

# 74LVC125A

Quad buffer/line driver with 5 V tolerant input/outputs; 3-state  
Rev. 8 — 5 May 2020

Product data sheet

## 1. General description

The 74LVC125A consists of four non-inverting buffers/line drivers with 3-state outputs (nY) that are controlled by the output enable input (nOE). A HIGH at nOE causes the outputs to assume a high-impedance OFF-state.

Inputs can be driven from either 3.3 V or 5 V devices. When disabled, up to 5.5 V can be applied to the outputs.

## 2. Features and benefits

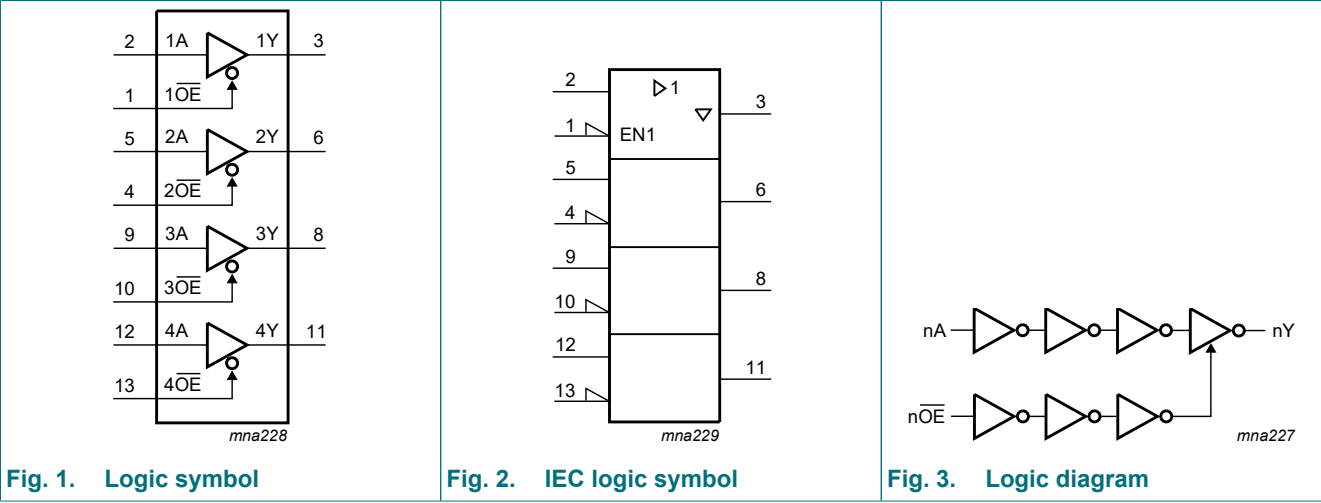
- 5 V tolerant inputs/outputs for interfacing with 5 V logic
- Wide supply voltage range from 1.2 V to 3.6 V
- CMOS low power consumption
- Direct interface with TTL levels
- Complies with JEDEC standard:
  - JESD8-7A (1.65 V to 1.95 V)
  - JESD8-5A (2.3 V to 2.7 V)
  - JESD8-C/JESD36 (2.7 V to 3.6 V)
- ESD protection:
  - HBM JESD22-A114F exceeds 2000 V
  - MM JESD22-A115-B exceeds 200 V
  - CDM JESD22-C101E exceeds 1000 V
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C

## 3. Ordering information

Table 1. Ordering information

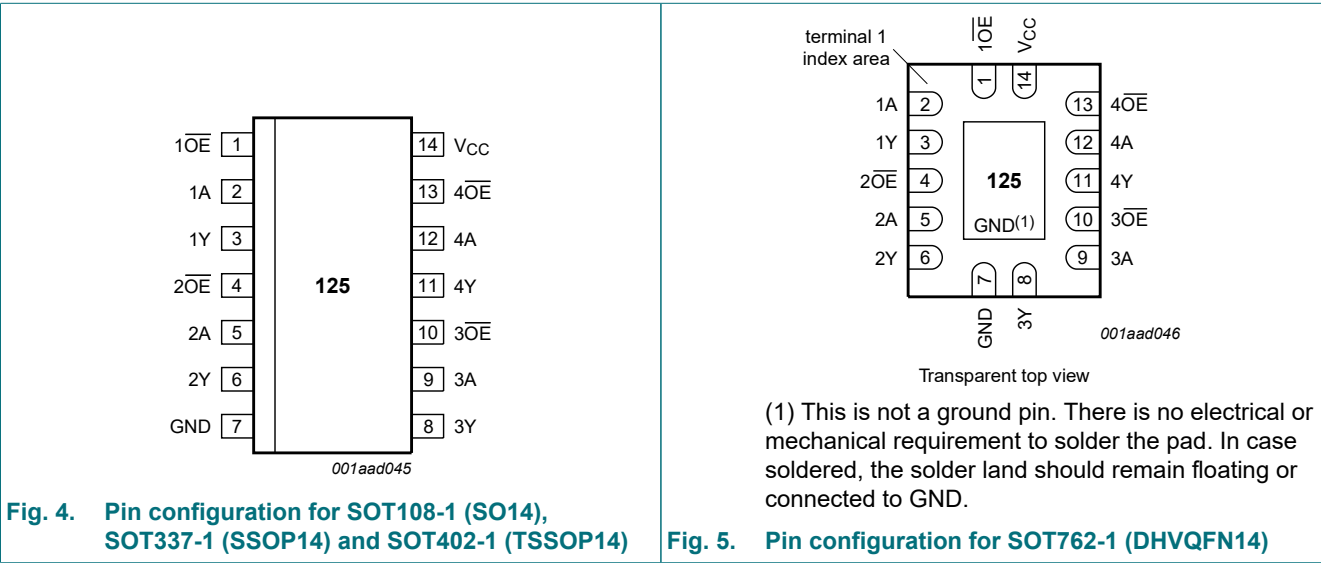
| Type number | Package           |          |                                                                                                                              |          |
|-------------|-------------------|----------|------------------------------------------------------------------------------------------------------------------------------|----------|
|             | Temperature range | Name     | Description                                                                                                                  | Version  |
| 74LVC125AD  | -40 °C to +125 °C | SO14     | plastic small outline package; 14 leads; body width 3.9 mm                                                                   | SOT108-1 |
| 74LVC125ADB | -40 °C to +125 °C | SSOP14   | plastic shrink small outline package; 14 leads; body width 5.3 mm                                                            | SOT337-1 |
| 74LVC125APW | -40 °C to +125 °C | TSSOP14  | plastic thin shrink small outline package; 14 leads; body width 4.4 mm                                                       | SOT402-1 |
| 74LVC125ABQ | -40 °C to +125 °C | DHVQFN14 | plastic dual in-line compatible thermal enhanced very thin quad flat package; no leads; 14 terminals; body 2.5 × 3 × 0.85 mm | SOT762-1 |

4. Functional diagram



5. Pinning information

5.1. Pinning



5.2. Pin description

Table 2. Pin description

| Symbol             | Pin          | Description                    |
|--------------------|--------------|--------------------------------|
| 1OE, 2OE, 3OE, 4OE | 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 (0 V)                   |
| VCC                | 14           | supply voltage                 |

## 6. Functional description

**Table 3. Function selection**

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

| Inputs |    | Output |
|--------|----|--------|
| nOE    | nA | nY     |
| L      | L  | L      |
| L      | H  | H      |
| H      | X  | Z      |

## 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 |
|-----------|-------------------------|-------------------------------|------|----------------|------|
| $V_{CC}$  | supply voltage          |                               | -0.5 | +6.5           | V    |
| $I_{IK}$  | input clamping current  | $V_I < 0$ V                   | -50  | -              | mA   |
| $V_I$     | input voltage           | [1]                           | -0.5 | +6.5           | V    |
| $I_{OK}$  | output clamping current | $V_O > V_{CC}$ or $V_O < 0$ V | -    | ±50            | mA   |
| $V_O$     | output voltage          | output HIGH or LOW-state      | [2]  | $V_{CC} + 0.5$ | V    |
|           |                         | output 3-state                | [2]  | +6.5           | V    |
| $I_O$     | output current          | $V_O = 0$ V to $V_{CC}$       | -    | ±50            | mA   |
| $I_{CC}$  | supply current          |                               | -    | 100            | mA   |
| $I_{GND}$ | ground current          |                               | -100 | -              | mA   |
| $P_{tot}$ | total power dissipation | $T_{amb} = -40$ °C to +125 °C | [3]  | 500            | mW   |
| $T_{stg}$ | storage temperature     |                               | -65  | +150           | °C   |

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

[2] The output voltage ratings may be exceeded if the output current ratings are observed.

[3] For SOT108-1 (SO14) package:  $P_{tot}$  derates linearly with 10.1 mW/K above 100 °C.  
 For SOT337-1 (SSOP14) package:  $P_{tot}$  derates linearly with 7.3 mW/K above 81 °C.  
 For SOT402-1 (TSSOP14) package:  $P_{tot}$  derates linearly with 7.3 mW/K above 81 °C.  
 For SOT762-1 (DHVQFN14) package:  $P_{tot}$  derates linearly with 9.6 mW/K above 98 °C.

## 8. Recommended operating conditions

**Table 5. Recommended operating conditions**

| Symbol              | Parameter                           | Conditions                | Min  | Typ | Max      | Unit |
|---------------------|-------------------------------------|---------------------------|------|-----|----------|------|
| $V_{CC}$            | supply voltage                      |                           | 1.65 | -   | 3.6      | V    |
|                     |                                     | functional                | 1.2  | -   | -        | V    |
| $V_I$               | input voltage                       |                           | 0    | -   | 5.5      | V    |
| $V_O$               | output voltage                      | output HIGH or LOW state  | 0    | -   | $V_{CC}$ | V    |
|                     |                                     | output 3-state            | 0    | -   | 5.5      | V    |
| $T_{amb}$           | ambient temperature                 |                           | -40  | -   | +125     | °C   |
| $\Delta t/\Delta V$ | input transition rise and fall rate | $V_{CC} = 2.3$ V to 2.7 V | 0    | -   | 20       | ns/V |
|                     |                                     | $V_{CC} = 2.7$ V to 3.6 V | 0    | -   | 10       | ns/V |

## 9. Static characteristics

**Table 6. Static characteristics**

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

| Symbol           | Parameter                 | Conditions                                                                                                      | -40 °C to +85 °C      |         |                     | -40 °C to +125 °C     |                     | Unit |
|------------------|---------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------|---------|---------------------|-----------------------|---------------------|------|
|                  |                           |                                                                                                                 | Min                   | Typ [1] | Max                 | Min                   | Max                 |      |
| V <sub>IH</sub>  | HIGH-level input voltage  | V <sub>CC</sub> = 1.2 V                                                                                         | 1.08                  | -       | -                   | 1.08                  | -                   | V    |
|                  |                           | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                              | 0.65V <sub>CC</sub>   | -       | -                   | 0.65V <sub>CC</sub>   | -                   | V    |
|                  |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                | 1.7                   | -       | -                   | 1.7                   | -                   | V    |
|                  |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                | 2.0                   | -       | -                   | 2.0                   | -                   | V    |
| V <sub>IL</sub>  | LOW-level input voltage   | V <sub>CC</sub> = 1.2 V                                                                                         | -                     | -       | 0.12                | -                     | 0.12                | V    |
|                  |                           | V <sub>CC</sub> = 1.65 V to 1.95 V                                                                              | -                     | -       | 0.35V <sub>CC</sub> | -                     | 0.35V <sub>CC</sub> | V    |
|                  |                           | V <sub>CC</sub> = 2.3 V to 2.7 V                                                                                | -                     | -       | 0.7                 | -                     | 0.7                 | V    |
|                  |                           | V <sub>CC</sub> = 2.7 V to 3.6 V                                                                                | -                     | -       | 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>                                                             |                       |         |                     |                       |                     |      |
|                  |                           | I <sub>O</sub> = -100 µA; V <sub>CC</sub> = 1.65 V to 3.6 V                                                     | V <sub>CC</sub> - 0.2 | -       | -                   | V <sub>CC</sub> - 0.3 | -                   | V    |
|                  |                           | I <sub>O</sub> = -4 mA; V <sub>CC</sub> = 1.65 V                                                                | 1.2                   | -       | -                   | 1.05                  | -                   | V    |
|                  |                           | I <sub>O</sub> = -8 mA; V <sub>CC</sub> = 2.3 V                                                                 | 1.8                   | -       | -                   | 1.65                  | -                   | V    |
|                  |                           | I <sub>O</sub> = -12 mA; V <sub>CC</sub> = 2.7 V                                                                | 2.2                   | -       | -                   | 2.05                  | -                   | V    |
|                  |                           | I <sub>O</sub> = -18 mA; V <sub>CC</sub> = 3.0 V                                                                | 2.4                   | -       | -                   | 2.25                  | -                   | V    |
|                  |                           | I <sub>O</sub> = -24 mA; V <sub>CC</sub> = 3.0 V                                                                | 2.2                   | -       | -                   | 2.0                   | -                   | 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> = 100 µA; V <sub>CC</sub> = 1.65 V to 3.6 V                                                      | -                     | -       | 0.2                 | -                     | 0.3                 | V    |
|                  |                           | I <sub>O</sub> = 4 mA; V <sub>CC</sub> = 1.65 V                                                                 | -                     | -       | 0.45                | -                     | 0.65                | V    |
|                  |                           | I <sub>O</sub> = 8 mA; V <sub>CC</sub> = 2.3 V                                                                  | -                     | -       | 0.6                 | -                     | 0.8                 | V    |
|                  |                           | I <sub>O</sub> = 12 mA; V <sub>CC</sub> = 2.7 V                                                                 | -                     | -       | 0.4                 | -                     | 0.6                 | V    |
|                  |                           | I <sub>O</sub> = 24 mA; V <sub>CC</sub> = 3.0 V                                                                 | -                     | -       | 0.55                | -                     | 0.8                 | V    |
| I <sub>I</sub>   | input leakage current     | V <sub>CC</sub> = 3.6 V; V <sub>I</sub> = 5.5 V or GND                                                          | -                     | ±0.1    | ±5                  | -                     | ±20                 | µA   |
| I <sub>OZ</sub>  | OFF-state output current  | V <sub>I</sub> = V <sub>IH</sub> or V <sub>IL</sub> ; V <sub>CC</sub> = 3.6 V; V <sub>O</sub> = 5.5 V or GND    | -                     | ±0.1    | ±5                  | -                     | ±20                 | µA   |
| I <sub>OFF</sub> | power-off leakage current | V <sub>CC</sub> = 0.0 V; V <sub>I</sub> or V <sub>O</sub> = 5.5 V                                               | -                     | ±0.1    | ±10                 | -                     | ±20                 | µA   |
| I <sub>CC</sub>  | supply current            | V <sub>CC</sub> = 3.6 V; V <sub>I</sub> = V <sub>CC</sub> or GND; I <sub>O</sub> = 0 A                          | -                     | 0.1     | 10                  | -                     | 40                  | µA   |
| ΔI <sub>CC</sub> | additional supply current | per input pin; V <sub>I</sub> = V <sub>CC</sub> - 0.6 V; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 2.7 V to 3.6 V | -                     | 5       | 500                 | -                     | 5000                | µA   |
| C <sub>I</sub>   | input capacitance         | V <sub>CC</sub> = 0 V to 3.6 V; V <sub>I</sub> = GND to V <sub>CC</sub>                                         | -                     | 4.0     | -                   | -                     | -                   | pF   |

[1] All typical values are measured at V<sub>CC</sub> = 3.3 V (unless stated otherwise) and T<sub>amb</sub> = 25 °C.

## 10. Dynamic characteristics

**Table 7. Dynamic characteristics**

Voltages are referenced to GND (ground = 0 V). For test circuit see Fig. 8.

| Symbol      | Parameter                     | Conditions                                     | -40 °C to +85 °C |         |      | -40 °C to +125 °C |      | Unit |
|-------------|-------------------------------|------------------------------------------------|------------------|---------|------|-------------------|------|------|
|             |                               |                                                | Min              | Typ [1] | Max  | Min               | Max  |      |
| $t_{pd}$    | propagation delay             | nA to nY; see Fig. 6 [2]                       |                  |         |      |                   |      |      |
|             |                               | $V_{CC} = 1.2 \text{ V}$                       | -                | 12.0    | -    | -                 | -    | ns   |
|             |                               | $V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$   | 1.5              | 5.4     | 11.0 | 1.5               | 12.8 | ns   |
|             |                               | $V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$     | 1.0              | 2.9     | 5.7  | 1.0               | 6.7  | ns   |
|             |                               | $V_{CC} = 2.7 \text{ V}$                       | 1.5              | 2.8     | 5.5  | 1.5               | 7.0  | ns   |
|             |                               | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$     | 1.0              | 2.5     | 4.8  | 1.0               | 6.0  | ns   |
| $t_{en}$    | enable time                   | nOE to nY; see Fig. 7 [2]                      |                  |         |      |                   |      |      |
|             |                               | $V_{CC} = 1.2 \text{ V}$                       | -                | 16.0    | -    | -                 | -    | ns   |
|             |                               | $V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$   | 1.0              | 5.0     | 12.2 | 1.0               | 14.2 | ns   |
|             |                               | $V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$     | 0.5              | 2.9     | 6.8  | 0.5               | 7.9  | ns   |
|             |                               | $V_{CC} = 2.7 \text{ V}$                       | 1.5              | 3.1     | 6.6  | 1.5               | 8.5  | ns   |
|             |                               | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$     | 1.0              | 2.3     | 5.4  | 1.0               | 7.0  | ns   |
| $t_{dis}$   | disable time                  | nOE to nY; see Fig. 7 [2]                      |                  |         |      |                   |      |      |
|             |                               | $V_{CC} = 1.2 \text{ V}$                       | -                | 7.0     | -    | -                 | -    | ns   |
|             |                               | $V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$   | 2.2              | 4.6     | 7.5  | 2.2               | 8.7  | ns   |
|             |                               | $V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$     | 0.5              | 2.6     | 4.2  | 0.5               | 5.0  | ns   |
|             |                               | $V_{CC} = 2.7 \text{ V}$                       | 1.5              | 3.1     | 5.0  | 1.5               | 6.5  | ns   |
|             |                               | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$     | 1.0              | 3.2     | 4.6  | 1.0               | 6.0  | ns   |
| $t_{sk(o)}$ | output skew time              | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$ [3] | -                | -       | 1.0  | -                 | 1.5  | ns   |
| $C_{PD}$    | power dissipation capacitance | per buffer; $V_I = \text{GND to } V_{CC}$ [4]  |                  |         |      |                   |      |      |
|             |                               | $V_{CC} = 1.65 \text{ V to } 1.95 \text{ V}$   | -                | 6.0     | -    | -                 | -    | pF   |
|             |                               | $V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}$     | -                | 9.4     | -    | -                 | -    | pF   |
|             |                               | $V_{CC} = 3.0 \text{ V to } 3.6 \text{ V}$     | -                | 12.4    | -    | -                 | -    | pF   |

[1] Typical values are measured at  $T_{amb} = 25 \text{ °C}$  and  $V_{CC} = 1.2 \text{ V}$ ,  $1.8 \text{ V}$ ,  $2.5 \text{ V}$ ,  $2.7 \text{ V}$ , and  $3.3 \text{ V}$  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] Skew between any two outputs of the same package switching in the same direction. This parameter is guaranteed by design.

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

$P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma(C_L \times V_{CC}^2 \times f_o)$  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

$N$  = number of inputs switching

$\Sigma(C_L \times V_{CC}^2 \times f_o)$  = sum of the outputs.

10.1. Waveforms and test circuit

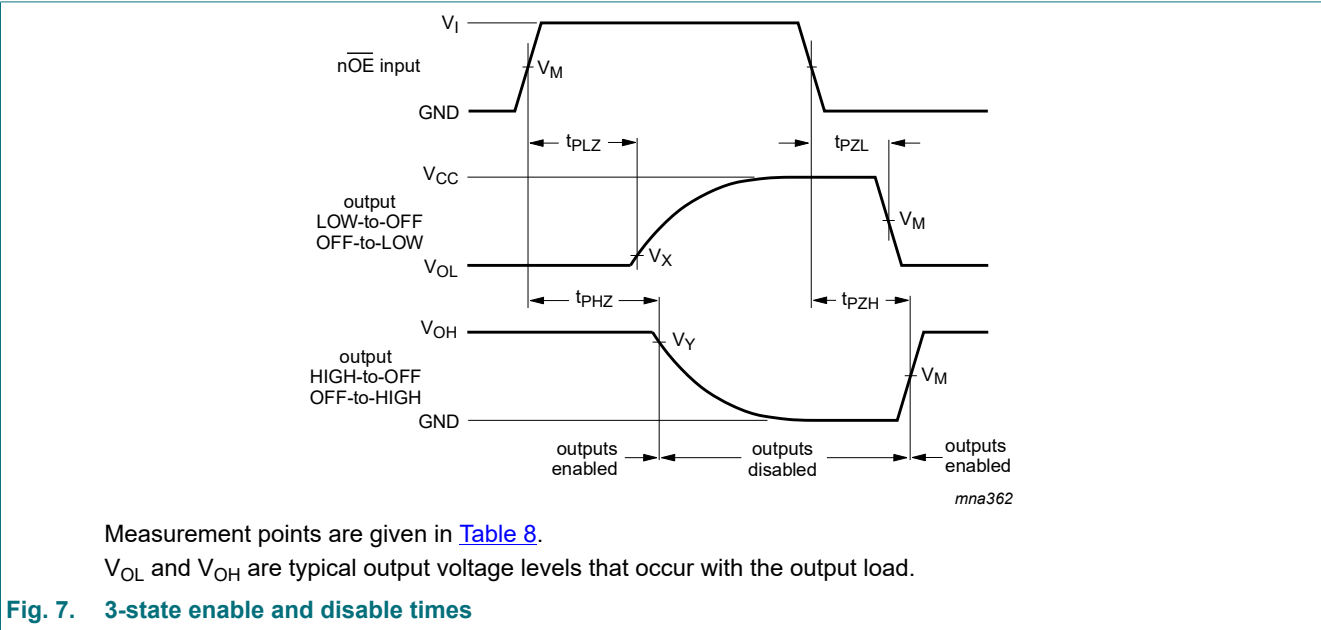
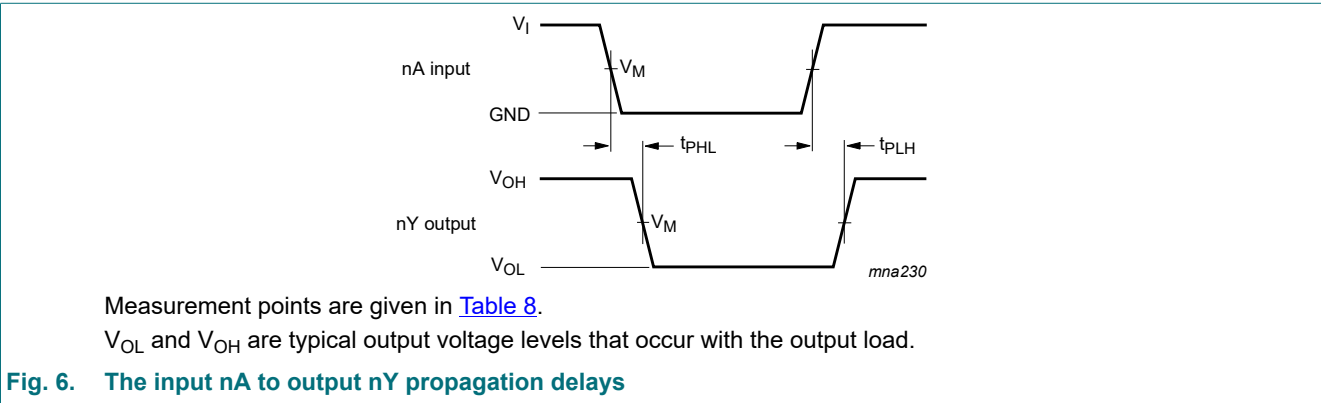
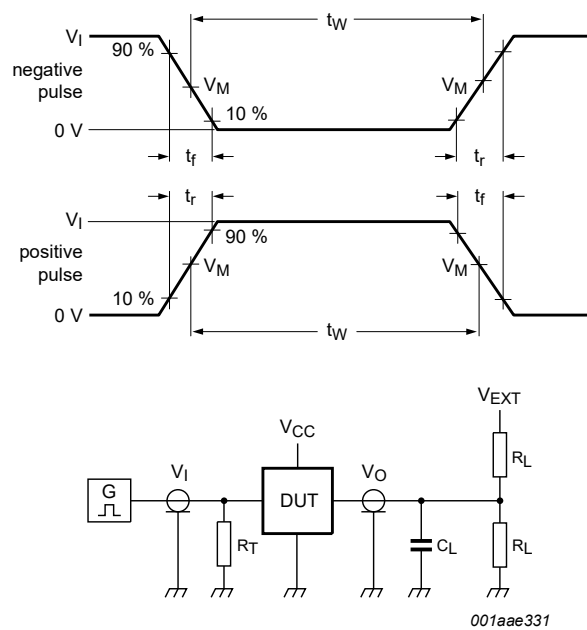


Table 8. Measurement points

| Supply voltage   | Input    |                     | Output              |                           |                           |
|------------------|----------|---------------------|---------------------|---------------------------|---------------------------|
| $V_{CC}$         | $V_I$    | $V_M$               | $V_M$               | $V_X$                     | $V_Y$                     |
| 1.2 V            | $V_{CC}$ | $0.5 \times V_{CC}$ | $0.5 \times V_{CC}$ | $V_{OL} + 0.15 \text{ V}$ | $V_{OH} - 0.15 \text{ V}$ |
| 1.65 V to 1.95 V | $V_{CC}$ | $0.5 \times V_{CC}$ | $0.5 \times V_{CC}$ | $V_{OL} + 0.15 \text{ V}$ | $V_{OH} - 0.15 \text{ V}$ |
| 2.3 V to 2.7 V   | $V_{CC}$ | $0.5 \times V_{CC}$ | $0.5 \times V_{CC}$ | $V_{OL} + 0.15 \text{ V}$ | $V_{OH} - 0.15 \text{ V}$ |
| 2.7 V            | 2.7 V    | 1.5 V               | 1.5 V               | $V_{OL} + 0.3 \text{ V}$  | $V_{OH} - 0.3 \text{ V}$  |
| 3.0 V to 3.6 V   | 2.7 V    | 1.5 V               | 1.5 V               | $V_{OL} + 0.3 \text{ V}$  | $V_{OH} - 0.3 \text{ V}$  |



Test data is given in [Table 9](#).  
Definitions for test circuit:  
 $R_L$  = Load resistance.  
 $C_L$  = Load capacitance including jig and probe capacitance.  
 $R_T$  = Termination resistance should be equal to output impedance  $Z_o$  of the pulse generator.  
 $V_{EXT}$  = External voltage for measuring switching times.

Fig. 8. Test circuit for measuring switching times

Table 9. Test data

| Supply voltage   | Input    |               | Load  |              | $V_{EXT}$          |                    |                    |
|------------------|----------|---------------|-------|--------------|--------------------|--------------------|--------------------|
| $V_{CC}$         | $V_I$    | $t_r, t_f$    | $C_L$ | $R_L$        | $t_{PLH}, t_{PHL}$ | $t_{PLZ}, t_{PZL}$ | $t_{PHZ}, t_{PZH}$ |
| 1.2 V            | $V_{CC}$ | $\leq 2$ ns   | 30 pF | 1 k $\Omega$ | open               | $2 \times V_{CC}$  | GND                |
| 1.65 V to 1.95 V | $V_{CC}$ | $\leq 2$ ns   | 30 pF | 1 k $\Omega$ | open               | $2 \times V_{CC}$  | GND                |
| 2.3 V to 2.7 V   | $V_{CC}$ | $\leq 2$ ns   | 30 pF | 500 $\Omega$ | open               | $2 \times V_{CC}$  | GND                |
| 2.7 V            | 2.7 V    | $\leq 2.5$ ns | 50 pF | 500 $\Omega$ | open               | $2 \times V_{CC}$  | GND                |
| 3.0 V to 3.6 V   | 2.7 V    | $\leq 2.5$ ns | 50 pF | 500 $\Omega$ | open               | $2 \times V_{CC}$  | GND                |

11. Package outline

SO14: plastic small outline package; 14 leads; body width 3.9 mm

SOT108-1



Fig. 9. Package outline SOT108-1 (SO14)

SSOP14: plastic shrink small outline package; 14 leads; body width 5.3 mm

SOT337-1



Fig. 10. Package outline SOT337-1 (SSOP14)

TSSOP14: plastic thin shrink small outline package; 14 leads; body width 4.4 mm

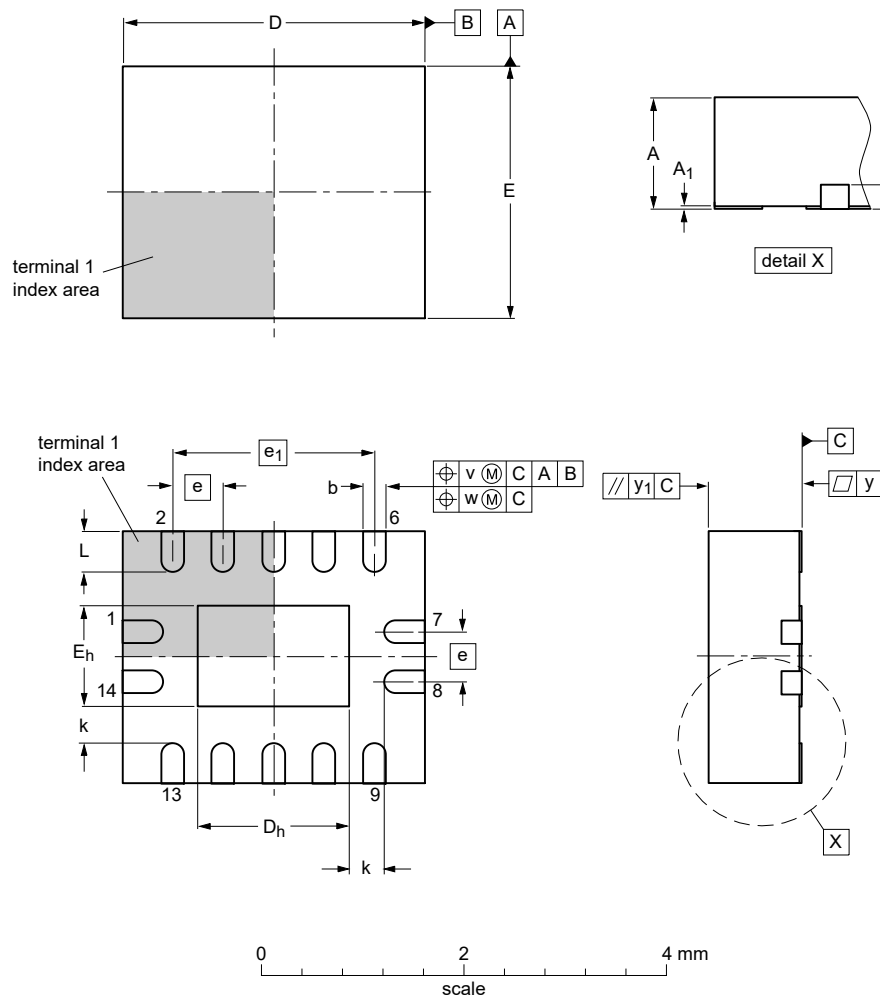
SOT402-1



Fig. 11. Package outline SOT402-1 (TSSOP14)

**DHVQFN14: plastic dual in-line compatible thermal enhanced very thin quad flat package; no leads; 14 terminals; body 2.5 x 3 x 0.85 mm**

**SOT762-1**



Dimensions (mm are the original dimensions)

| Unit |     | A <sup>(1)</sup> | A <sub>1</sub> | b    | c   | D <sup>(1)</sup> | D <sub>h</sub> | E <sup>(1)</sup> | E <sub>h</sub> | e   | e <sub>1</sub> | k   | L   | v   | w    | y    | y <sub>1</sub> |
|------|-----|------------------|----------------|------|-----|------------------|----------------|------------------|----------------|-----|----------------|-----|-----|-----|------|------|----------------|
| mm   | max | 1                | 0.05           | 0.30 |     | 3.1              | 1.65           | 2.6              | 1.15           |     |                |     | 0.5 |     |      |      |                |
|      | nom |                  | 0.02           | 0.25 | 0.2 | 3.0              | 1.50           | 2.5              | 1.00           | 0.5 | 2              |     | 0.4 | 0.1 | 0.05 | 0.05 | 0.1            |
|      | min |                  | 0.00           | 0.18 |     | 2.9              | 1.35           | 2.4              | 0.85           |     |                | 0.2 | 0.3 |     |      |      |                |

### Note

1. Plastic or metal protrusions of 0.075 mm maximum per side are not included.

sot762-1\_po

| Outline version | References |        |       |  | European projection                                                                   | Issue date                      |
|-----------------|------------|--------|-------|--|---------------------------------------------------------------------------------------|---------------------------------|
|                 | IEC        | JEDEC  | JEITA |  |                                                                                       |                                 |
| SOT762-1        |            | MO-241 |       |  |  | <del>15-04-10</del><br>15-05-05 |

**Fig. 12. Package outline SOT762-1 (DHVQFN14)**

## 12. Abbreviations

Table 10. 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             |

## 13. Revision history

Table 11. Revision history

| Document ID    | Release date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Data sheet status     | Change notice | Supersedes    |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|---------------|---------------|
| 74LVC125A v.8  | 20200505                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product data sheet    | -             | 74LVC125A v.7 |
| 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><a href="#">Table 4</a>: Derating values for <math>P_{tot}</math> total power dissipation updated.</li> <li><a href="#">Table 8</a>: Added measurement points for <math>V_X</math> and <math>V_Y</math>.</li> <li><a href="#">Fig. 12</a>: Package outline drawing SOT762-1 (DHVQFN14) updated.</li> </ul> |                       |               |               |
| 74LVC125A v.7  | 20130411                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product data sheet    | -             | 74LVC125A v.6 |
| Modifications: | <ul style="list-style-type: none"> <li>Features list corrected (errata)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                       |               |               |
| 74LVC125A v.6  | 20130305                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product data sheet    | -             | 74LVC125A v.5 |
| 74LVC125A v.5  | 20120208                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product data sheet    | -             | 74LVC125A v.4 |
| 74LVC125A v.4  | 20030507                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product specification | -             | 74LVC125A v.3 |
| 74LVC125A v.3  | 20020308                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product specification | -             | 74LVC125A v.2 |
| 74LVC125A v.2  | 19980428                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product specification | -             | 74LVC125A v.1 |
| 74LVC125A v.1  | 19970801                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Product specification | -             | -             |

## 14. Legal information

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|--------------------------------|--------------------|---------------------------------------------------------------------------------------|
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| 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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