# 74AHC132-Q100; 74AHCT132-Q100

## Quad 2-input NAND Schmitt trigger

Rev. 2 — 3 July 2020 Product data sheet

## 1. General description

The 74AHC132-Q100; 74AHCT132-Q100 is a quad 2-input NAND gate with Schmitt-trigger inputs. Inputs are overvoltage tolerant. This feature allows the use of these devices as translators in mixed voltage environments.

This product has been qualified to the Automotive Electronics Council (AEC) standard Q100 (Grade 1) and is suitable for use in automotive applications.

## 2. Features and benefits

- Automotive product qualification in accordance with AEC-Q100 (Grade 1)
  - Specified from -40 °C to +85 °C and from -40 °C to +125 °C
- Wide supply voltage range from 2.0 V to 5.5 V
- Overvoltage tolerant inputs to 5.5 V
- High noise immunity
- CMOS low power dissipation
- Input levels:
  - For 74AHC132-Q100: CMOS level
  - For 74AHCT132-Q100: TTL level
- ESD protection:
  - MIL-STD-883, method 3015 exceeds 2000 V
  - HBM JESD22-A114F exceeds 2000 V
  - MM JESD22-A115-A exceeds 200 V (C = 200 pF, R = 0 Ω)
- Latch-up performance exceeds 100 mA per JESD 78 Class II Level A
- Multiple package options
- DHVQFN package with Side-Wettable Flanks enabling Automatic Optical Inspection (AOI) of solder joints

nexperia

# 3. Ordering information

**Table 1. Ordering information**

| Type number | Package | | | |
|---|---|---|---|---|
| | Temperature range | Name | Description | Version |
| 74AHC132D-Q100 | -40 °C to +125 °C | SO14 | plastic small outline package; 14 leads; body width 3.9 mm | SOT108-1 |
| 74AHCT132D-Q100 | | | | |
| 74AHC132PW-Q100 | -40 °C to +125 °C | TSSOP14 | plastic thin shrink small outline package; 14 leads; body width 4.4 mm | SOT402-1 |
| 74AHCT132PW-Q100 | | | | |
| 74AHC132BQ-Q100 | -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 |
| 74AHCT132BQ-Q100 | | | | |

# 4. Functional diagram

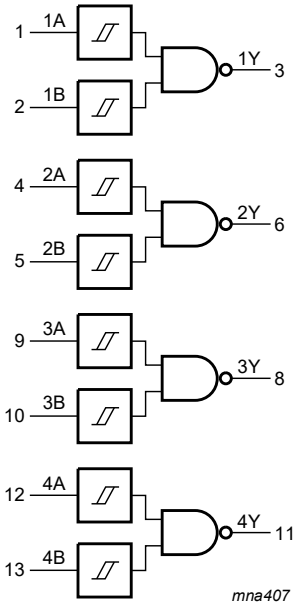



**Fig. 1. Logic symbol**

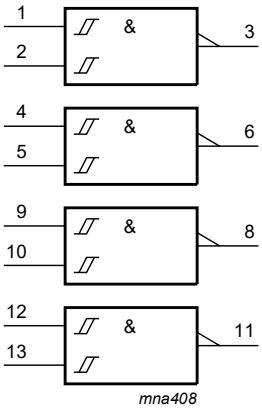



**Fig. 2. IEC logic symbol**

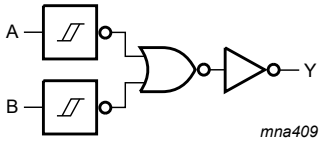



**Fig. 3. Logic diagram (one Schmitt trigger)**

# 5. Pinning information

## 5.1. Pinning

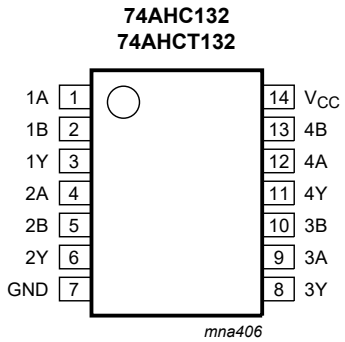
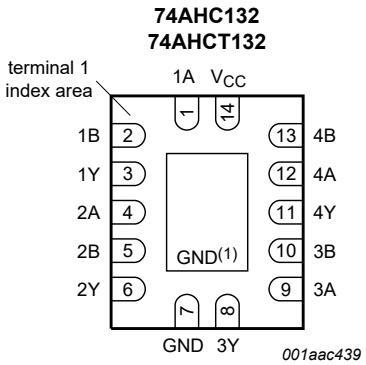



**Fig. 4. Pin configuration SOT108-1 (SO14) and SOT402-1 (TSSOP14)**




Transparent top view

(1) This is not a ground pin. There is no electrical or mechanical requirement to solder the pad. In case soldered, the solder land should remain floating or connected to GND

**Fig. 5. Pin configuration SOT762-1 (DHVQFN14)**

## 5.2. Pin description

**Table 2. Pin description**

| Symbol | Pin | Description |
|---|---|---|
| 1A, 2A, 3A, 4A | 1, 4, 9, 12 | data input A |
| 1B, 2B, 3B, 4B | 2, 5, 10, 13 | data input B |
| 1Y, 2Y, 3Y, 4Y | 3, 6, 8, 11 | data output Y |
| GND | 7 | ground (0 V) |
| $V_{CC}$ | 14 | supply voltage |

# 6. Functional description

**Table 3. Function table**

*H = HIGH voltage level; L = LOW voltage level.*

| Input | | Output |
|---|---|---|
| **nA** | **nB** | **nY** |
| L | L | H |
| L | H | H |
| H | L | H |
| H | H | L |

# 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 | +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 | +20 | mA |
| $I_O$ | output current | $V_O$ = -0.5 V to ($V_{CC}$ + 0.5 V) | | -25 | +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] | - | 500 | mW |

[1] The input and output voltage ratings may be exceeded if the input and output current ratings are observed.
[2] For SOT108-1 (SO14) package: $P_{tot}$ derates linearly with 10.1 mW/K above 100 °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**

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

| Symbol | Parameter | Conditions | 74AHC132-Q100 | | | 74AHCT132-Q100 | | | 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 |
| Δt/ΔV | 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 |

# 9. Static characteristics

**Table 6. Static characteristics**

*At recommended operating conditions; 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 | |
| **74AHC132-Q100** | | | | | | | | | | |
| $V_{OH}$ | HIGH-level output voltage | $V_I = V_{T+}$ or $V_{T-}$ | | | | | | | | |
| | | $I_O$ = -50 µA; $V_{CC}$ = 2.0 V | 1.9 | 2.0 | - | 1.9 | 2.2 | 1.9 | - | V |
| | | $I_O$ = -50 µA; $V_{CC}$ = 3.0 V | 2.9 | 3.0 | - | 2.9 | 3.15 | 2.9 | - | V |
| | | $I_O$ = -50 µA; $V_{CC}$ = 4.5 V | 4.4 | 4.5 | - | 4.4 | 3.85 | 4.4 | - | V |
| | | $I_O$ = -4.0 mA; $V_{CC}$ = 3.0 V | 2.58 | - | - | 2.48 | - | 2.40 | - | V |
| | | $I_O$ = -8.0 mA; $V_{CC}$ = 4.5 V | 3.94 | - | - | 3.80 | - | 3.70 | - | V |
| $V_{OL}$ | LOW-level output voltage | $V_I = V_{T+}$ or $V_{T-}$ | | | | | | | | |
| | | $I_O$ = 50 µA; $V_{CC}$ = 2.0 V | - | 0 | 0.1 | - | 0.1 | - | 0.1 | V |
| | | $I_O$ = 50 µA; $V_{CC}$ = 3.0 V | - | 0 | 0.1 | - | 0.1 | - | 0.1 | V |
| | | $I_O$ = 50 µA; $V_{CC}$ = 4.5 V | - | 0 | 0.1 | - | 0.1 | - | 0.1 | V |
| | | $I_O$ = 4.0 mA; $V_{CC}$ = 3.0 V | - | - | 0.36 | - | 0.44 | - | 0.55 | V |
| | | $I_O$ = 8.0 mA; $V_{CC}$ = 4.5 V | - | - | 0.36 | - | 0.44 | - | 0.55 | V |
| $I_I$ | input leakage current | $V_I$ = 5.5 V or GND; $V_{CC}$ = 0 V to 5.5 V | - | - | 0.1 | - | 1.0 | - | 2.0 | µA |
| $I_{CC}$ | supply current | $V_I = V_{CC}$ or GND; $I_O$ = 0 A; $V_{CC}$ = 5.5 V | - | - | 2.0 | - | 20 | - | 40 | µA |
| $C_I$ | input capacitance | $V_I = V_{CC}$ or GND | - | 3 | 10 | - | 10 | - | 10 | pF |
| $C_O$ | output capacitance | | - | 4 | - | - | - | - | - | pF |
| **74AHCT132-Q100** | | | | | | | | | | |
| $V_{OH}$ | HIGH-level output voltage | $V_I = V_{T+}$ or $V_{T-}$; $V_{CC}$ = 4.5 V | | | | | | | | |
| | | $I_O$ = -50 µA | 4.4 | 4.5 | - | 4.4 | - | 4.4 | - | V |
| | | $I_O$ = -8.0 mA | 3.94 | - | - | 3.80 | - | 3.70 | - | V |
| $V_{OL}$ | LOW-level output voltage | $V_I = V_{T+}$ or $V_{T-}$; $V_{CC}$ = 4.5 V | | | | | | | | |
| | | $I_O$ = 50 µA | - | 0 | 0.1 | - | 0.1 | - | 0.1 | V |
| | | $I_O$ = 8.0 mA | - | - | 0.36 | - | 0.44 | - | 0.55 | V |
| $I_I$ | input leakage current | $V_I$ = 5.5 V or GND; $V_{CC}$ = 0 V to 5.5 V | - | - | 0.1 | - | 1.0 | - | 2.0 | µA |
| $I_{CC}$ | supply current | $V_I = V_{CC}$ or GND; $I_O$ = 0 A; $V_{CC}$ = 5.5 V | - | - | 2.0 | - | 20 | - | 40 | µA |
| $\Delta I_{CC}$ | additional supply current | per input pin; $V_I = V_{CC}$ - 2.1 V; other pins at $V_{CC}$ or GND; $I_O$ = 0 A; $V_{CC}$ = 4.5 V to 5.5 V | - | - | 1.35 | - | 1.5 | - | 1.5 | mA |
| $C_I$ | input capacitance | $V_I = V_{CC}$ or GND | - | 3 | 10 | - | 10 | - | 10 | pF |
| $C_O$ | output capacitance | | - | 4 | - | - | - | - | - | pF |

# 10. Dynamic characteristics

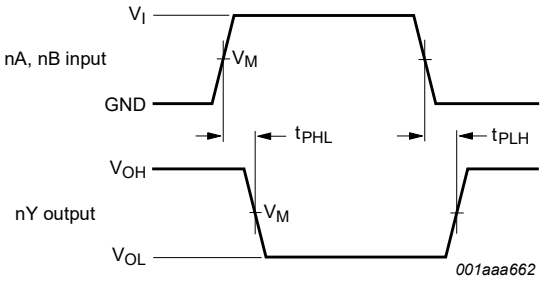
**Table 7. Dynamic characteristics**

*Voltages are referenced to GND (ground = 0 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 | |
| **74AHC132-Q100** | | | | | | | | | | |
| $t_{pd}$ | propagation delay | nA, nB to nY; see Fig. 6 [2] | | | | | | | | |
| | | $V_{CC}$ = 3.0 V to 3.6 V | | | | | | | | |
| | | $C_L$ = 15 pF | - | 4.4 | 11.9 | 1.0 | 14.0 | 1.0 | 15.0 | ns |
| | | $C_L$ = 50 pF | - | 6.2 | 15.4 | 1.0 | 17.5 | 1.0 | 19.5 | ns |
| | | $V_{CC}$ = 4.5 V to 5.5 V | | | | | | | | |
| | | $C_L$ = 15 pF | - | 3.3 | 7.7 | 1.0 | 9.0 | 1.0 | 10.0 | ns |
| | | $C_L$ = 50 pF | - | 4.7 | 9.7 | 1.0 | 11.0 | 1.0 | 12.5 | ns |
| $C_{PD}$ | power dissipation capacitance | $f_i$ = 1 MHz; $V_I$ = GND to $V_{CC}$ [3] | - | 11 | - | - | - | - | - | pF |
| **74AHCT132-Q100; $V_{CC}$ = 4.5 V to 5.5 V** | | | | | | | | | | |
| $t_{pd}$ | propagation delay | nA, nB to nY; see Fig. 6 [2] | | | | | | | | |
| | | $C_L$ = 15 pF | - | 3.5 | 7.0 | 1.0 | 8.0 | 1.0 | 9.0 | ns |
| | | $C_L$ = 50 pF | - | 5.0 | 8.0 | 1.0 | 9.0 | 1.0 | 10.0 | ns |
| $C_{PD}$ | power dissipation capacitance | $f_i$ = 1 MHz; $V_I$ = GND to $V_{CC}$ [3] | - | 14 | - | - | - | - | - | pF |

[1] Typical values are measured at nominal supply voltage ($V_{CC}$ = 3.3 V and $V_{CC}$ = 5.0 V).
[2] $t_{pd}$ is the same as $t_{PLH}$ and $t_{PHL}$.
[3] $C_{PD}$ 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 V;
N = number of inputs switching;
$\Sigma(C_L \times V_{CC}^2 \times f_o)$ = sum of the outputs.

## 10.1. Waveform and test circuit



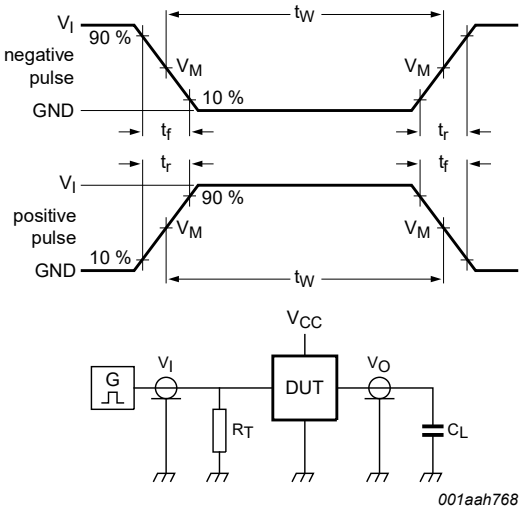

Measurement points are given in Table 8.

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

**Fig. 6. Input to output propagation delays**

**Table 8. Measurement points**

| Type | Input | Output |
|---|---|---|
| | $V_M$ | $V_M$ |
| 74AHC132-Q100 | 0.5 x $V_{CC}$ | 0.5 x $V_{CC}$ |
| 74AHCT132-Q100 | 1.5 V | 0.5 x $V_{CC}$ |




Test data is given in Table 9.

Definitions test circuit:

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

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

**Fig. 7. Test circuit for measuring switching times**

**Table 9. Test data**

| Type | Input | | Load | Test |
|---|---|---|---|---|
| | $V_I$ | $t_r$, $t_f$ | $C_L$ | |
| 74AHC132-Q100 | $V_{CC}$ | ≤ 3.0 ns | 50 pF, 15 pF | $t_{PLH}$, $t_{PHL}$ |
| 74AHCT132-Q100 | 3.0 V | ≤ 3.0 ns | 50 pF, 15 pF | $t_{PLH}$, $t_{PHL}$ |

# 11. Transfer characteristics

**Table 10. Transfer characteristics**

*At recommended operating conditions; 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 | |
| **74AHC132-Q100** | | | | | | | | | | |
| $V_{T+}$ | positive-going threshold voltage | $V_{CC}$ = 3.0 V | - | - | 2.2 | - | 2.2 | - | 2.2 | V |
| | | $V_{CC}$ = 4.5 V | - | - | 3.15 | - | 3.15 | - | 3.15 | V |
| | | $V_{CC}$ = 5.5 V | - | - | 3.85 | - | 3.85 | - | 3.85 | V |
| $V_{T-}$ | negative-going threshold voltage | $V_{CC}$ = 3.0 V | 0.9 | - | - | 0.9 | - | 0.9 | - | V |
| | | $V_{CC}$ = 4.5 V | 1.35 | - | - | 1.35 | - | 1.35 | - | V |
| | | $V_{CC}$ = 5.5 V | 1.65 | - | - | 1.65 | - | 1.65 | - | V |
| $V_H$ | hysteresis voltage | $V_{CC}$ = 3.0 V | 0.3 | - | 1.2 | 0.3 | 1.2 | 0.25 | 1.2 | V |
| | | $V_{CC}$ = 4.5 V | 0.4 | - | 1.4 | 0.4 | 1.4 | 0.35 | 1.4 | V |
| | | $V_{CC}$ = 5.5 V | 0.5 | - | 1.6 | 0.5 | 1.6 | 0.45 | 1.6 | V |
| **74AHCT132-Q100** | | | | | | | | | | |
| $V_{T+}$ | positive-going threshold voltage | $V_{CC}$ = 4.5 V | - | - | 1.9 | - | 1.9 | - | 1.9 | V |
| | | $V_{CC}$ = 5.5 V | - | - | 2.1 | - | 2.1 | - | 2.1 | V |
| $V_{T-}$ | negative-going threshold voltage | $V_{CC}$ = 4.5 V | 0.5 | - | - | 0.5 | - | 0.5 | - | V |
| | | $V_{CC}$ = 5.5 V | 0.6 | - | - | 0.6 | - | 0.6 | - | V |
| $V_H$ | hysteresis voltage | $V_{CC}$ = 4.5 V | 0.3 | - | 1.4 | 0.3 | 1.4 | 0.3 | 1.4 | V |
| | | $V_{CC}$ = 5.5 V | 0.3 | - | 1.5 | 0.3 | 1.5 | 0.3 | 1.5 | V |

## 11.1. Transfer characteristics waveforms

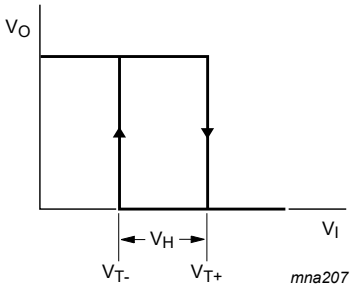



**Fig. 8. Transfer characteristics**

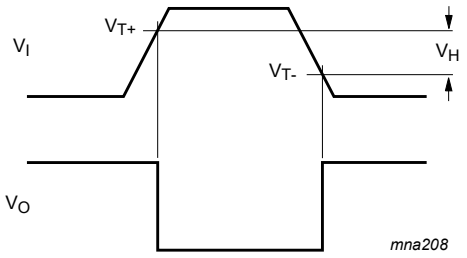
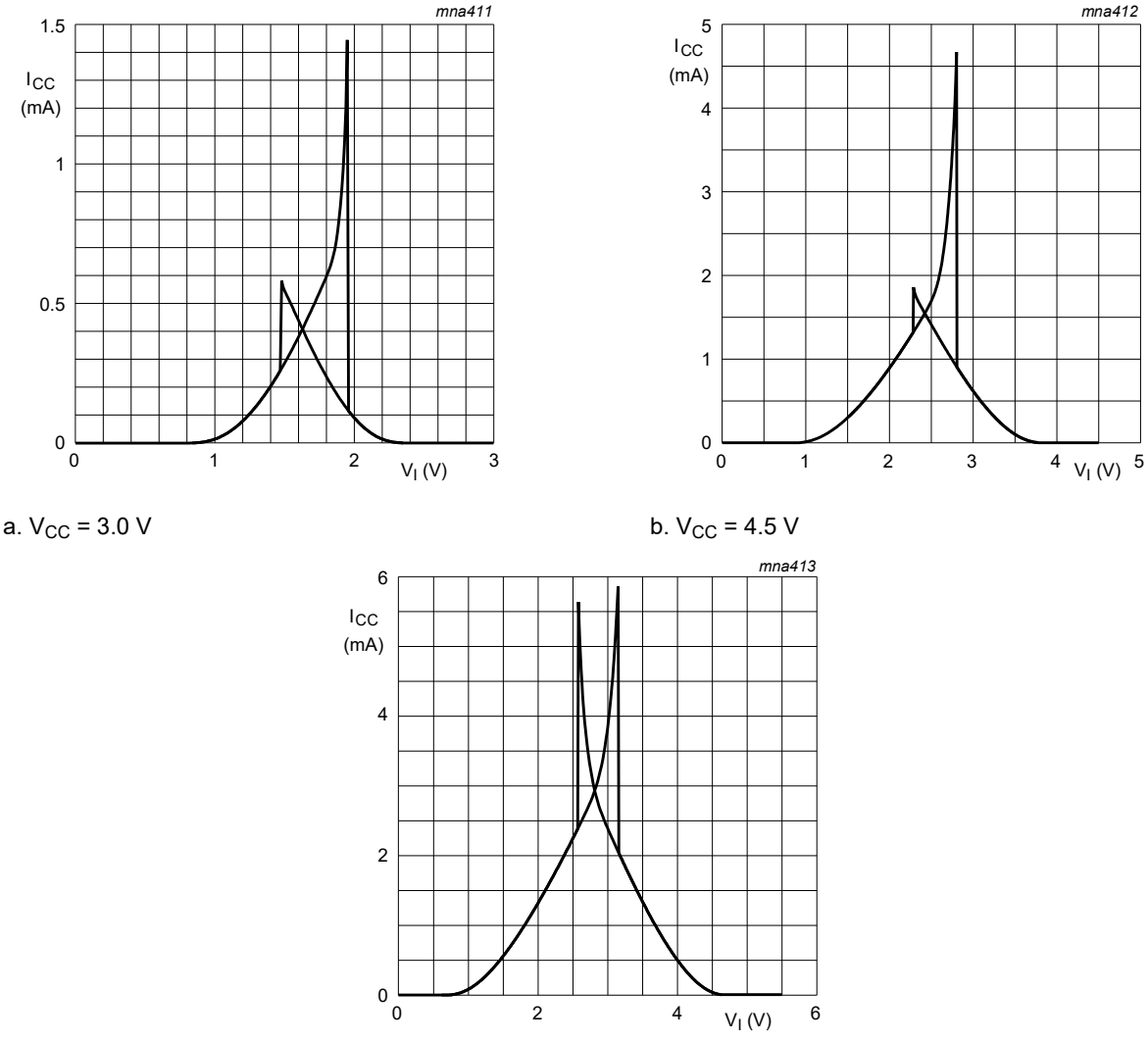



**Fig. 9. Definition of $V_{T+}$, $V_{T-}$ and $V_H$**

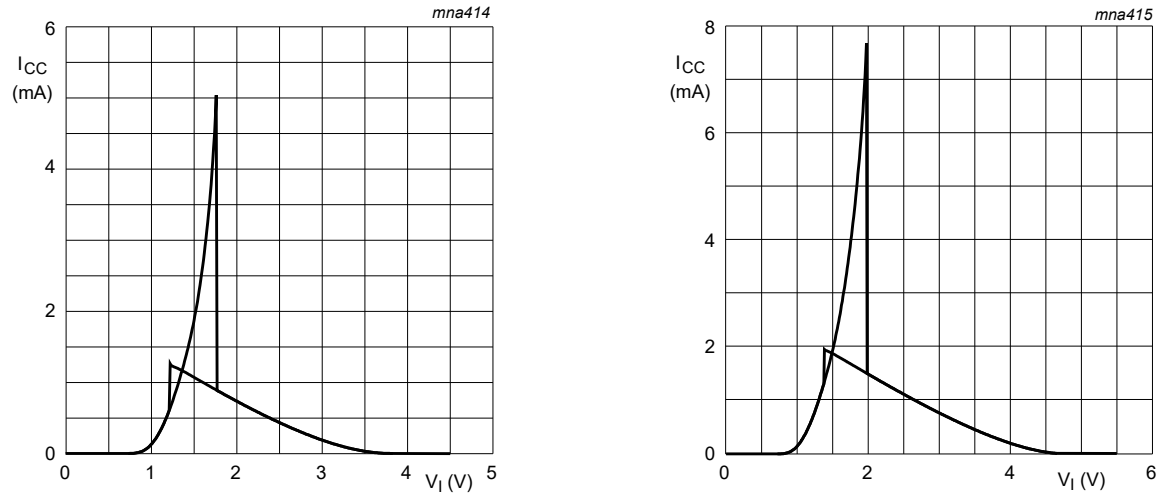



a. $V_{CC}$ = 3.0 V

b. $V_{CC}$ = 4.5 V

c. $V_{CC}$ = 5.5 V

**Fig. 10. Typical 74AHC132-Q100 transfer characteristics**

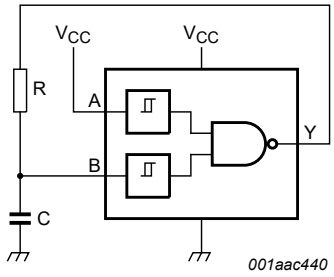



a. $V_{CC}$ = 4.5 V

b. $V_{CC}$ = 5.5 V

**Fig. 11. Typical 74AHCT132-Q100 transfer characteristics**

## 12. Application information



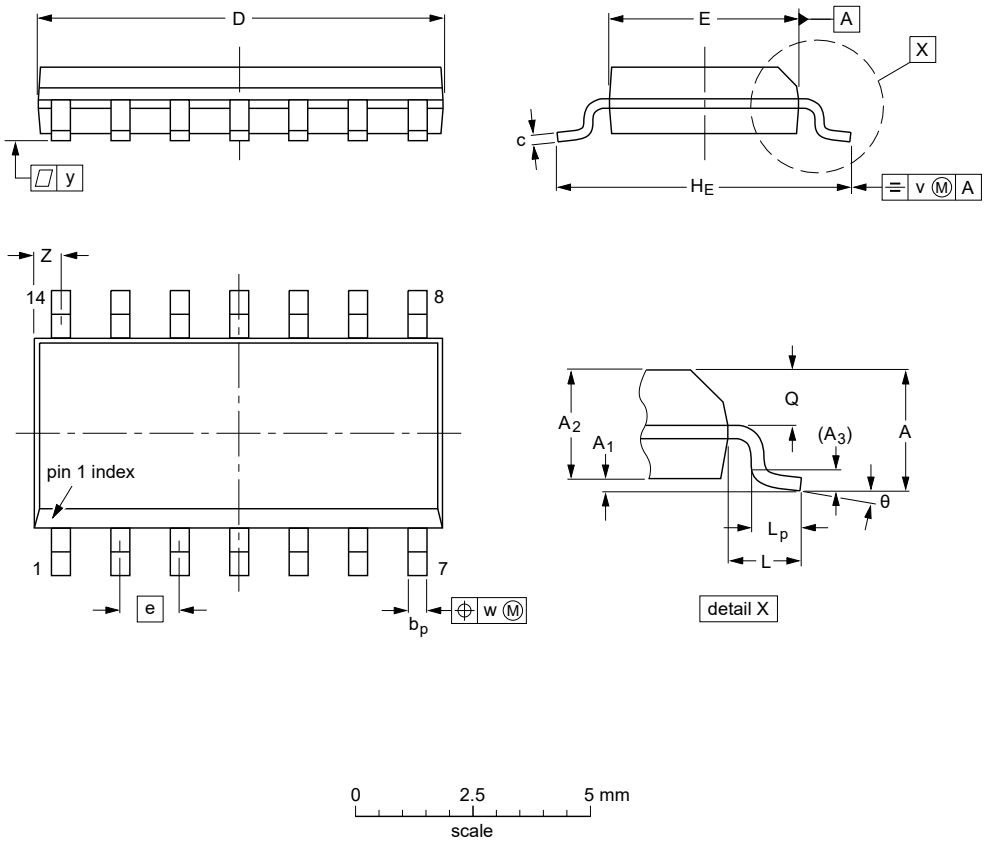

For 74AHC132-Q100: $f = \frac{1}{T} \approx \frac{1}{0.55 \times RC}$

For 74AHCT132-Q100: $f = \frac{1}{T} \approx \frac{1}{0.60 \times RC}$

**Fig. 12. Relaxation oscillator**

# 13. Package outline

**SO14: plastic small outline package; 14 leads; body width 3.9 mm** **SOT108-1**




**DIMENSIONS (inch dimensions are derived from the original mm dimensions)**

| UNIT | A max. | $A_1$ | $A_2$ | $A_3$ | $b_p$ | c | $D^{(1)}$ | $E^{(1)}$ | e | $H_E$ | L | $L_p$ | Q | v | w | y | $Z^{(1)}$ | θ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | 1.75 | 0.25<br>0.10 | 1.45<br>1.25 | 0.25 | 0.49<br>0.36 | 0.25<br>0.19 | 8.75<br>8.55 | 4.0<br>3.8 | 1.27 | 6.2<br>5.8 | 1.05 | 1.0<br>0.4 | 0.7<br>0.6 | 0.25 | 0.25 | 0.1 | 0.7<br>0.3 | $8^o$<br>$0^o$ |
| inches | 0.069 | 0.010<br>0.004 | 0.057<br>0.049 | 0.01 | 0.019<br>0.014 | 0.0100<br>0.0075 | 0.35<br>0.34 | 0.16<br>0.15 | 0.05 | 0.244<br>0.228 | 0.041 | 0.039<br>0.016 | 0.028<br>0.024 | 0.01 | 0.01 | 0.004 | 0.028<br>0.012 | |

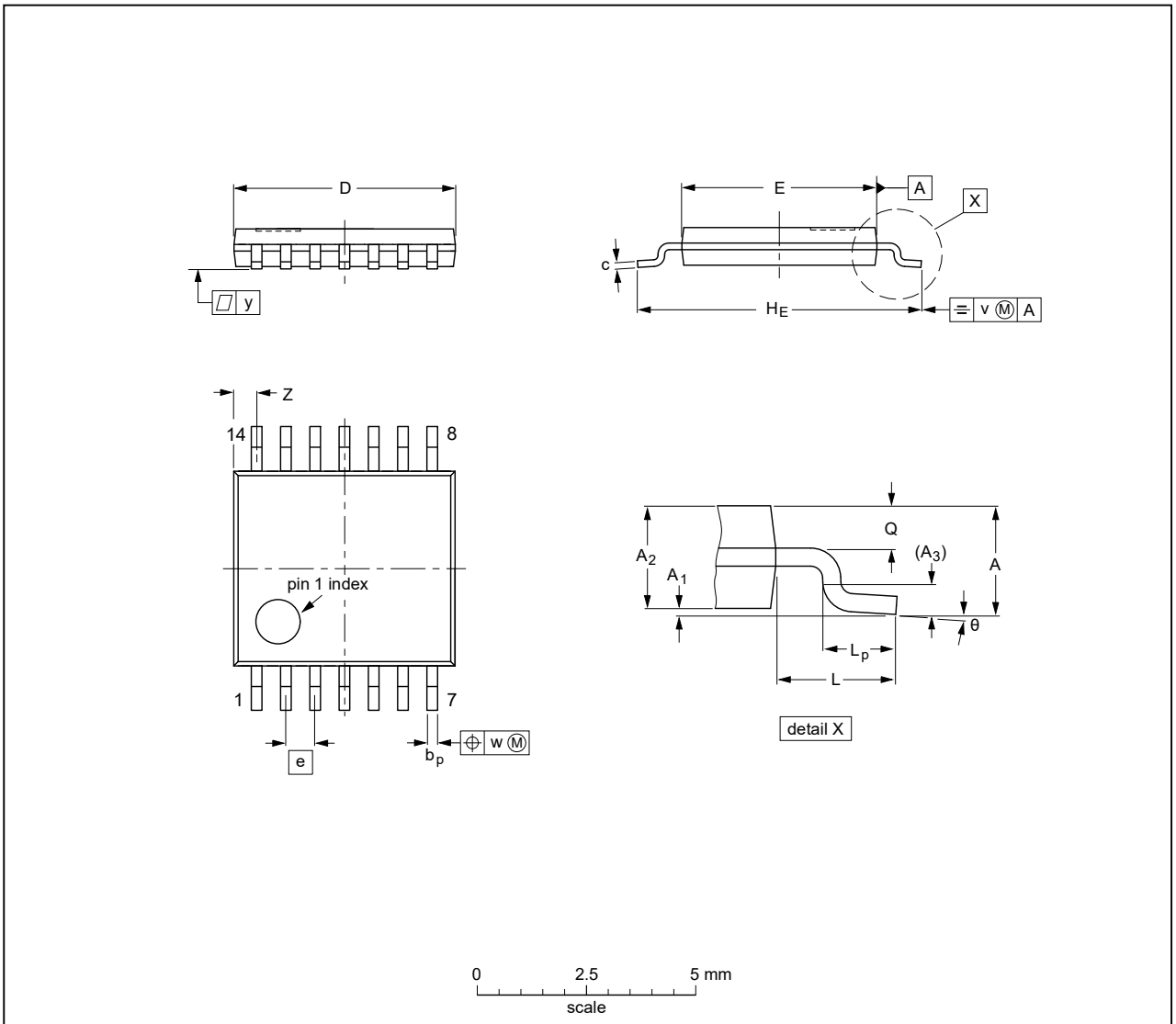
**Note**

1. Plastic or metal protrusions of 0.15 mm (0.006 inch) maximum per side are not included.

| OUTLINE VERSION | REFERENCES | | | | EUROPEAN PROJECTION | ISSUE DATE |
|---|---|---|---|---|---|---|
| | IEC | JEDEC | JEITA | | | |
| SOT108-1 | 076E06 | MS-012 | | | | ~~99-12-27~~<br>03-02-19 |

**Fig. 13. Package outline SOT108-1 (SO14)**

**TSSOP14: plastic thin shrink small outline package; 14 leads; body width 4.4 mm** **SOT402-1**




**DIMENSIONS (mm are the original dimensions)**

| UNIT | A max. | $A_1$ | $A_2$ | $A_3$ | $b_p$ | c | D (1) | E (2) | e | $H_E$ | L | $L_p$ | Q | v | w | y | Z (1) | θ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| mm | 1.1 | 0.15<br>0.05 | 0.95<br>0.80 | 0.25 | 0.30<br>0.19 | 0.2<br>0.1 | 5.1<br>4.9 | 4.5<br>4.3 | 0.65 | 6.6<br>6.2 | 1 | 0.75<br>0.50 | 0.4<br>0.3 | 0.2 | 0.13 | 0.1 | 0.72<br>0.38 | 8°<br>0° |

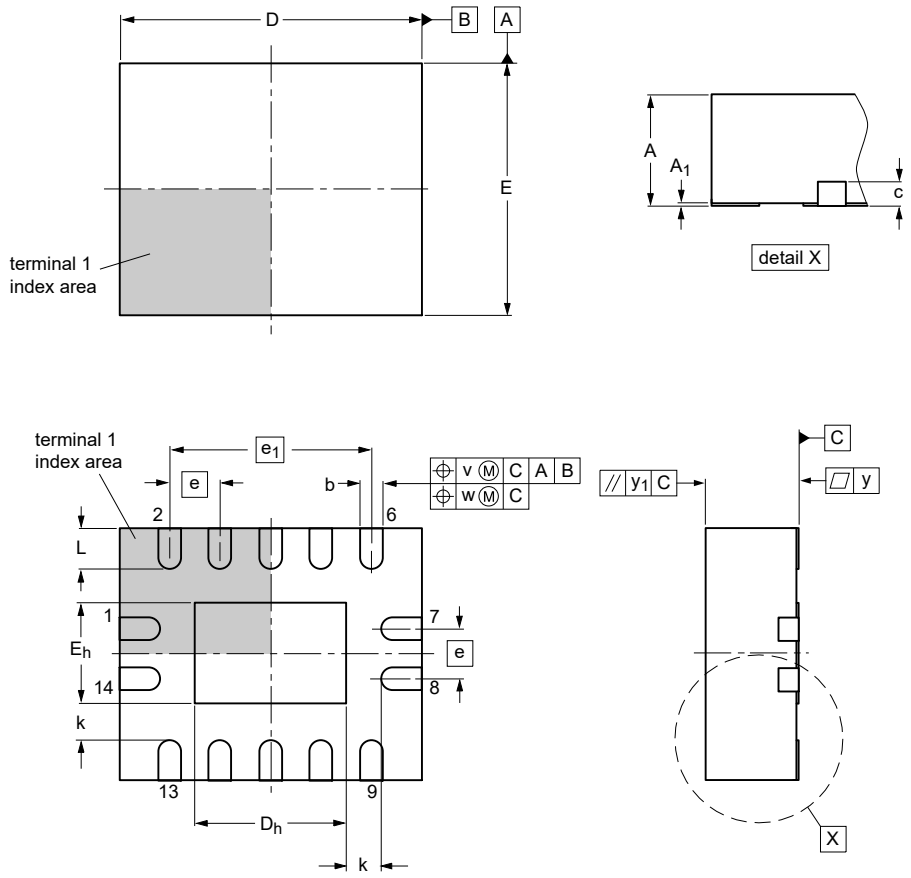
**Notes**

1. Plastic or metal protrusions of 0.15 mm maximum per side are not included.
2. Plastic interlead protrusions of 0.25 mm maximum per side are not included.

| OUTLINE VERSION | REFERENCES | | | | EUROPEAN PROJECTION | ISSUE DATE |
|---|---|---|---|---|---|---|
| | IEC | JEDEC | JEITA | | | |
| SOT402-1 | | MO-153 | | | | ~~99-12-27~~<br>03-02-18 |

**Fig. 14. 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 | | $A^{(1)}$ | $A_1$ | b | c | $D^{(1)}$ | $D_h$ | $E^{(1)}$ | $E_h$ | e | $e_1$ | k | L | v | w | y | $y_1$ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | max | 1 | 0.05 | 0.30 | | 3.1 | 1.65 | 2.6 | 1.15 | | | | 0.5 | | | | |
| mm | 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 | | | | ~~15-04-10~~ 15-05-05 |

**Fig. 15. Package outline SOT762-1 (DHVQFN14)**

# 14. Abbreviations

**Table 11. Abbreviations**

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

# 15. Revision history

**Table 12. Revision history**

| Document ID | Release date | Data sheet status | Change notice | Supersedes |
|---|---|---|---|---|
| 74AHC_AHCT132_Q100 v.2 | 20200703 | Product data sheet | - | 74AHC_AHCT132_Q100 v.1 |
| Modifications: | • The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia.<br>• Legal texts have been adapted to the new company name where appropriate.<br>• Section 1 and Section 2 updated.<br>• Table 4: Derating values for $P_{tot}$ total power dissipation updated.<br>• Package outline drawing of SOT762-1 (Fig. 15) updated. | | | |
| 74AHC_AHCT132_Q100 v.1 | 20090504 | Product data sheet | - | - |

# 16. 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. |

[1] Please consult the most recently issued document before initiating or completing a design.
[2] The term 'short data sheet' is explained in section "Definitions".
[3] The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the internet at https://www.nexperia.com.

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**Date of release: 3 July 2020**

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