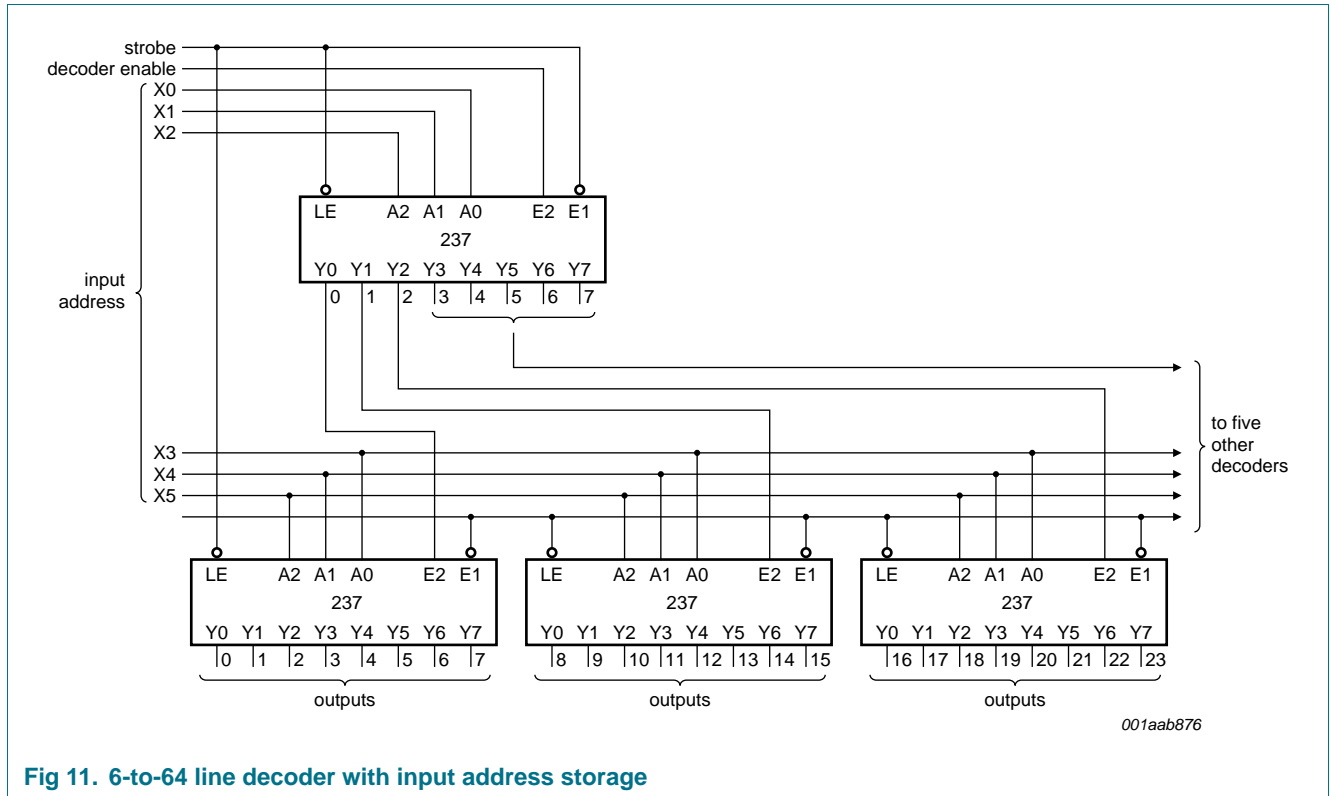


Fig 11. 6-to-64 line decoder with input address storage

13. Package outline

DIP16: plastic dual in-line package; 16 leads (300 mil)

SOT38-4

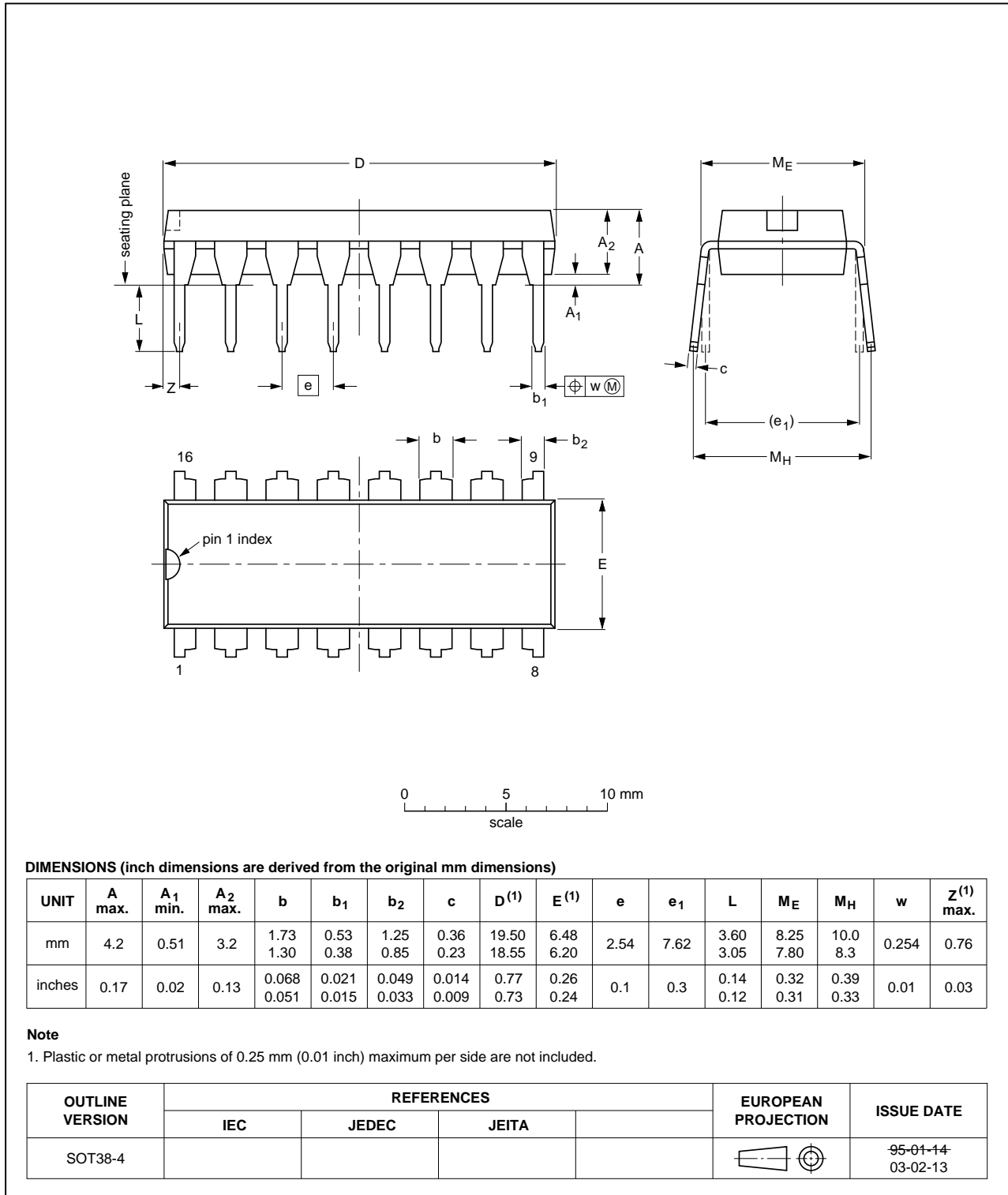


Fig 12. Package outline SOT38-4 (DIP16)

SO16: plastic small outline package; 16 leads; body width 3.9 mm

SOT109-1

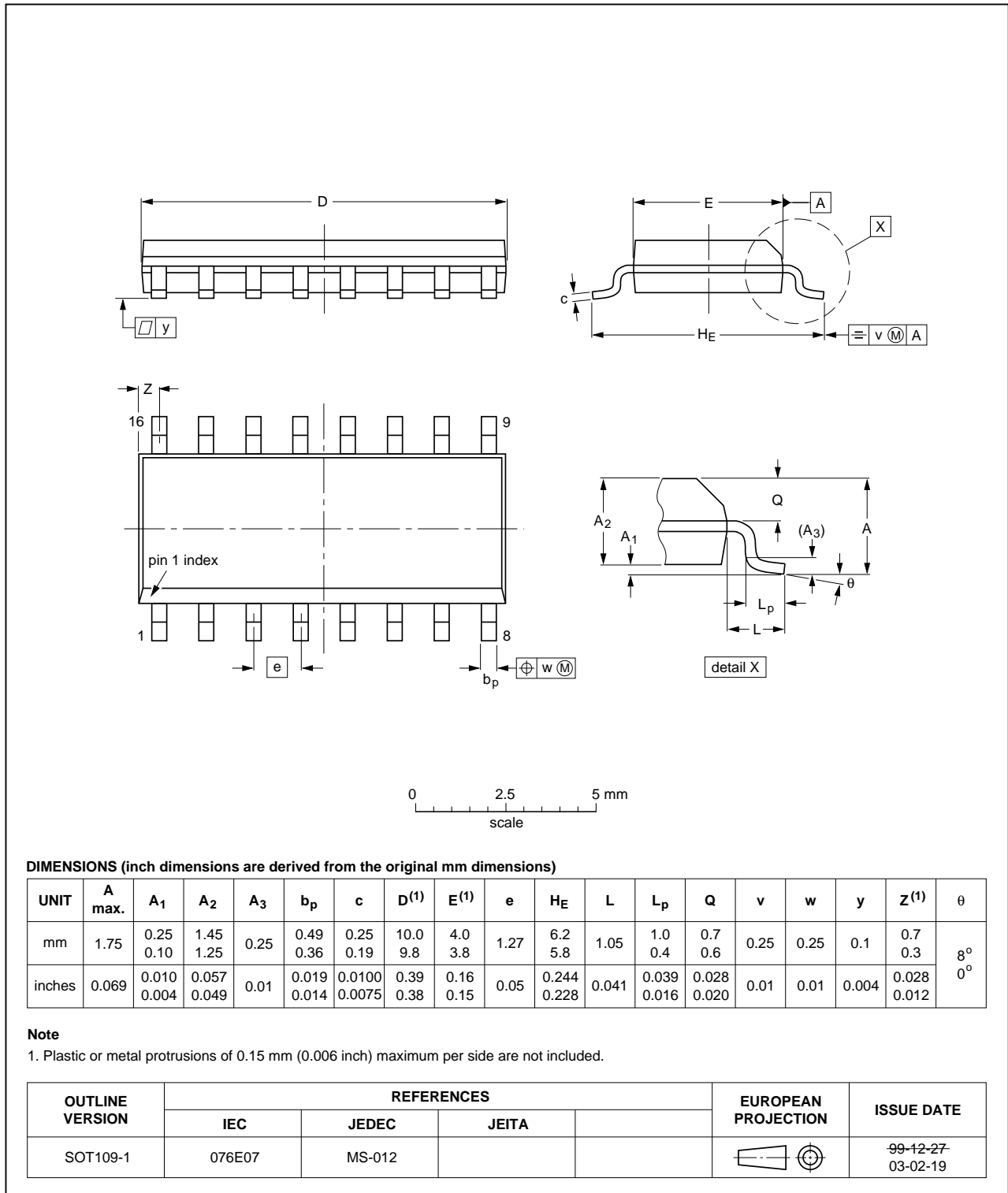


Fig 13. Package outline SOT109-1 (SO16)

SSOP16: plastic shrink small outline package; 16 leads; body width 5.3 mm

SOT338-1

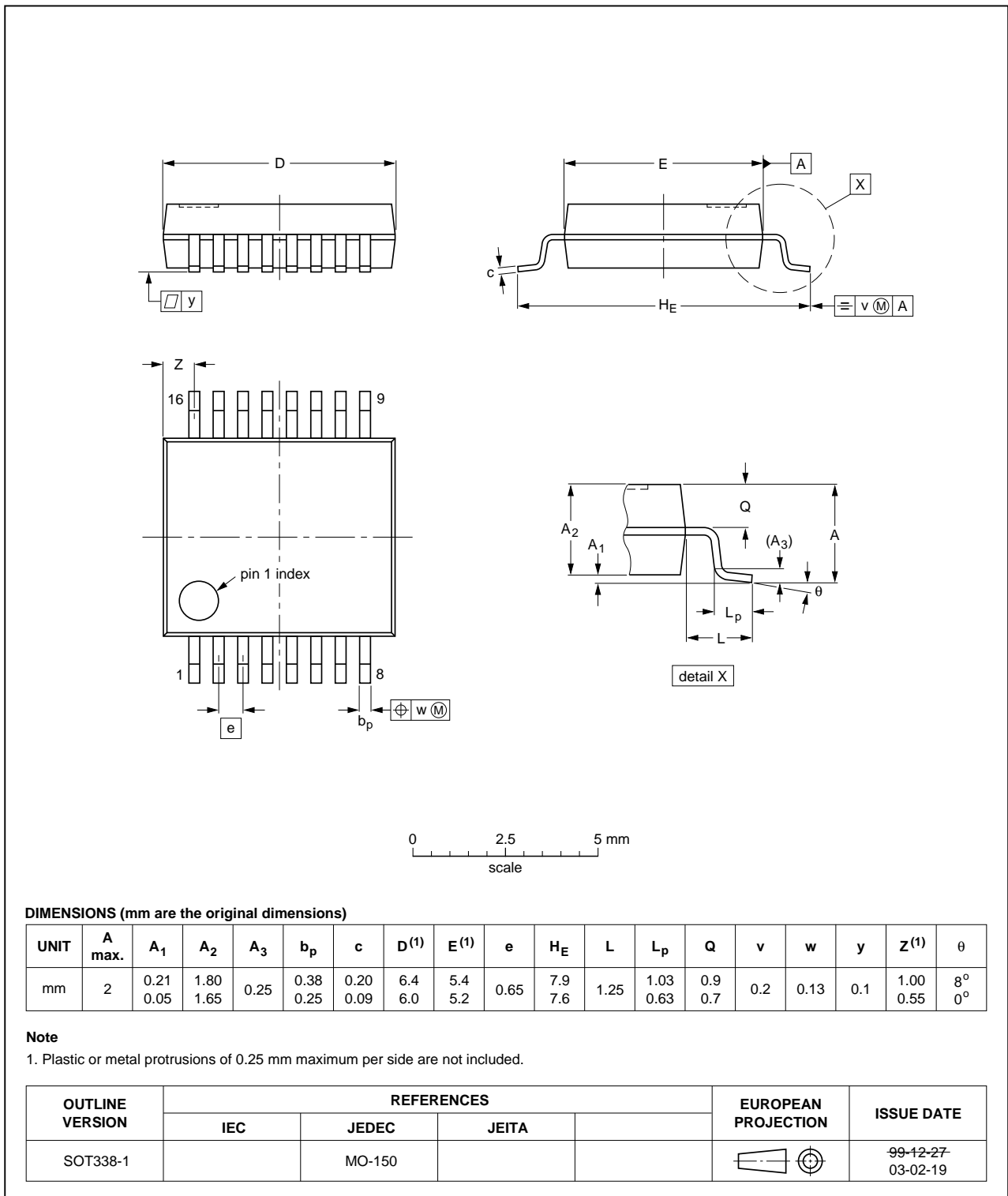


Fig 14. Package outline SOT338-1 (SSOP16)

## 14. Abbreviations

Table 10. Abbreviations

| Acronym | Description                             |
|---------|---|
| CMOS    | Complementary Metal Oxide Semiconductor |
| DUT     | Device Under Test                       |
| ESD     | ElectroStatic Discharge                 |
| HBM     | Human Body Model                        |
| MM      | Machine Model                           |
| TTL     | Transistor-Transistor Logic             |

## 15. Revision history

Table 11. Revision history

| Document ID         | Release date  | Data sheet status     | Change notice | Supersedes          |
|---------------------|---|-----------------------|---------------|---------------------|
| 74HC237 v.6         | 20120823  | Product data sheet    | -             | 74HC237 v.5         |
| Modifications:      | <ul style="list-style-type: none"> <li>Measurement points added to <a href="#">Figure 7</a> and <a href="#">Figure 8</a> (errata).</li> </ul> |                       |               |                     |
| 74HC237 v.5         | 20111209  | Product data sheet    | -             | 74HC237 v.4         |
| Modifications:      | <ul style="list-style-type: none"> <li>Legal pages updated.</li> </ul>  |                       |               |                     |
| 74HC237 v.4         | 20110110  | Product data sheet    | -             | 74HC237 v.3         |
| 74HC237 v.3         | 20041112  | Product data sheet    | -             | 74HC_HCT237_CNV v.2 |
| 74HC_HCT237_CNV v.2 | 19970828  | Product specification | -             | 74HC_HCT237 v.1     |
| 74HC_HCT237 v.1     | 19901201  | Product specification | -             | -                   |

## 16. Legal information

### 16.1 Data sheet status

| Document status <sup>[1][2]</sup> | Product status <sup>[3]</sup> | Definition  |
|-----------------------------------|-------------------------------|---|
| Objective [short] data sheet      | Development                   | This document contains data from the objective specification for product development. |
| Preliminary [short] data sheet    | Qualification                 | This document contains data from the preliminary specification.                       |
| Product [short] data sheet        | Production                    | This document contains the product specification.                                     |

[1] Please consult the most recently issued document before initiating or completing a design.

[2] The term 'short data sheet' is explained in section "Definitions".

[3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL <http://www.nxp.com>.

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