

# 74AHC2G125; 74AHCT2G125

Dual buffer/line driver; 3-state

Rev. 4 — 2 January 2019

Product data sheet

## 1. General description

The 74AHC2G125 and 74AHCT2G125 are high-speed Si-gate CMOS devices. They provide a dual non-inverting buffer/line driver with 3-state output. The 3-state output is controlled by the output enable input (nOE). A HIGH at nOE causes the output to assume a high-impedance OFF-state.

The AHC device has CMOS input switching levels and supply voltage range 2 V to 5.5 V.

The AHCT device has TTL input switching levels and supply voltage range 4.5 V to 5.5 V.

## 2. Features and benefits

- Symmetrical output impedance
- High noise immunity
- Low power dissipation
- Balanced propagation delays
- Multiple package options
- ESD protection:
  - HBM JESD22-A114E: exceeds 2000 V
  - MM JESD22-A115-A: exceeds 200 V
  - CDM JESD22-C101C: exceeds 1000 V
- Specified from -40 °C to +125 °C

## 3. Ordering information

Table 1. Ordering information

| Type number   | Package           |        |                                                                                            |          |
|---------------|-------------------|--------|--------------------------------------------------------------------------------------------|----------|
|               | Temperature range | Name   | Description                                                                                | Version  |
| 74AHC2G125DP  | -40 °C to +125 °C | TSSOP8 | plastic thin shrink small outline package;<br>8 leads; body width 3 mm; lead length 0.5 mm | SOT505-2 |
| 74AHCT2G125DP |                   |        |                                                                                            |          |
| 74AHC2G125DC  | -40 °C to +125 °C | VSSOP8 | plastic very thin shrink small outline package;<br>8 leads; body width 2.3 mm              | SOT765-1 |
| 74AHCT2G125DC |                   |        |                                                                                            |          |

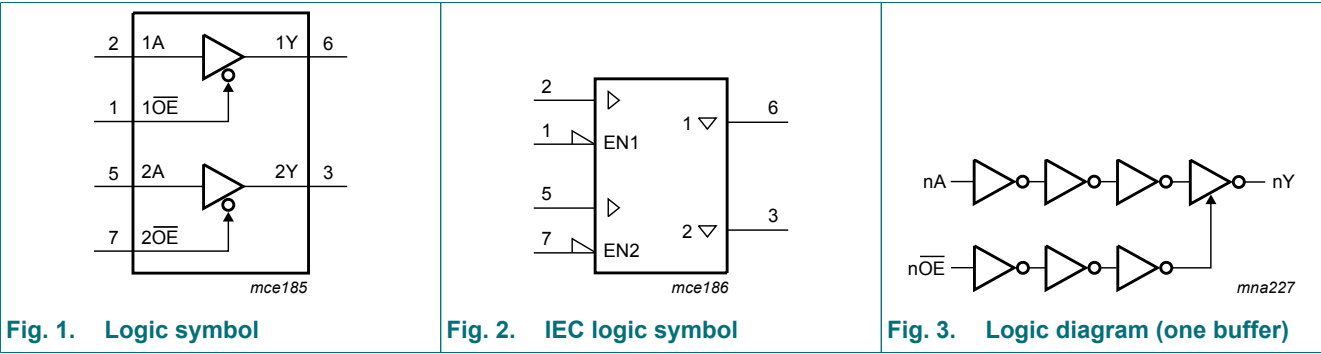
## 4. Marking

Table 2. Marking codes

| Type number   | Marking <sup>[1]</sup> |
|---------------|------------------------|
| 74AHC2G125DP  | A25                    |
| 74AHCT2G125DP | C25                    |
| 74AHC2G125DC  | A25                    |
| 74AHCT2G125DC | C25                    |

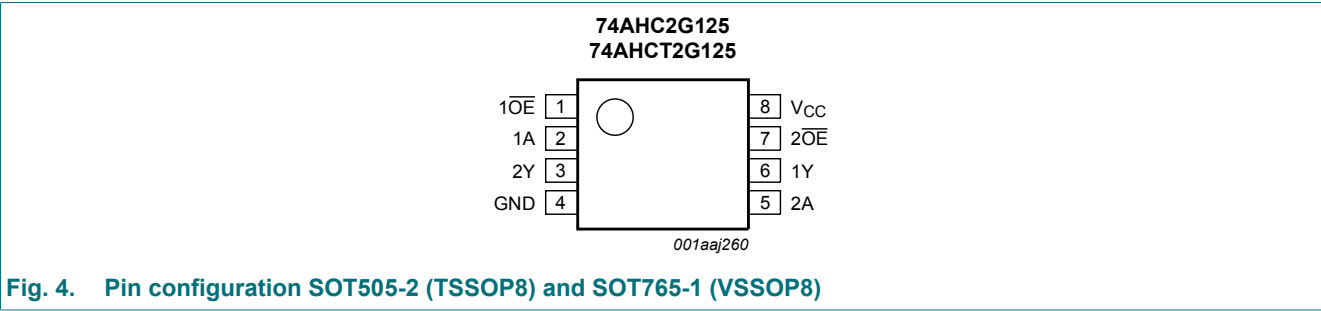
[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

5. Functional diagram



6. Pinning information

6.1. Pinning



6.2. Pin description

Table 3. Pin description

| Symbol   | Pin  | Description                      |
|----------|------|----------------------------------|
| 1OE, 2OE | 1, 7 | output enable input (active LOW) |
| 1A, 2A   | 2, 5 | data input                       |
| GND      | 4    | ground (0 V)                     |
| 1Y, 2Y   | 6, 3 | data output                      |
| VCC      | 8    | supply voltage                   |

7. Functional description

Table 4. Function table

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

| Control | Input | Output |
|---------|-------|--------|
| nOE     | nA    | nY     |
| L       | L     | L      |
| L       | H     | H      |
| H       | X     | Z      |

## 8. Limiting values

**Table 5. 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 |
|-----------|-------------------------|----------------------------------------------|------|------|------|
| $V_{CC}$  | supply voltage          |                                              | -0.5 | +7.0 | V    |
| $V_I$     | input voltage           |                                              | -0.5 | +7.0 | V    |
| $I_{IK}$  | input clamping current  | $V_I < -0.5$ V [1]                           | -20  | -    | mA   |
| $I_{OK}$  | output clamping current | $V_O < -0.5$ V or $V_O > V_{CC} + 0.5$ V [1] | -    | ±20  | mA   |
| $I_O$     | output current          | $-0.5$ V < $V_O$ < $V_{CC} + 0.5$ V          | -    | ±25  | mA   |
| $I_{CC}$  | supply current          |                                              | -    | 75   | mA   |
| $I_{GND}$ | ground current          |                                              | -75  | -    | mA   |
| $T_{stg}$ | storage temperature     |                                              | -65  | +150 | °C   |
| $P_{tot}$ | total power dissipation | $T_{amb} = -40$ °C to +125 °C [2]            | -    | 250  | mW   |

[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.

[2] For TSSOP8 package: above 55 °C the value of  $P_{tot}$  derates linearly with 2.5 mW/K.

For VSSOP8 package: above 110 °C the value of  $P_{tot}$  derates linearly with 8 mW/K.

## 9. Recommended operating conditions

**Table 6. Recommended operating conditions**

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

| Symbol              | Parameter                           | Conditions               | 74AHC2G125 |     |          | 74AHCT2G125 |     |          | Unit |
|---------------------|-------------------------------------|--------------------------|------------|-----|----------|-------------|-----|----------|------|
|                     |                                     |                          | Min        | Typ | Max      | Min         | Typ | Max      |      |
| $V_{CC}$            | supply voltage                      |                          | 2.0        | 5.0 | 5.5      | 4.5         | 5.0 | 5.5      | V    |
| $V_I$               | input voltage                       |                          | 0          | -   | 5.5      | 0           | -   | 5.5      | V    |
| $V_O$               | output voltage                      |                          | 0          | -   | $V_{CC}$ | 0           | -   | $V_{CC}$ | V    |
| $T_{amb}$           | ambient temperature                 |                          | -40        | +25 | +125     | -40         | +25 | +125     | °C   |
| $\Delta t/\Delta V$ | input transition rise and fall rate | $V_{CC} = 3.3$ V ± 0.3 V | -          | -   | 100      | -           | -   | -        | ns/V |
|                     |                                     | $V_{CC} = 5.0$ V ± 0.5 V | -          | -   | 20       | -           | -   | 20       | ns/V |

## 10. Static characteristics

**Table 7. Static characteristics**

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

| Symbol          | Parameter                | Conditions              | 25 °C |     |      | -40 °C to +85 °C |      | -40 °C to +125 °C |      | Unit |
|-----------------|--------------------------|-------------------------|-------|-----|------|------------------|------|-------------------|------|------|
|                 |                          |                         | Min   | Typ | Max  | Min              | Max  | Min               | Max  |      |
| 74AHC2G125      |                          |                         |       |     |      |                  |      |                   |      |      |
| V <sub>IH</sub> | HIGH-level input voltage | V <sub>CC</sub> = 2.0 V | 1.5   | -   | -    | 1.5              | -    | 1.5               | -    | V    |
|                 |                          | V <sub>CC</sub> = 3.0 V | 2.1   | -   | -    | 2.1              | -    | 2.1               | -    | V    |
|                 |                          | V <sub>CC</sub> = 5.5 V | 3.85  | -   | -    | 3.85             | -    | 3.85              | -    | V    |
| V <sub>IL</sub> | LOW-level input voltage  | V <sub>CC</sub> = 2.0 V | -     | -   | 0.5  | -                | 0.5  | -                 | 0.5  | V    |
|                 |                          | V <sub>CC</sub> = 3.0 V | -     | -   | 0.9  | -                | 0.9  | -                 | 0.9  | V    |
|                 |                          | V <sub>CC</sub> = 5.5 V | -     | -   | 1.65 | -                | 1.65 | -                 | 1.65 | V    |

| Symbol             | Parameter                 | Conditions                                                                                                                         | 25 °C |     |      | -40 °C to +85 °C |      | -40 °C to +125 °C |      | Unit |
|--------------------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------|-------|-----|------|------------------|------|-------------------|------|------|
|                    |                           |                                                                                                                                    | Min   | Typ | Max  | Min              | Max  | Min               | Max  |      |
| V <sub>OH</sub>    | HIGH-level output voltage | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>                                                                                |       |     |      |                  |      |                   |      |      |
|                    |                           | I <sub>O</sub> = -50 µA; V <sub>CC</sub> = 2.0 V                                                                                   | 1.9   | 2.0 | -    | 1.9              | -    | 1.9               | -    | V    |
|                    |                           | I <sub>O</sub> = -50 µA; V <sub>CC</sub> = 3.0 V                                                                                   | 2.9   | 3.0 | -    | 2.9              | -    | 2.9               | -    | V    |
|                    |                           | I <sub>O</sub> = -50 µA; V <sub>CC</sub> = 4.5 V                                                                                   | 4.4   | 4.5 | -    | 4.4              | -    | 4.4               | -    | V    |
|                    |                           | I <sub>O</sub> = -4.0 mA; V <sub>CC</sub> = 3.0 V                                                                                  | 2.58  | -   | -    | 2.48             | -    | 2.40              | -    | V    |
|                    |                           | I <sub>O</sub> = -8.0 mA; V <sub>CC</sub> = 4.5 V                                                                                  | 3.94  | -   | -    | 3.8              | -    | 3.70              | -    | V    |
| V <sub>OL</sub>    | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub>                                                                                |       |     |      |                  |      |                   |      |      |
|                    |                           | I <sub>O</sub> = 50 µA; V <sub>CC</sub> = 2.0 V                                                                                    | -     | 0   | 0.1  | -                | 0.1  | -                 | 0.1  | V    |
|                    |                           | I <sub>O</sub> = 50 µA; V <sub>CC</sub> = 3.0 V                                                                                    | -     | 0   | 0.1  | -                | 0.1  | -                 | 0.1  | V    |
|                    |                           | I <sub>O</sub> = 50 µA; V <sub>CC</sub> = 4.5 V                                                                                    | -     | 0   | 0.1  | -                | 0.1  | -                 | 0.1  | V    |
|                    |                           | I <sub>O</sub> = 4.0 mA; V <sub>CC</sub> = 3.0 V                                                                                   | -     | -   | 0.36 | -                | 0.44 | -                 | 0.55 | V    |
|                    |                           | I <sub>O</sub> = 8.0 mA; V <sub>CC</sub> = 4.5 V                                                                                   | -     | -   | 0.36 | -                | 0.44 | -                 | 0.55 | V    |
| I <sub>OZ</sub>    | OFF-state output current  | V <sub>I</sub> = V <sub>CC</sub> or GND; V <sub>CC</sub> = 5.5 V                                                                   | -     | -   | 0.25 | -                | 2.5  | -                 | 10   | µA   |
| I <sub>I</sub>     | input leakage current     | V <sub>I</sub> = 5.5 V or GND;<br>V <sub>CC</sub> = 0 V to 5.5 V                                                                   | -     | -   | 0.1  | -                | 1.0  | -                 | 2.0  | 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> = 5.5 V                                          | -     | -   | 1.0  | -                | 10   | -                 | 40   | µA   |
| C <sub>I</sub>     | input capacitance         |                                                                                                                                    | -     | 1.5 | 10   | -                | 10   | -                 | 10   | pF   |
| <b>74AHCT2G125</b> |                           |                                                                                                                                    |       |     |      |                  |      |                   |      |      |
| V <sub>IH</sub>    | HIGH-level input voltage  | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                                   | 2.0   | -   | -    | 2.0              | -    | 2.0               | -    | V    |
| V <sub>IL</sub>    | LOW-level input voltage   | V <sub>CC</sub> = 4.5 V to 5.5 V                                                                                                   | -     | -   | 0.8  | -                | 0.8  | -                 | 0.8  | V    |
| V <sub>OH</sub>    | HIGH-level output voltage | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>CC</sub> = 4.5 V                                                      |       |     |      |                  |      |                   |      |      |
|                    |                           | I <sub>O</sub> = -50 µA                                                                                                            | 4.4   | 4.5 | -    | 4.4              | -    | 4.4               | -    | V    |
|                    |                           | I <sub>O</sub> = -8.0 mA                                                                                                           | 3.94  | -   | -    | 3.8              | -    | 3.70              | -    | V    |
| V <sub>OL</sub>    | LOW-level output voltage  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>CC</sub> = 4.5 V                                                      |       |     |      |                  |      |                   |      |      |
|                    |                           | I <sub>O</sub> = 50 µA                                                                                                             | -     | 0   | 0.1  | -                | 0.1  | -                 | 0.1  | V    |
|                    |                           | I <sub>O</sub> = 8.0 mA                                                                                                            | -     | -   | 0.36 | -                | 0.44 | -                 | 0.55 | V    |
| I <sub>OZ</sub>    | OFF-state output current  | V <sub>I</sub> = V <sub>CC</sub> or GND; V <sub>CC</sub> = 5.5 V                                                                   | -     | -   | 0.25 | -                | 2.5  | -                 | 10   | µA   |
| I <sub>I</sub>     | input leakage current     | V <sub>I</sub> = 5.5 V or GND;<br>V <sub>CC</sub> = 0 V to 5.5 V                                                                   | -     | -   | 0.1  | -                | 1.0  | -                 | 2.0  | 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> = 5.5 V                                          | -     | -   | 1.0  | -                | 10   | -                 | 40   | µA   |
| ΔI <sub>CC</sub>   | additional supply current | per input pin; V <sub>I</sub> = 3.4 V;<br>other inputs at V <sub>CC</sub> or GND;<br>I <sub>O</sub> = 0 A; V <sub>CC</sub> = 5.5 V | -     | -   | 1.35 | -                | 1.5  | -                 | 1.5  | mA   |
| C <sub>I</sub>     | input capacitance         |                                                                                                                                    | -     | 1.5 | 10   | -                | 10   | -                 | 10   | pF   |

## 11. Dynamic characteristics

**Table 8. Dynamic characteristics**

$GND = 0\text{ V}$ ; for test circuit see Fig. 7.

| Symbol           | Parameter                     | Conditions                                                                                                 | 25 °C |         |      | -40 °C to +85 °C |      | -40 °C to +125 °C |      | Unit |
|------------------|-------------------------------|------------------------------------------------------------------------------------------------------------|-------|---------|------|------------------|------|-------------------|------|------|
|                  |                               |                                                                                                            | Min   | Typ [1] | Max  | Min              | Max  | Min               | Max  |      |
| 74AHC2G125       |                               |                                                                                                            |       |         |      |                  |      |                   |      |      |
| t <sub>pd</sub>  | propagation delay             | nA to nY; see Fig. 5 [2]                                                                                   |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 15 pF                                                   | -     | 4.7     | 8.0  | 1.0              | 9.5  | 1.0               | 11.5 | ns   |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 50 pF                                                   | -     | 6.6     | 11.5 | 1.0              | 13.0 | 1.0               | 14.5 | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 3.4     | 5.5  | 1.0              | 6.5  | 1.0               | 7.0  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 4.8     | 7.5  | 1.0              | 8.5  | 1.0               | 9.5  | ns   |
| t <sub>en</sub>  | enable time                   | nOE to nY; see Fig. 6 [2]                                                                                  |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 15 pF                                                   | -     | 5.0     | 8.0  | 1.0              | 9.5  | 1.0               | 11.5 | ns   |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 50 pF                                                   | -     | 6.9     | 11.5 | 1.0              | 13.0 | 1.0               | 14.5 | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 3.6     | 5.1  | 1.0              | 6.0  | 1.0               | 6.5  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 4.9     | 7.5  | 1.0              | 8.5  | 1.0               | 9.5  | ns   |
| t <sub>dis</sub> | disable time                  | nOE to nY; see Fig. 6 [2]                                                                                  |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 15 pF                                                   | -     | 6.0     | 9.7  | 1.0              | 11.5 | 1.0               | 12.5 | ns   |
|                  |                               | V <sub>CC</sub> = 3.0 V to 3.6 V; C <sub>L</sub> = 50 pF                                                   | -     | 8.3     | 13.2 | 1.0              | 15.0 | 1.0               | 16.5 | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 4.1     | 6.8  | 1.0              | 8.0  | 1.0               | 8.5  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 5.7     | 8.8  | 1.0              | 10.0 | 1.0               | 11.0 | ns   |
| C <sub>PD</sub>  | power dissipation capacitance | per buffer; C <sub>L</sub> = 50 pF; f <sub>i</sub> = 1 MHz; [3]<br>V <sub>i</sub> = GND to V <sub>CC</sub> | -     | 9       | -    | -                | -    | -                 | -    | pF   |
| 74AHCT2G125      |                               |                                                                                                            |       |         |      |                  |      |                   |      |      |
| t <sub>pd</sub>  | propagation delay             | nA to nY; see Fig. 5 [2]                                                                                   |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 3.4     | 5.5  | 1.0              | 6.5  | 1.0               | 6.5  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 4.8     | 7.5  | 1.0              | 8.5  | 1.0               | 8.5  | ns   |
| t <sub>en</sub>  | enable time                   | nOE to nY; see Fig. 6 [2]                                                                                  |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 3.9     | 5.1  | 1.0              | 6.0  | 1.0               | 6.0  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 5.1     | 7.5  | 1.0              | 8.5  | 1.0               | 8.5  | ns   |
| t <sub>dis</sub> | disable time                  | nOE to nY; see Fig. 6 [2]                                                                                  |       |         |      |                  |      |                   |      |      |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF                                                   | -     | 4.5     | 6.8  | 1.0              | 8.0  | 1.0               | 8.0  | ns   |
|                  |                               | V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF                                                   | -     | 6.1     | 8.8  | 1.0              | 10.0 | 1.0               | 10.0 | ns   |
| C <sub>PD</sub>  | power dissipation capacitance | per buffer; C <sub>L</sub> = 50 pF; f <sub>i</sub> = 1 MHz; [3]<br>V <sub>i</sub> = GND to V <sub>CC</sub> | -     | 11      | -    | -                | -    | -                 | -    | pF   |

[1] Typical values are measured at  $T_{amb} = 25\text{ °C}$  and  $V_{CC} = 3.3\text{ V}$  and  $5.0\text{ V}$  respectively.

[2]  $t_{pd}$  is the same as  $t_{PLH}$  and  $t_{PHL}$ ;  $t_{en}$  is the same as  $t_{PZL}$  and  $t_{PZH}$ ;  $t_{dis}$  is the same as  $t_{PLZ}$  and  $t_{PHZ}$ .

[3]  $C_{PD}$  is used to determine the dynamic power dissipation  $P_D$  ( $\mu\text{W}$ ).

$P_D = C_{PD} \times V_{CC}^2 \times f_i + \sum (C_L \times V_{CC}^2 \times f_o)$  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 Volts.

11.1. Waveforms and test circuit

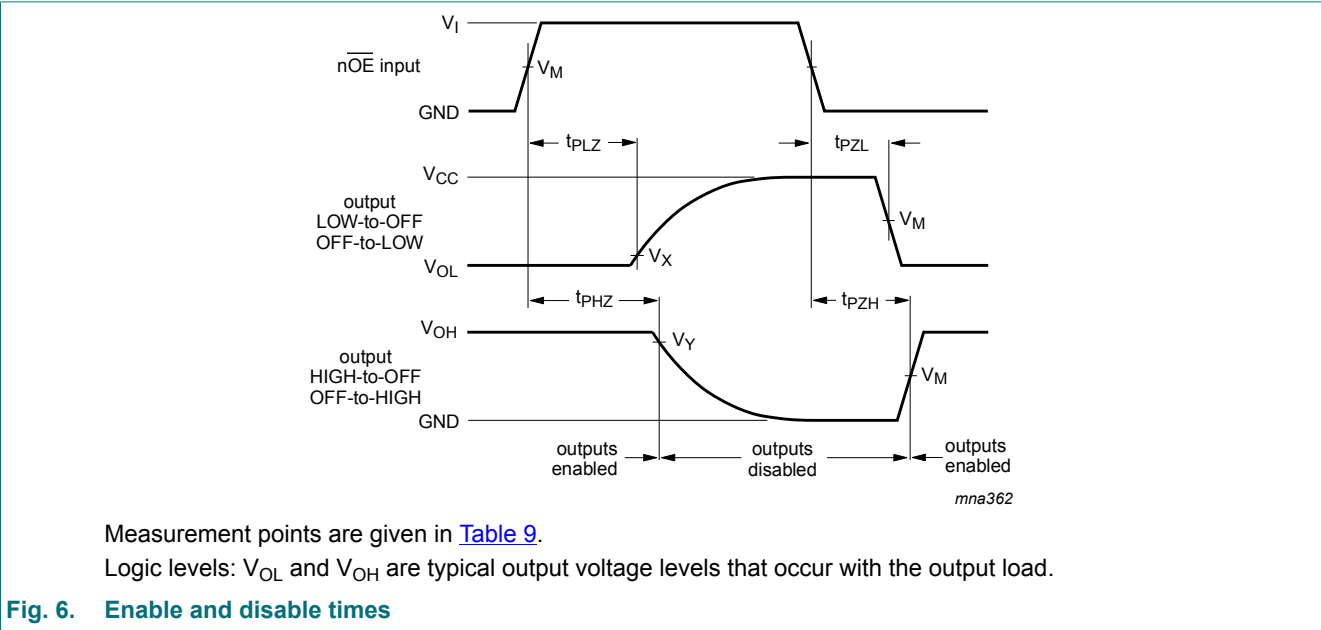
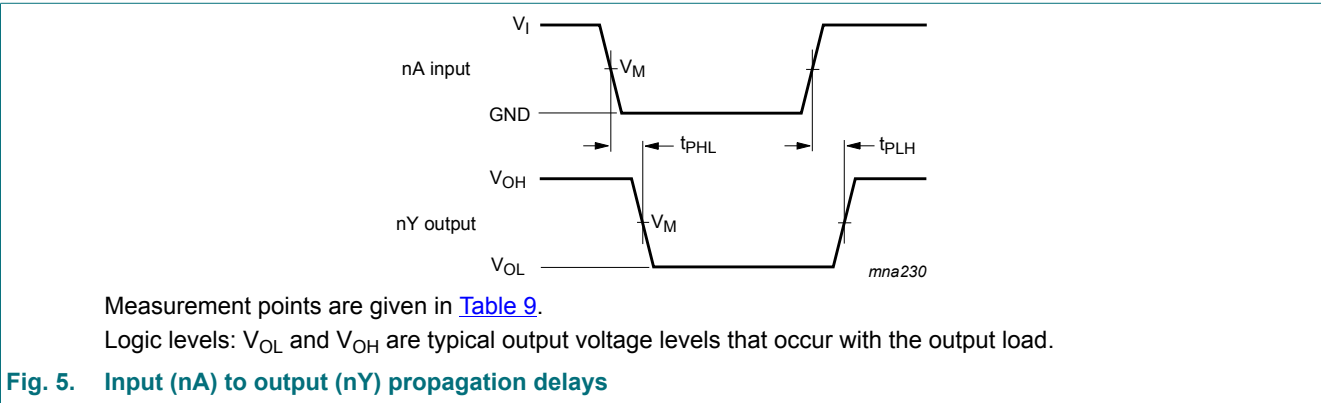


Table 9. Measurement points

| Type        | Input       | Output      |                         |                         |
|-------------|-------------|-------------|-------------------------|-------------------------|
|             | $V_M$       | $V_M$       | $V_X$                   | $V_Y$                   |
| 74AHC2G125  | $0.5V_{CC}$ | $0.5V_{CC}$ | $V_{OL} + 0.3\text{ V}$ | $V_{OH} - 0.3\text{ V}$ |
| 74AHCT2G125 | 1.5 V       | $0.5V_{CC}$ | $V_{OL} + 0.3\text{ V}$ | $V_{OH} - 0.3\text{ V}$ |

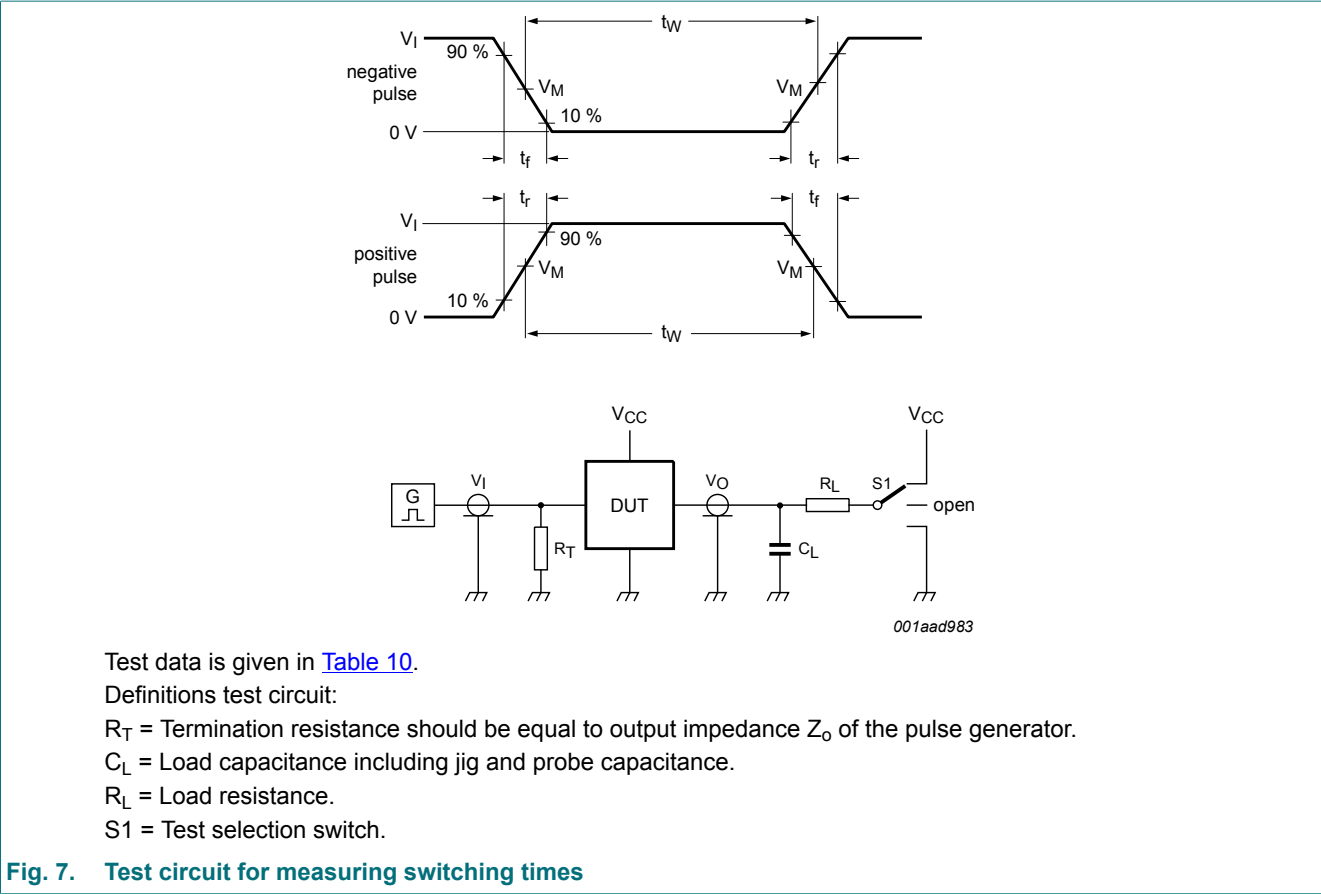


Table 10. Test data

| Type        | Input    |                     | Load         |              | S1 position        |                    |                    |
|-------------|----------|---------------------|--------------|--------------|--------------------|--------------------|--------------------|
|             | $V_I$    | $t_r, t_f$          | $C_L$        | $R_L$        | $t_{PHL}, t_{PLH}$ | $t_{PZH}, t_{PHZ}$ | $t_{PZL}, t_{PLZ}$ |
| 74AHC2G125  | $V_{CC}$ | $\leq 3 \text{ ns}$ | 15 pF, 50 pF | 1 k $\Omega$ | open               | GND                | $V_{CC}$           |
| 74AHCT2G125 | 3 V      | $\leq 3 \text{ ns}$ | 15 pF, 50 pF | 1 k $\Omega$ | open               | GND                | $V_{CC}$           |

12. Package outline

TSSOP8: plastic thin shrink small outline package; 8 leads; body width 3 mm; lead length 0.5 mm    SOT505-2

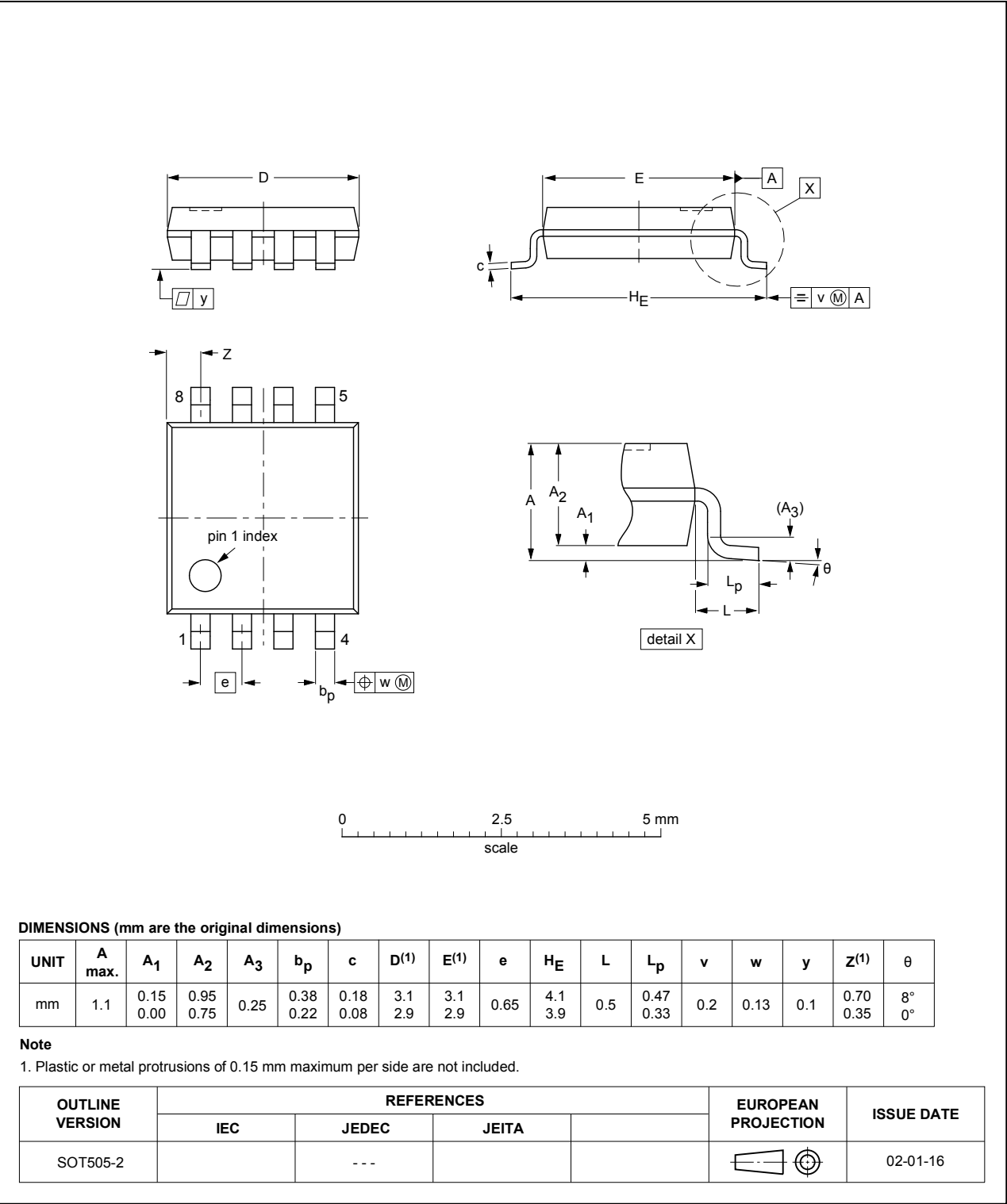


Fig. 8. Package outline SOT505-2 (TSSOP8)



VSSOP8: plastic very thin shrink small outline package; 8 leads; body width 2.3 mm

SOT765-1

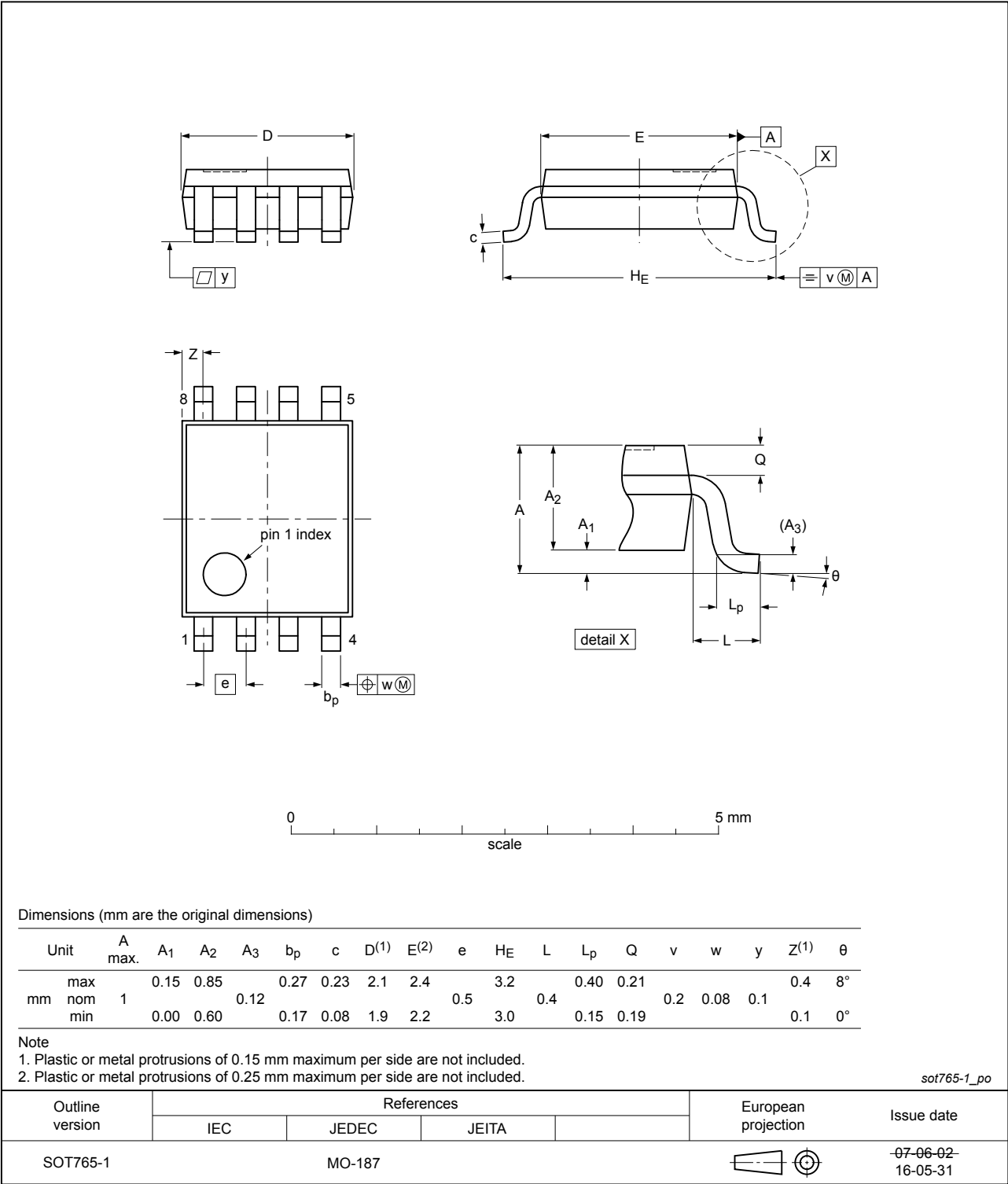


Fig. 9. Package outline SOT765-1 (VSSOP8)

## 13. Abbreviations

Table 11. Abbreviations

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

## 14. Revision history

Table 12. Revision history

| Document ID         | Release date                                                                                                                                                                                                                                                                                                                                                                                   | Data sheet status     | Change notice | Supersedes          |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|---------------------|
| 74AHC_AHCT2G125 v.4 | 20190102                                                                                                                                                                                                                                                                                                                                                                                       | Product data sheet    | -             | 74AHC_AHCT2G125 v.3 |
| Modifications:      | <ul style="list-style-type: none"> <li>The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia.</li> <li>Legal texts have been adapted to the new company name where appropriate.</li> <li>Type numbers 74AHC2G125GD and 74AHCT2G125GD (SOT996-2) removed.</li> <li>Package outline drawing <a href="#">SOT765-1</a> (VSSOP8) updated.</li> </ul> |                       |               |                     |
| 74AHC_AHCT2G125 v.3 | 20130506                                                                                                                                                                                                                                                                                                                                                                                       | Product data sheet    | -             | 74AHC_AHCT2G125 v.2 |
| Modifications:      | <ul style="list-style-type: none"> <li>For type number 74AHC2G125GD and 74AHCT2G125GD XSON8U has changed to XSON8.</li> </ul>                                                                                                                                                                                                                                                                  |                       |               |                     |
| 74AHC_AHCT2G125 v.2 | 20081222                                                                                                                                                                                                                                                                                                                                                                                       | Product data sheet    | -             | 74AHC_AHCT2G125 v.1 |
| Modifications:      | <ul style="list-style-type: none"> <li>The format of this data sheet has been redesigned to comply with the new identity guidelines of NXP Semiconductors.</li> <li>Legal texts have been adapted to the new company name where appropriate.</li> <li>Added type number 74AHC2G125GD and 74AHCT2G125GD (XSON8U package).</li> </ul>                                                            |                       |               |                     |
| 74AHC_AHCT2G125 v.1 | 20040113                                                                                                                                                                                                                                                                                                                                                                                       | Product specification | -             | -                   |

## 15. Legal information

### Data sheet status

| Document status<br>[1][2]      | Product status [3] | 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".
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