74LVC16373A; 74LVCH16373A

16-bit D-type transparent latch with 5 V tolerant inputs/outputs; 3-state

Rev. 10 — 1 October 2021

Product data sheet

1. General description

The 74LVC16373A and 74LVCH16373A are 16-bit D-type transparent latches with 3-state outputs. The devices can be used as two 8-bit transparent latches or a single 16-bit transparent latch. The devices feature two latch enables (1LE and 2LE) and two output enables ($1\overline{OE}$ and $2\overline{OE}$), each controlling 8-bits. When nLE is HIGH, data at the inputs enter the latches. In this condition the latches are transparent, a latch output will change each time its corresponding D-input changes. When nLE is LOW the latches store the information that was present at the inputs a set-up time preceding the HIGH-to-LOW transition of nLE. A HIGH on $n\overline{OE}$ causes the outputs to assume a high-impedance OFF-state. Operation of the $n\overline{OE}$ input does not affect the state of the latches. Inputs can be driven from either 3.3 V or 5 V devices. This feature allows the use of these devices as translators in mixed 3.3 V and 5 V environments.

Schmitt-trigger action at all inputs makes the circuit tolerant of slower input rise and fall times.

This device is fully specified for partial power down applications using I_{OFF} . The I_{OFF} circuitry disables the output, preventing the potentially damaging backflow current through the device when it is powered down.

Bus hold on the data inputs eliminates the need for external pull-up resistors to hold unused inputs.

2. Features and benefits

- Overvoltage tolerant inputs to 5.5 V
- Wide supply voltage range from 1.2 V to 3.6 V
- CMOS low power dissipation
- · MULTIBYTE flow-through standard pinout architecture
- Multiple low inductance supply pins for minimum noise and ground bounce
- Direct interface with TTL levels
- All data inputs have bus hold (74LVCH16373A only)
- I_{OFF} circuitry provides partial Power-down mode operation
- · Complies with JEDEC standards:
 - 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 ANSI/ESDA/Jedec JS-002 exceeds 1000 V
- Specified from -40 °C to +85 °C and -40 °C to +125 °C

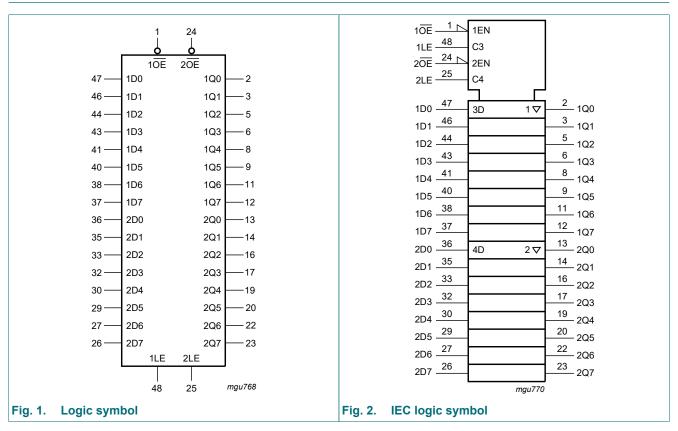


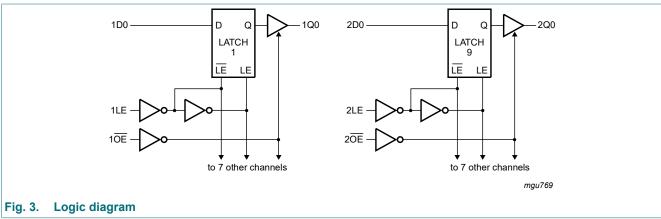
3. Ordering information

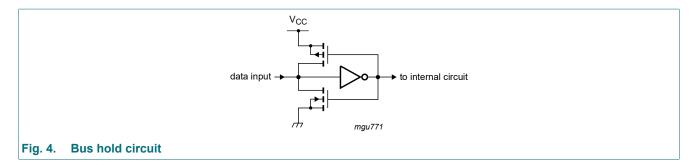
Table 1. Ordering information

| Type number | Package | | | |
|-----------------|-------------------|---------|---|----------|
| | Temperature range | Name | Description | Version |
| 74LVC16373ADGG | -40 °C to +125 °C | TSSOP48 | plastic thin shrink small outline package; | SOT362-1 |
| 74LVCH16373ADGG | | | 48 leads; body width 6.1 mm | |
| 74LVC16373ADGV | -40 °C to +125 °C | TVSOP48 | plastic thin shrink small outline | SOT480-1 |
| 74LVCH16373ADGV | | | package; 48 leads; body width 4.4 mm; lead pitch 0.4 mm | |

4. Functional diagram

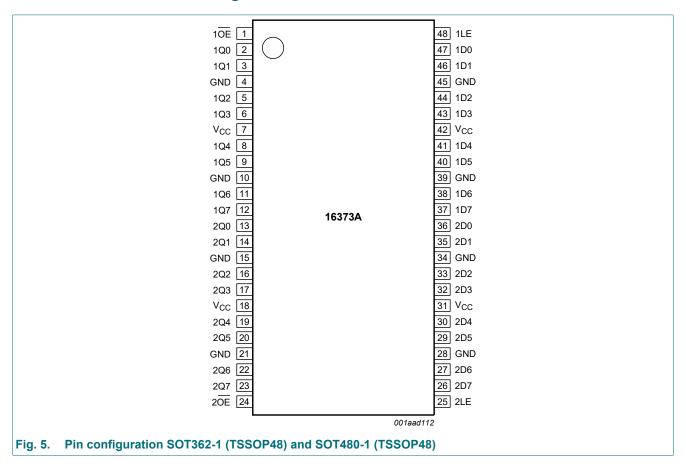






5. Pinning information

5.1. Pinning



5.2. Pin description

Table 2. Pin description

| Symbol | Pin | Description |
|-----------------------------------|--------------------------------|----------------------------------|
| 1 OE , 2 OE | 1, 24 | output enable input (active LOW) |
| 1LE, 2LE | 48, 25 | latch enable input (active HIGH) |
| GND | 4, 10, 15, 21, 28, 34, 39, 45 | ground (0 V) |
| V _{CC} | 7, 18, 31, 42 | supply voltage |
| 1Q0 to 1Q7 | 2, 3, 5, 6, 8, 9, 11, 12 | data output |
| 2Q0 to 2Q7 | 13, 14, 16, 17, 19, 20, 22, 23 | data output |
| 1D0 to 1D7 | 47, 46, 44, 43, 41, 40, 38, 37 | data input |
| 2D0 to 2D7 | 36, 35, 33, 32, 30, 29, 27, 26 | data input |

6. Functional description

Table 3. Function table

Per section of eight bits.

 $H = HIGH \ voltage \ level; \ h = HIGH \ voltage \ level \ one \ set-up \ time \ prior \ to \ the \ HIGH \ to \ LOW \ LE \ transition$

 $L = LOW \ voltage \ level; \ l = LOW \ voltage \ level \ one \ set-up \ time \ prior \ to \ the \ HIGH \ to \ LOW \ LE \ transition$

Z = high-impedance OFF-state

| Operating modes | Input | | | Internal latch | Output |
|------------------------------------|-------|-----|-----|----------------|------------|
| | nOE | nLE | nDn | | nQ0 to nQ7 |
| Enable and read register | L | Н | L | L | L |
| (transparent mode) | L | Н | Н | Н | Н |
| Latch and read register | L | L | I | L | L |
| | L | L | h | Н | Н |
| Latch register and disable outputs | Н | L | 1 | L | Z |
| | Н | L | h | Н | Z |

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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 | -50 | - | mA |
| VI | input voltage | [1] | -0.5 | +6.5 | V |
| I _{OK} | output clamping current | V _O > V _{CC} or V _O < 0 | - | ±50 | mA |
| Vo | output voltage | output HIGH or LOW state [2] | -0.5 | V _{CC} + 0.5 | V |
| | | output 3-state [2] | -0.5 | +6.5 | V |
| Io | output current | $V_O = 0 \text{ V to } V_{CC}$ | - | ±50 | mA |
| I _{CC} | supply current | | - | 100 | mA |
| I _{GND} | ground current | | -100 | - | mA |
| T _{stg} | storage temperature | | -65 | +150 | °C |
| P _{tot} | total power dissipation | $T_{amb} = -40 ^{\circ}\text{C} \text{ to } +125 ^{\circ}\text{C}$ [3] | - | 500 | mW |

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

8. Recommended operating conditions

Table 5. Recommended operating conditions

| Symbol | Parameter | Conditions | Min | Тур | Max | Unit |
|------------------|-------------------------------------|----------------------------------|------|-----|-----------------|------|
| V _{CC} | supply voltage | | 1.65 | - | 3.6 | V |
| | | functional | 1.2 | - | 3.6 | V |
| VI | input voltage | | 0 | - | 5.5 | V |
| Vo | output voltage | output HIGH or LOW state | 0 | - | V _{CC} | V |
| | | output 3-state | 0 | - | 5.5 | V |
| T _{amb} | ambient temperature | in free air | -40 | - | +125 | °C |
| Δt/ΔV | input transition rise and fall rate | V _{CC} = 1.2 V to 2.7 V | 0 | - | 20 | ns/V |
| | | V _{CC} = 2.7 V to 3.6 V | 0 | - | 10 | ns/V |

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

^[3] For SOT362-1 (TSSOP48) packages: P_{tot} derates linearly with 12.2 mW/K above 109 °C. For SOT480-1 (TVSOP48) packages: P_{tot} derates linearly with 5.5 mW/K above 60 °C.

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 | 5 °C | -40 °C to | +125 °C | Unit |
|------------------|---------------------------------|--|-----------------------|-----------|---------------------|-----------------------|---------------------|------|
| | | | Min | Typ [1] | Max | Min | Max | 1 |
| V _{IH} | HIGH-level | V _{CC} = 1.2 V | 1.08 | - | - | 1.08 | - | V |
| | input voltage | V _{CC} = 1.65 V to 1.95 V | 0.65V _{CC} | - | - | 0.65V _{CC} | - | V |
| | | V _{CC} = 2.3 V to 2.7 V | 1.7 | - | - | 1.7 | - | V |
| | | V _{CC} = 2.7 V to 3.6 V | 2.0 | - | - | 2.0 | - | V |
| V _{IL} | LOW-level | V _{CC} = 1.2 V | - | - | 0.12 | - | 0.12 | V |
| | input voltage | V _{CC} = 1.65 V to 1.95 V | - | - | 0.35V _{CC} | - | 0.35V _{CC} | V |
| | | V _{CC} = 2.3 V to 2.7 V | - | - | 0.7 | - | 0.7 | V |
| | | V _{CC} = 2.7 V to 3.6 V | - | - | 0.8 | - | 0.8 | V |
| V _{OH} | HIGH-level | $V_I = V_{IH}$ or V_{IL} | | | | | | |
| | output voltage | $I_O = -100 \mu A;$ $V_{CC} = 1.65 \text{ V to } 3.6 \text{ V}$ | V _{CC} - 0.2 | - | - | V _{CC} - 0.3 | - | V |
| | | I _O = -4 mA; V _{CC} = 1.65 V | 1.2 | - | - | 1.05 | - | V |
| | | I _O = -8 mA; V _{CC} = 2.3 V | 1.8 | - | - | 1.65 | - | V |
| | | I_{O} = -12 mA; V_{CC} = 2.7 V | 2.2 | - | - | 2.05 | - | V |
| | | I_{O} = -18 mA; V_{CC} = 3.0 V | 2.4 | - | - | 2.25 | - | V |
| | | I_{O} = -24 mA; V_{CC} = 3.0 V | 2.2 | - | - | 2.0 | - | V |
| V _{OL} | LOW-level | $V_I = V_{IH}$ or V_{IL} | | | | | | |
| | output voltage | $I_O = 100 \mu A;$ $V_{CC} = 1.65 \text{ V to } 3.6 \text{ V}$ | - | - | 0.2 | - | 0.3 | V |
| | | I _O = 4 mA; V _{CC} = 1.65 V | - | - | 0.45 | - | 0.65 | V |
| | | I_{O} = 8 mA; V_{CC} = 2.3 V | - | - | 0.6 | - | 0.8 | V |
| | | I _O = 12 mA; V _{CC} = 2.7 V | - | - | 0.4 | - | 0.6 | V |
| | | I_{O} = 24 mA; V_{CC} = 3.0 V | - | - | 0.55 | - | 0.8 | V |
| I _I | input leakage current | $V_{CC} = 3.6 \text{ V};$ [2] $V_{I} = 5.5 \text{ V or GND}$ | - | ±0.1 | ±5 | - | ±20 | μΑ |
| l _{OZ} | OFF-state output current | $V_I = V_{IH} \text{ or } V_{IL}; V_{CC} = 3.6 \text{ V};$ [2] $V_O = 5.5 \text{ V or GND}$ | - | ±0.1 | ±5 | - | ±20 | μΑ |
| I _{OFF} | power-off leakage current | $V_{CC} = 0 \text{ V}; V_{I} \text{ or } V_{O} = 5.5 \text{ V}$ | - | ±0.1 | ±10 | - | ±20 | μA |
| I _{CC} | supply current | V_{CC} = 3.6 V; V_I = V_{CC} or GND; I_O = 0 A | - | 0.1 | 20 | - | 80 | μΑ |
| ΔI _{CC} | additional supply current | per input pin; $V_{CC} = 2.7 \text{ V to } 3.6 \text{ V};$ $V_{I} = V_{CC} - 0.6 \text{ V};$ $I_{O} = 0 \text{ A}$ | - | 5 | 500 | - | 5000 | μA |
| C _I | input capacitance | $V_{CC} = 0 \text{ V to } 3.6 \text{ V};$ $V_I = \text{GND to } V_{CC}$ | - | 5.0 | - | - | - | pF |

| Symbol | mbol Parameter Conditions | | -40 | °C to +85 | °C | -40 °C to | +125 °C | Unit |
|-------------------|---------------------------|---|------|-----------|-----|-----------|---------|------|
| | | | Min | Typ [1] | Max | Min | Max | |
| I _{BHL} | bus hold LOW | $V_{CC} = 1.65; V_I = 0.58 V$ [3][4] | 10 | - | - | 10 | - | μΑ |
| | current | $V_{CC} = 2.3; V_I = 0.7 V$ | 30 | - | - | 25 | - | μΑ |
| | | V _{CC} = 3.0; V _I = 0.8 V | 75 | - | - | 60 | - | μΑ |
| I _{BHH} | bus hold | $V_{CC} = 1.65; V_I = 1.07 V$ [3][4] | -10 | - | - | -10 | - | μΑ |
| | HIGH current | V _{CC} = 2.3; V _I = 1.7 V | -30 | - | - | -25 | - | μΑ |
| | | $V_{CC} = 3.0; V_I = 2.0 V$ | -75 | - | - | -60 | - | μΑ |
| I _{BHLO} | bus hold LOW | V _{CC} = 1.95 V [3][5] | 200 | - | - | 200 | - | μΑ |
| | overdrive current | V _{CC} = 2.7 V | 300 | - | - | 300 | - | μA |
| | Current | V _{CC} = 3.6 V | 500 | - | - | 500 | - | μA |
| Івнно | bus hold | V _{CC} = 1.95 V [3][5] | -200 | - | - | -200 | - | μΑ |
| | HIGH overdrive | V _{CC} = 2.7 V | -300 | - | - | -300 | - | μΑ |
| | current | V _{CC} = 3.6 V | -500 | - | - | -500 | - | μΑ |
| | | | | | | | | |

- [1] All typical values are measured at V_{CC} = 3.3 V (unless stated otherwise) and T_{amb} = 25 °C.
- [2] The bus hold circuit is switched off when $V_I > V_{CC}$ allowing 5.5 V on the input pin.
- [3] Valid for data inputs (74LVCH16373A) only; control inputs do not have a bus hold circuit.
- [4] The specified sustaining current at the data inputs holds the input below the specified V_I level.
- [5] The specified overdrive current at the data input forces the data input to the opposite logic input state.

10. Dynamic characteristics

Table 7. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V). For test circuit see Fig. 10.

| Symbol | Parameter | Conditions | -40 | °C to +85 | °C | -40 °C to +125 °C | | Unit |
|-----------------|-------------------|------------------------------------|-----|-----------|------|-------------------|------|------|
| | | | Min | Typ [1] | Max | Min | Max | |
| t _{pd} | propagation delay | Dn to Qn; see Fig. 6 [2] | | | | | | |
| | | V _{CC} = 1.2 V | - | 12 | - | - | - | ns |
| | | V _{CC} = 1.65 V to 1.95 V | 1.5 | 5.4 | 11.4 | 1.5 | 13.2 | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 1.0 | 2.9 | 5.7 | 1.0 | 6.6 | ns |
| | | V _{CC} = 2.7 V | 1.5 | 2.9 | 4.9 | 1.5 | 6.5 | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 1.0 | 2.4 | 4.4 | 1.0 | 5.5 | ns |
| | | LE to Qn; see Fig. 7 | | | | | | |
| | | V _{CC} = 1.2 V | - | 14 | - | - | - | ns |
| | | V _{CC} = 1.65 V to 1.95 V | 2.0 | 6.4 | 12.4 | 2.0 | 14.4 | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 1.5 | 3.4 | 6.1 | 1.5 | 7.1 | ns |
| | | V _{CC} = 2.7 V | 1.5 | 3.0 | 5.3 | 1.5 | 7.0 | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 1.5 | 2.9 | 4.8 | 1.5 | 6.0 | ns |
| t _{en} | enable time | OE to Qn; see Fig. 8 [2] | | | | | | |
| | | V _{CC} = 1.2 V | - | 18 | - | - | - | ns |
| | | V _{CC} = 1.65 V to 1.95 V | 1.5 | 5.5 | 12.4 | 1.5 | 14.3 | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 1.0 | 3.1 | 6.6 | 1.0 | 7.6 | ns |
| | | V _{CC} = 2.7 V | 1.5 | 3.3 | 5.7 | 1.5 | 7.5 | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 1.0 | 2.5 | 4.9 | 1.0 | 6.5 | ns |

| Symbol | Parameter | Conditions | -40 | 0 °C to +85 | °C | -40 °C to +125 °C | | Unit |
|--------------------|-------------------|--|------|-------------|-----|-------------------|------|------|
| | | | Min | Typ [1] | Max | Min | Max | |
| t _{dis} | disable time | OE to Qn; see Fig. 8 [2] | | | | | | |
| | | V _{CC} = 1.2 V | - | 11 | - | - | - | ns |
| | | V _{CC} = 1.65 V to 1.95 V | 2.8 | 4.5 | 9.1 | 2.8 | 10.5 | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 1.0 | 2.5 | 5.1 | 1.0 | 6.0 | ns |
| | | V _{CC} = 2.7 V | 1.5 | 3.3 | 6.3 | 1.5 | 8.0 | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 1.5 | 3.1 | 5.4 | 1.5 | 7.0 | ns |
| t _W | pulse width | LE HIGH; see Fig. 7 | | | | | | |
| | | V _{CC} = 1.65 V to 1.95 V | 5.0 | - | - | 5.0 | - | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 4.0 | - | - | 4.0 | - | ns |
| | | V _{CC} = 2.7 V | 3.0 | - | - | 3.0 | - | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 3.0 | 2.0 | - | 3.0 | - | ns |
| t _{su} | set-up time | Dn to LE; see Fig. 9 | | | | | | |
| | | V _{CC} = 1.65 V to 1.95 V | 3.0 | - | - | 3.0 | - | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 2.5 | - | - | 2.5 | - | ns |
| | | V _{CC} = 2.7 V | 2.0 | - | - | 2.0 | - | ns |
| | | V _{CC} = 3.0 V to 3.6 V | 2.0 | 1.0 | - | 2.0 | - | ns |
| t _h | hold time | Dn to LE; see Fig. 9 | | | | | | |
| | | V _{CC} = 1.65 V to 1.95 V | 2.5 | - | - | 2.5 | - | ns |
| | | V _{CC} = 2.3 V to 2.7 V | 2.0 | - | - | 2.0 | - | ns |
| | | V _{CC} = 2.7 V | 0.9 | - | - | 0.9 | - | ns |
| | | V _{CC} = 3.0 V to 3.6 V | +0.9 | -1.0 | - | +0.9 | - | ns |
| t _{sk(o)} | output skew time | V _{CC} = 3.0 V to 3.6 V [3] | - | - | 1.0 | - | 1.5 | ns |
| C _{PD} | power dissipation | per input; $V_I = GND$ to V_{CC} [4] | | | | | | |
| | capacitance | V _{CC} = 1.65 V to 1.95 V | - | 10.8 | - | - | - | pF |
| | | V _{CC} = 2.3 V to 2.7 V | - | 13.0 | - | - | - | pF |
| | | V _{CC} = 3.0 V to 3.6 V | - | 15.0 | - | - | - | pF |
| | 1 | - I | | | | | | |

[1] Typical values are measured at T_{amb} = 25 °C and V_{CC} = 1.2 V, 1.8 V, 2.5 V, 2.7 V and 3.3 V respectively.

[2] t_{pd} is the same as t_{PLH} and t_{PHL} .

 t_{en} is the same as t_{PZL} and $t_{\text{PZH}}.$

 t_{dis} is the same as t_{PLZ} and t_{PHZ} . Skew between any two outputs of the same package switching in the same direction. This parameter is guaranteed by design.

 C_{PD} is used to determine the dynamic power dissipation (P_D in μW).

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

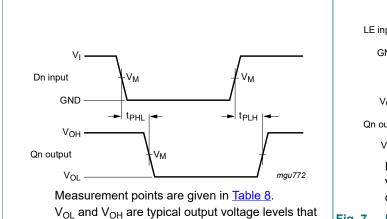
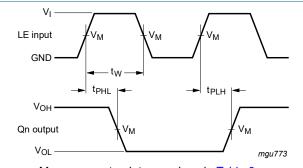


Fig. 6. Input (Dn) to output (Qn) propagation delays

occur with the output load.



Measurement points are given in Table 8.

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

Fig. 7. Latch enable input (LE) pulse width, and the latch enable input to output (Qn) propagation delays

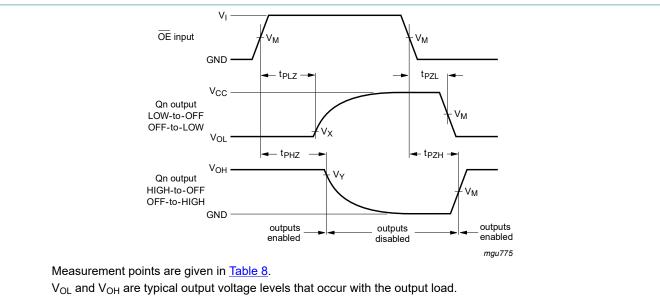
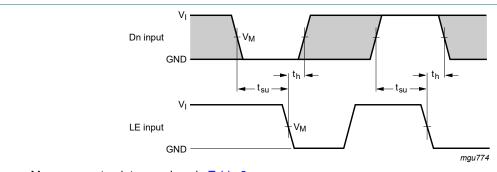


Fig. 8. 3-state enable and disable times



Measurement points are given in <u>Table 8</u>.

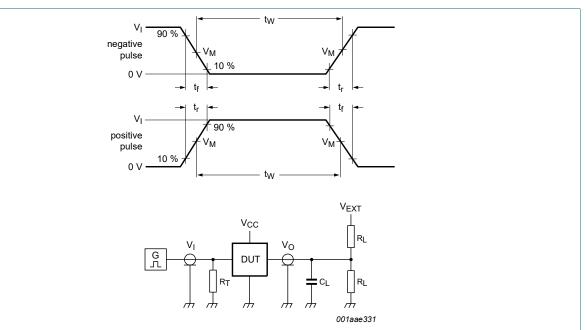
 V_{OL} and V_{OH} are typical output voltage levels that occur with the output load.

The shaded areas indicate when the input is permitted to change for predictable output performance.

Fig. 9. Data set-up and hold times for the Dn input to the LE input

Table 8. Measurement points

| Output | | | | |
|---|--|--|--|--|
| V_X V_Y | | | | |
| C V _{OL} + 0.15 V V _{OH} - 0.15 V | | | | |
| C V _{OL} + 0.15 V V _{OH} - 0.15 V | | | | |
| C V _{OL} + 0.15 V V _{OH} - 0.15 V | | | | |
| V _{OL} + 0.3 V V _{OH} - 0.3 V | | | | |
| V _{OL} + 0.3 V V _{OH} - 0.3 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_0 of the pulse generator.

 V_{EXT} = External voltage for measuring switching times.

Fig. 10. Test circuit for measuring switching times

Table 9. Test data

| Supply voltage | Input | | Load V _{EXT} | | _oad V _{EXT} | | |
|------------------|-----------------|---------------------------------|-----------------------|----------------|-------------------------------------|-------------------------------------|-------------------------------------|
| V _{CC} | VI | t _r , t _f | CL | R _L | t _{PLH} , t _{PHL} | t _{PLZ} , t _{PZL} | t _{PHZ} , t _{PZH} |
| 1.2 V | V _{CC} | ≤ 2 ns | 30 pF | 1 kΩ | open | 2 × V _{CC} | GND |
| 1.65 V to 1.95 V | V _{CC} | ≤ 2 ns | 30 pF | 1 kΩ | open | 2 × V _{CC} | GND |
| 2.3 V to 2.7 V | V _{CC} | ≤ 2 ns | 30 pF | 500 Ω | open | 2 × V _{CC} | GND |
| 2.7 V | 2.7 V | ≤ 2.5 ns | 50 pF | 500 Ω | open | 2 × V _{CC} | GND |
| 3.0 V to 3.6 V | 2.7 V | ≤ 2.5 ns | 50 pF | 500 Ω | open | 2 × V _{CC} | GND |

11. Package outline

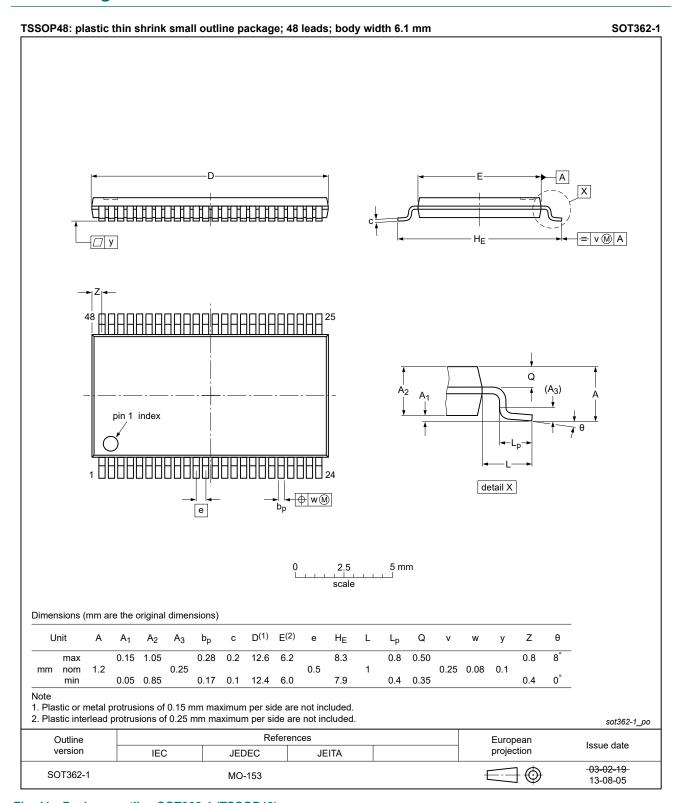


Fig. 11. Package outline SOT362-1 (TSSOP48)

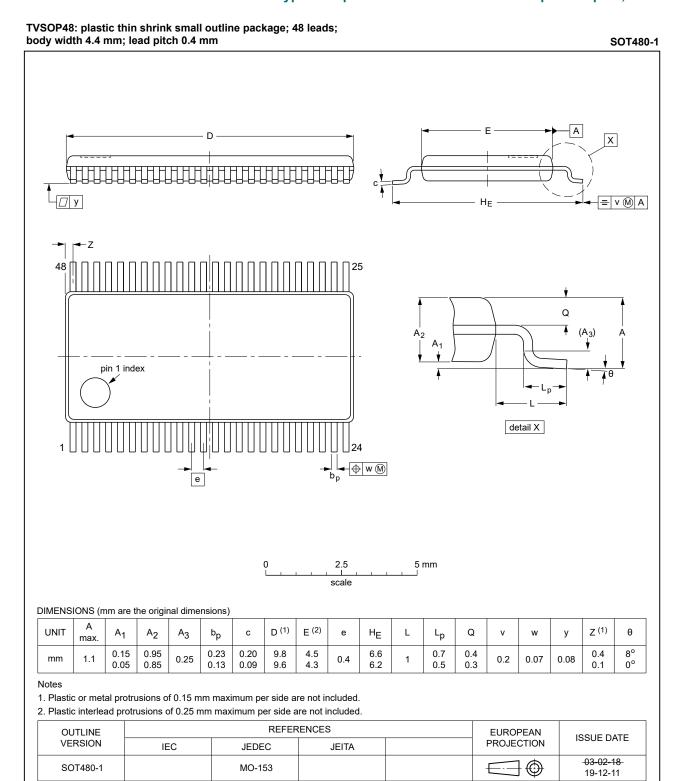


Fig. 12. Package outline SOT480-1 (TVSOP48)

12. Abbreviations

Table 10. Abbreviations

| Acronym | Description |
|---------|---|
| CDM | Charged Device Model |
| CMOS | Complementary Metal-Oxide Semiconductor |
| DUT | Device Under Test |
| ESD | ElectroStatic Discharge |
| НВМ | 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 | |
|----------------------------------|---|-----------------------|---------------|----------------------------------|--|
| 74LVC_LVCH16373A v.10 | 20211001 | Product data sheet | - | 74LVC_LVCH16373A v.9 | |
| Modifications: | Type number 74LVC16373ADL (SOT370-1/SSOP48) removed. Package outline drawing <u>SOT480-1</u> updated. <u>Section 1</u> and <u>Section 2</u> updated. | | | | |
| 74LVC_LVCH16373A v.9 | 20190215 | Product data sheet | - | 74LVC_LVCH16373A v.8 | |
| Modifications: | The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia. Legal texts have been adapted to the new company name where appropriate. Type numbers 74LVCH16373ADL (SOT370-1) removed. Type numbers 74LVC16373ADGV and 74LVCH16373ADGV (SOT480-1) added. | | | | |
| 74LVC_LVCH16373A v.8 | 20140106 | Product data sheet | - | 74LVC_LVCH16373A v.7 | |
| Modifications: | General description corrected (errata). | | | | |
| 74LVC_LVCH16373A v.7 | 20130118 | Product data sheet | - | 74LVC_LVCH16373A v.6 | |
| Modifications: | The format of this data sheet has been redesigned to comply with the new identity guidelines of NXP Semiconductors. Legal texts have been adapted to the new company name where appropriate. Table 5, Table 6, Table 7, Table 8 and Table 9: values added for lower voltage ranges. | | | | |
| 74LVC_LVCH16373A v.6 | 20031208 | Product specification | - | 74LVC_LVCH16373A v.5 | |
| 74LVC_LVCH16373A v.5 | 20021002 | Product specification | - | 74LVC_H16373A v.4 | |
| 74LVC_H16373A v.4 | 19980317 | Product specification | - | 74LVC16373A_ 74LVCH16373A v.3 | |
| 74LVC16373A_ 74LVCH16373A v.3 | 19980317 | Product specification | - | 74LVC16373A v.2 | |
| 74LVC16373A v.2 | 19970822 | Product specification | - | 74LVC16373A v.1 | |
| 74LVC16373A v.1 | 19960108 | - | - | - | |

14. Legal information

Data sheet status

| Document status [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. |

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