



# 74AHC74; 74AHCT74

Dual D-type flip-flop with set and reset; positive-edge trigger

Rev. 11 — 28 April 2025

Product data sheet

## 1. General description

The 74AHC74; 74AHCT74 is a high-speed Si-gate CMOS device and is pin compatible with Low-Power Schottky TTL (LSTTL). It is specified in compliance with JEDEC standard No. 7-A.

The 74AHC74; 74AHCT74 is a dual positive-edge triggered, D-type flip-flop with individual data inputs (D), clock inputs (CP), set inputs ( $\overline{SD}$ ) and reset inputs ( $\overline{RD}$ ). It also has complementary outputs (Q and  $\overline{Q}$ ).

The set and reset are asynchronous active LOW inputs that operate independent of the clock input. Information on the data input is transferred to the Q output on the LOW to HIGH transition of the clock pulse. The data inputs must be stable one set-up time prior to the LOW to HIGH clock transition for predictable operation.

Schmitt-trigger action in the clock input makes the circuit highly tolerant to slower clock rise and fall times.

## 2. Features and benefits

- Balanced propagation delays
- All inputs have Schmitt-trigger actions
- Inputs accept voltages higher than  $V_{CC}$
- Input levels:
  - For 74AHC74: CMOS level
  - For 74AHCT74: TTL level
- ESD protection:
  - HBM: ANSI/ESDA/JEDEC JS-001 class 2 exceeds 2000 V
  - CDM: ANSI/ESDA/JEDEC JS-002 class C3 exceeds 1000 V
- Multiple package options
- Specified from -40 °C to +85 °C and from -40 °C to +125 °C

## 3. Ordering information

Table 1. Ordering information

Type number	Package			
	Temperature range	Name	Description	Version
<a href="#">74AHC74D</a> <a href="#">74AHCT74D</a>	-40 °C to +125 °C	SO14	plastic small outline package; 14 leads; body width 3.9 mm	<a href="#">SOT108-1</a>
<a href="#">74AHC74PW</a> <a href="#">74AHCT74PW</a>	-40 °C to +125 °C	TSSOP14	plastic thin shrink small outline package; 14 leads; body width 4.4 mm	<a href="#">SOT402-1</a>
<a href="#">74AHC74BQ</a> <a href="#">74AHCT74BQ</a>	-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	<a href="#">SOT762-1</a>
<a href="#">74AHC74BZ</a> <a href="#">74AHCT74BZ</a>	-40 °C to +125 °C	DHXQFN14	plastic, leadless dual in-line compatible thermal enhanced extreme thin quad flat package; no leads; 14 terminals; 0.4 mm pitch; body 2 mm × 2 mm × 0.48 mm	<a href="#">SOT8014-1</a>

## 4. Functional diagram

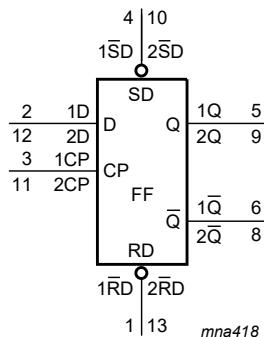


Fig. 1. Functional diagram

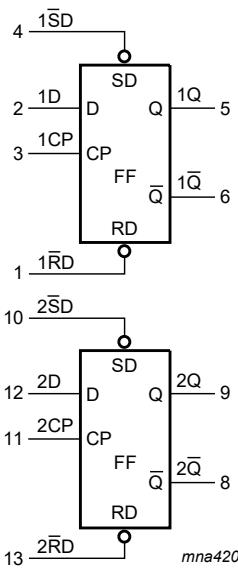


Fig. 2. Logic symbol

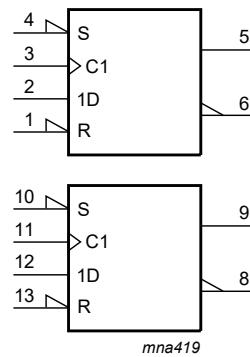


Fig. 3. IEC logic symbol

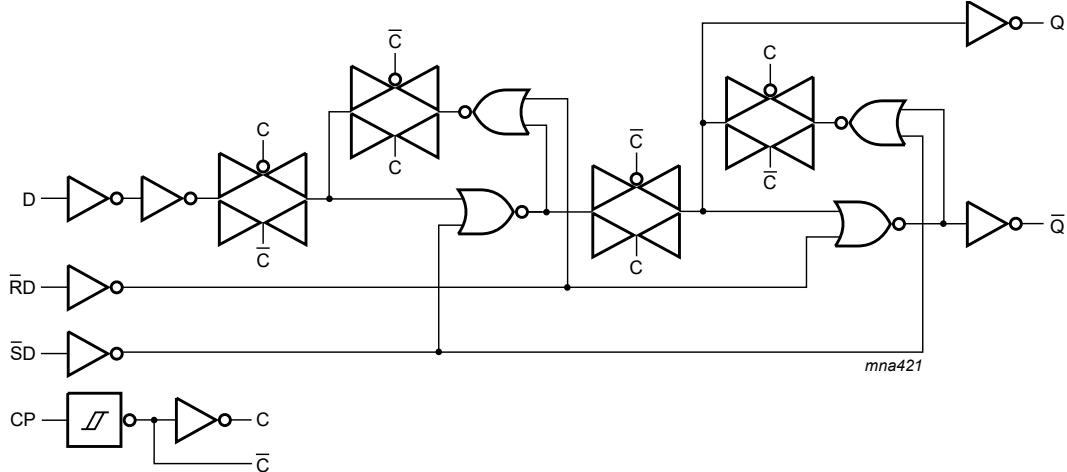
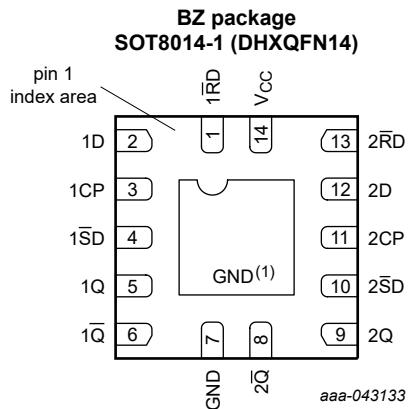
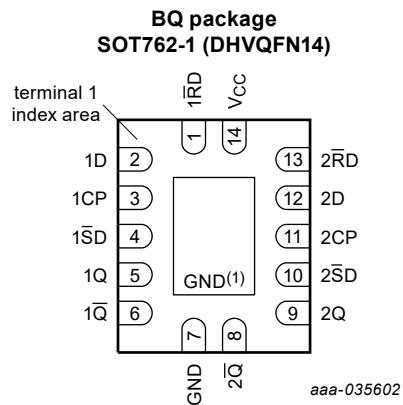
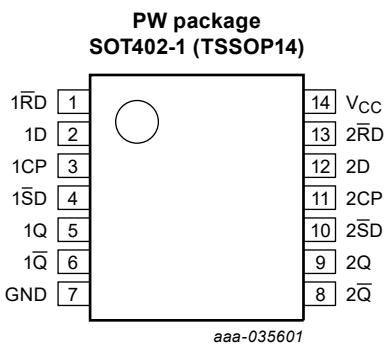
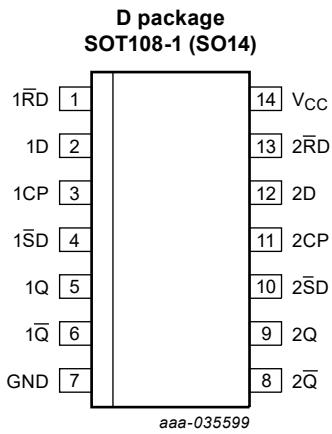


Fig. 4. Logic diagram (one flip-flop)

## 5. Pinning information

### 5.1. Pinning



(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.

## 5.2. Pin description

**Table 2. Pin description**

Symbol	Pin	Description
1RD	1	asynchronous reset direct input (active LOW)
1D	2	data input
1CP	3	clock input (LOW to HIGH, edge-triggered)
1SD	4	asynchronous set direct input (active LOW)
1Q	5	true flip-flop output
1Q̄	6	complement flip-flop output
GND	7	ground (0 V)
2RD	8	complement flip-flop output
2Q	9	true flip-flop output
2SD	10	asynchronous set direct input (active LOW)
2CP	11	clock input (LOW to HIGH, edge-triggered)
2D	12	data input
2RD	13	asynchronous reset direct input (active LOW)
V <sub>CC</sub>	14	supply voltage

## 6. Functional description

**Table 3. Function table**

H = HIGH voltage level; L = LOW voltage level; X = don't care;

↑ = LOW to HIGH transition; Q<sub>n+1</sub> = state after the next LOW to HIGH CP transition.

Control			Input	Output			
nSD	nRD	nCP	nD	nQ	nQ̄	nQ <sub>n+1</sub>	nQ̄ <sub>n+1</sub>
L	H	X	X	H	L	-	-
H	L	X	X	L	H	-	-
L	L	X	X	H	H	-	-
H	H	↑	L	-	-	L	H
H	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				
		SOT108-1 (SO14)	[2]	-	500	mW
		SOT402-1 (TSSOP14)				
SOT762-1 (DHVQFN14)						
	SOT8014-1 (DHXQFN14)	[3]	-	250	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.

[3] For SOT8014-1 (DHXQFN14) package:  $P_{tot}$  derates linearly with 8.7 mW/K above 121 °C.

## 8. Recommended operating conditions

**Table 5. Operating conditions**

Symbol	Parameter	Conditions	74AHC74			74AHCT74			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	$V_{CC} = 3.0$ V to 3.6 V	-	-	100	-	-	-	ns/V
		$V_{CC} = 4.5$ V to 5.5 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	
<b>74AHC74</b>										
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
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	-	-	3.80	-	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>I</sub>	input leakage current	V <sub>I</sub> = 5.5 V or GND; 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; V <sub>CC</sub> = 5.5 V	-	-	2.0	-	20	-	40	µA
C <sub>I</sub>	input capacitance	V <sub>I</sub> = V <sub>CC</sub> or GND	-	3	10	-	10	-	10	pF
<b>74AHCT74</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	-	-	3.80	-	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>I</sub>	input leakage current	V <sub>I</sub> = 5.5 V or GND; 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; V <sub>CC</sub> = 5.5 V	-	-	2.0	-	20	-	40	µA

Symbol	Parameter	Conditions	25 °C			-40 °C to +85 °C		-40 °C to +125 °C		Unit
			Min	Typ	Max	Min	Max	Min	Max	
$\Delta I_{CC}$	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

## 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	Max	Min	Max	Min	Max	
<b>74AHC74</b>										
$t_{pd}$	propagation delay	nCP to nQ, $n\bar{Q}$ ; see <a href="#">Fig. 5</a> [2]								
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 15$ pF	-	5.2	11.9	1.0	14.0	1.0	15.0	ns
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 50$ pF	-	7.4	15.4	1.0	17.5	1.0	19.5	ns
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 15$ pF	-	3.7	7.3	1.0	8.5	1.0	9.5	ns
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 50$ pF	-	5.2	9.3	1.0	10.5	1.0	12.0	ns
		nSD, nRD to nQ, $n\bar{Q}$ ; see <a href="#">Fig. 6</a>								
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 15$ pF	-	5.4	12.3	1.0	14.5	1.0	15.5	ns
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 50$ pF	-	7.7	15.8	1.0	18.0	1.0	20.0	ns
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 15$ pF	-	3.7	7.7	1.0	9.0	1.0	10.0	ns
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 50$ pF	-	5.3	9.7	1.0	11.0	1.0	12.5	ns
$f_{max}$	maximum frequency	see <a href="#">Fig. 5</a>								
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 15$ pF	80	125	-	70	-	70	-	MHz
		$V_{CC} = 3.0$ V to 3.6 V; $C_L = 50$ pF	50	75	-	45	-	45	-	MHz
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 15$ pF	130	170	-	110	-	110	-	MHz
		$V_{CC} = 4.5$ V to 5.5 V; $C_L = 50$ pF	90	115	-	75	-	75	-	MHz
$t_w$	pulse width	CP HIGH or LOW; nSD, nRD LOW; see <a href="#">Fig. 5</a> and <a href="#">Fig. 6</a>								
		$V_{CC} = 3.0$ V to 3.6 V	6.0	-	-	7.0	-	7.0	-	ns
		$V_{CC} = 4.5$ V to 5.5 V	5.0	-	-	5.0	-	5.0	-	ns
$t_{su}$	set-up time	nD to nCP; see <a href="#">Fig. 5</a>								
		$V_{CC} = 3.0$ V to 3.6 V	6.0	-	-	7.0	-	7.0	-	ns
		$V_{CC} = 4.5$ V to 5.5 V	5.0	-	-	5.0	-	5.0	-	ns
$t_h$	hold time	nD to nCP; see <a href="#">Fig. 5</a>								
		$V_{CC} = 3.0$ V to 3.6 V	0.5	-	-	0.5	-	0.5	-	ns
		$V_{CC} = 4.5$ V to 5.5 V	0.5	-	-	0.5	-	0.5	-	ns

Symbol	Parameter	Conditions	25 °C			-40 °C to +85 °C		-40 °C to +125 °C		Unit
			Min	Typ [1]	Max	Min	Max	Min	Max	
t <sub>rec</sub>	recovery time	nRD to nCP; see <a href="#">Fig. 6</a>								
		V <sub>CC</sub> = 3.0 V to 3.6 V	5.0	-	-	5.0	-	5.0	-	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V	3.0	-	-	3.0	-	3.0	-	ns
C <sub>PD</sub>	power dissipation capacitance	f <sub>i</sub> = 1 MHz; V <sub>I</sub> = GND to V <sub>CC</sub> [3]	-	12	-	-	-	-	-	pF

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t <sub>pd</sub>	propagation delay	nCP to nQ, n $\bar{Q}$ ; see <a href="#">Fig. 5</a> [2]								
		V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF	-	3.3	7.8	1.0	9.0	1.0	10.0	ns
		V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF	-	4.8	8.8	1.0	10.0	1.0	11.0	ns
		n $\bar{SD}$ , nRD to nQ, n $\bar{Q}$ ; see <a href="#">Fig. 6</a>								
		V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF	-	3.7	10.4	1.0	12.0	1.0	13.0	ns
f <sub>max</sub>	maximum frequency	see <a href="#">Fig. 5</a>								
		V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 15 pF	100	160	-	80	-	80	-	MHz
		V <sub>CC</sub> = 4.5 V to 5.5 V; C <sub>L</sub> = 50 pF	80	140	-	65	-	65	-	MHz
t <sub>w</sub>	pulse width	CP HIGH or LOW; n $\bar{SD}$ , nRD LOW; V <sub>CC</sub> = 4.5 V to 5.5 V; see <a href="#">Fig. 5</a> and <a href="#">Fig. 6</a>	5.0	-	-	5.0	-	5.0	-	ns
t <sub>su</sub>	set-up time	nD to nCP; V <sub>CC</sub> = 4.5 V to 5.5 V; see <a href="#">Fig. 5</a>	5.0	-	-	5.0	-	5.0	-	ns
t <sub>h</sub>	hold time	nD to nCP; V <sub>CC</sub> = 4.5 V to 5.5 V; see <a href="#">Fig. 5</a>	0	-	-	0	-	0	-	ns
t <sub>rec</sub>	recovery time	nRD to nCP; V <sub>CC</sub> = 4.5 V to 5.5 V; see <a href="#">Fig. 6</a>	3.5	-	-	3.5	-	3.5	-	ns
C <sub>PD</sub>	power dissipation capacitance	f <sub>i</sub> = 1 MHz; V <sub>I</sub> = GND to V <sub>CC</sub> [3]	-	16	-	-	-	-	-	pF

[1] Typical values are measured at nominal supply voltage (V<sub>CC</sub> = 3.3 V and V<sub>CC</sub> = 5.0 V).

[2] t<sub>pd</sub> is the same as t<sub>PLH</sub> and t<sub>PHL</sub>.

[3] C<sub>PD</sub> is used to determine the dynamic power dissipation (P<sub>D</sub> in  $\mu$ W).

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

f<sub>i</sub> = input frequency in MHz;

f<sub>o</sub> = output frequency in MHz;

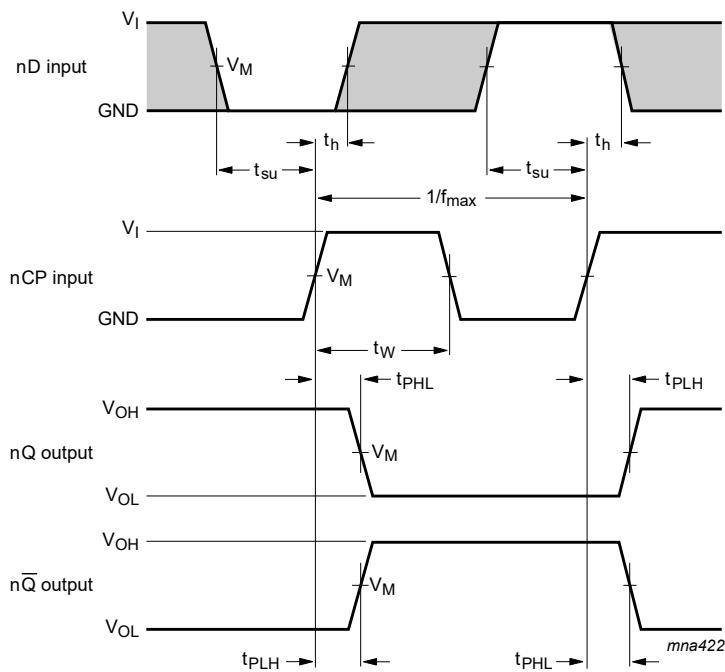
C<sub>L</sub> = output load capacitance in pF;

V<sub>CC</sub> = supply voltage in V;

N = number of inputs switching;

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

### 10.1. Waveforms and test circuit

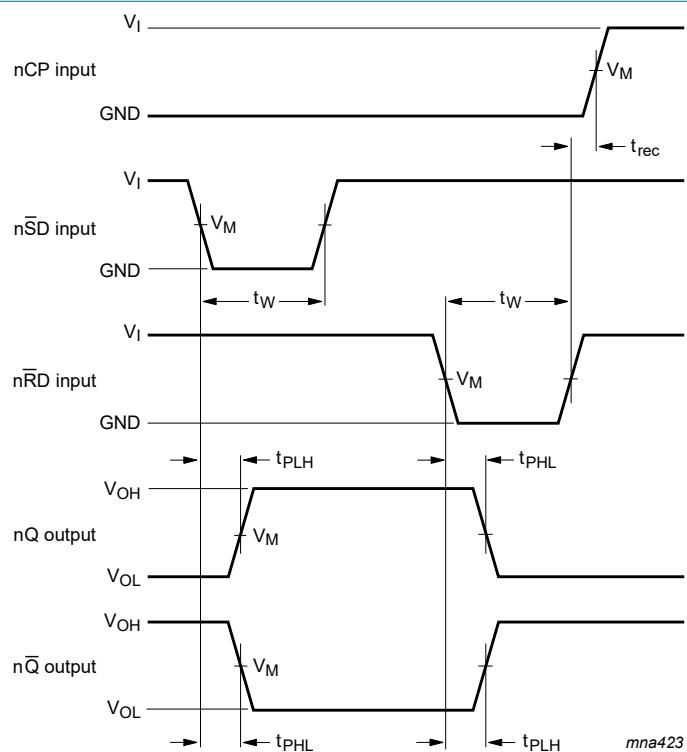


Measurement points are given in [Table 8](#).

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

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

**Fig. 5. Clock pulse width, maximum frequency, set-up times, hold times and input to output propagation delays**



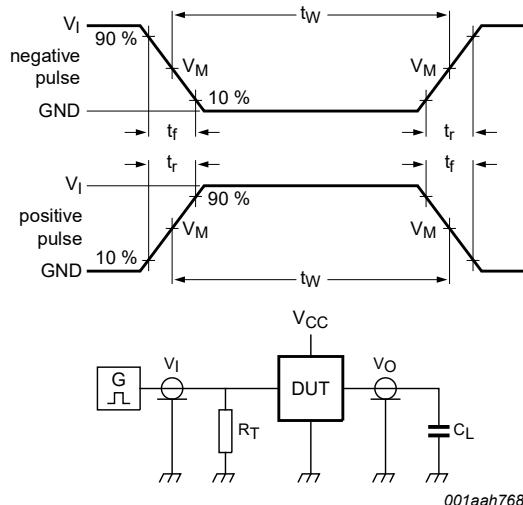
Measurement points are given in [Table 8](#).

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

**Fig. 6. Set and reset pulse widths, recovery time and input to output propagation delays**

Table 8. Measurement points

Type	Input	Output
	$V_M$	$V_M$
74AHC74	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$
74AHCT74	1.5 V	$0.5 \times V_{CC}$



For test data, see [Table 9](#).

Definitions test circuit:

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

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

Fig. 7. Test circuit for measuring switching times

Table 9. Test data

Type	Input		$C_L$	Test
	$V_I$	$t_r, t_f$		
74AHC74	$V_{CC}$	$\leq 3.0 \text{ ns}$	50 pF, 15 pF	$t_{PLH}, t_{PHL}$
74AHCT74	3.0 V	$\leq 3.0 \text{ ns}$	50 pF, 15 pF	$t_{PLH}, t_{PHL}$

## 11. Package outline

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

SOT108-1

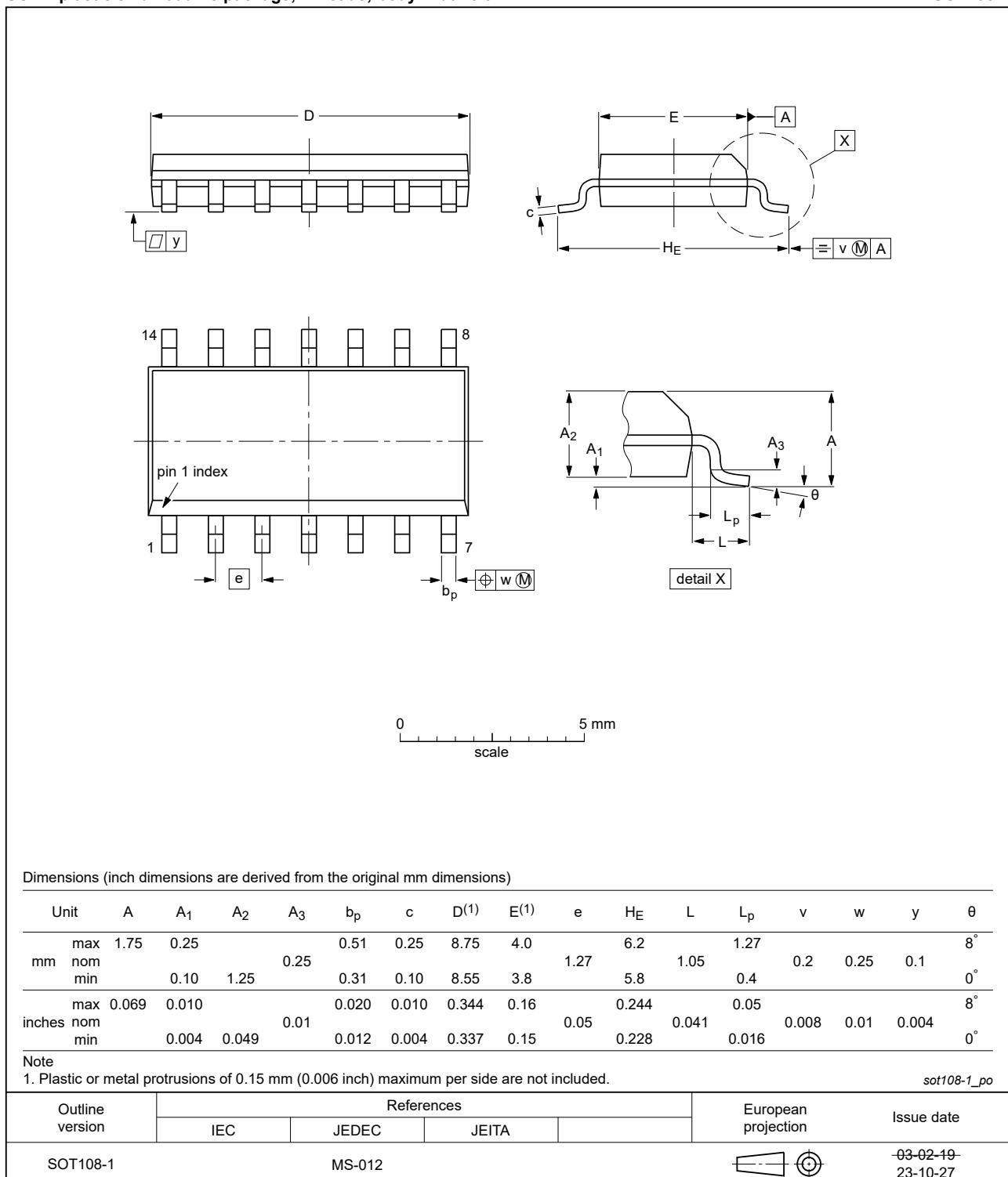


Fig. 8. Package outline SOT108-1 (SO14)

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

SOT402-1

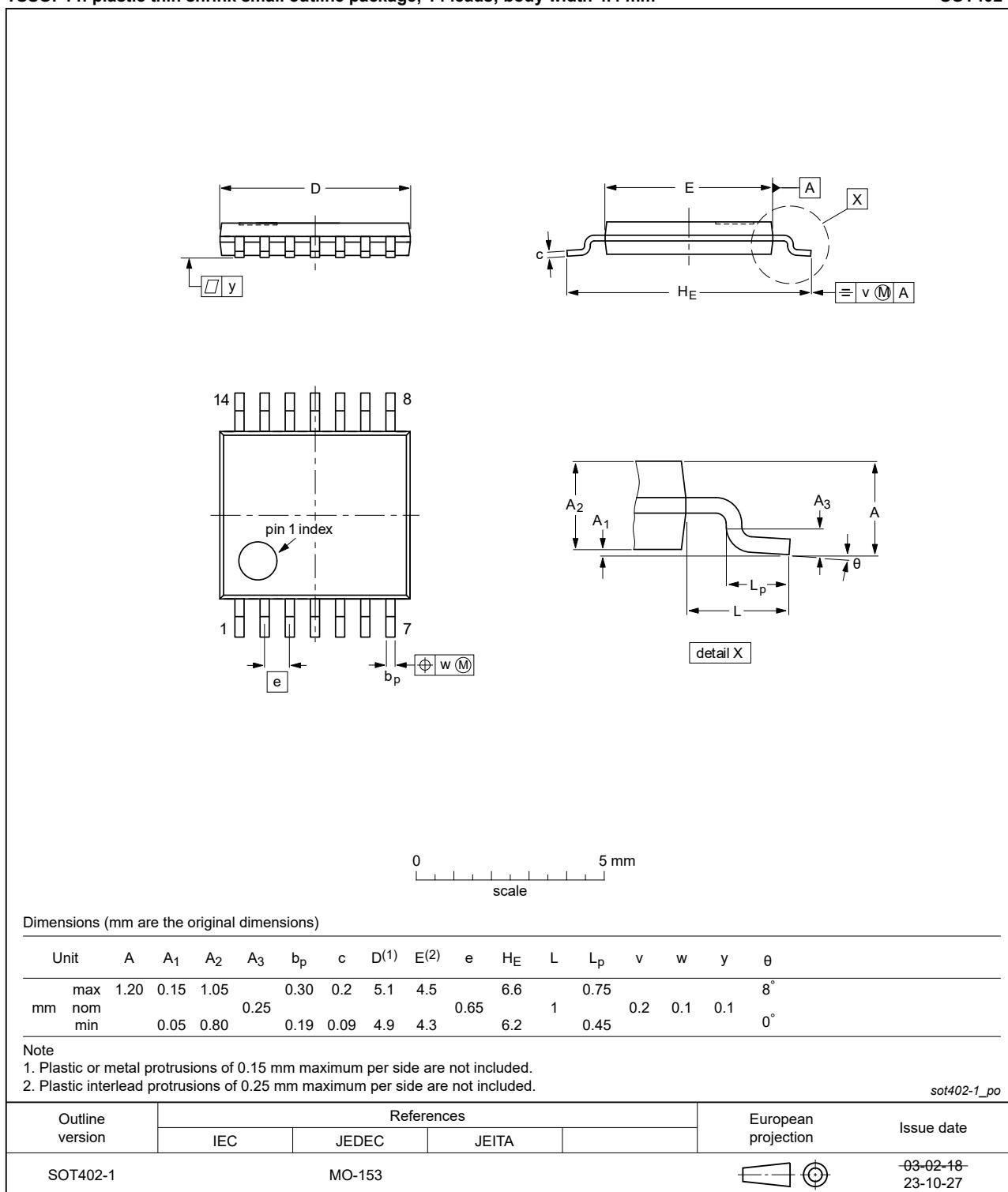


Fig. 9. Package outline SOT402-1 (TSSOP14)

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

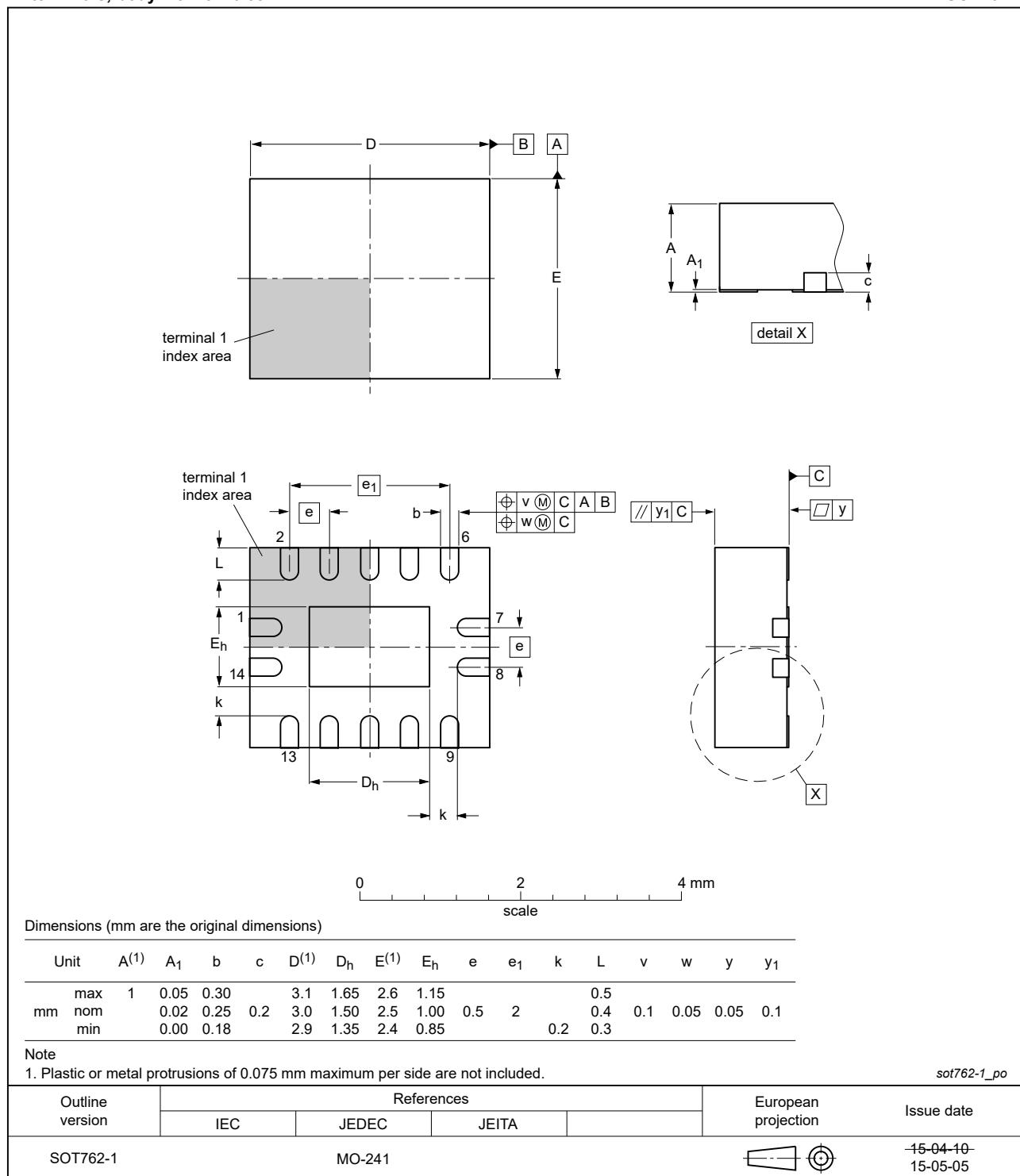


Fig. 10. Package outline SOT762-1 (DHVQFN14)

DHXQFN14: plastic, leadless dual in-line compatible thermal enhanced extreme thin quad flat package; no leads; 14 terminals; 0.4 mm pitch; body 2 mm x 2 mm x 0.48 mm

SOT8014-1

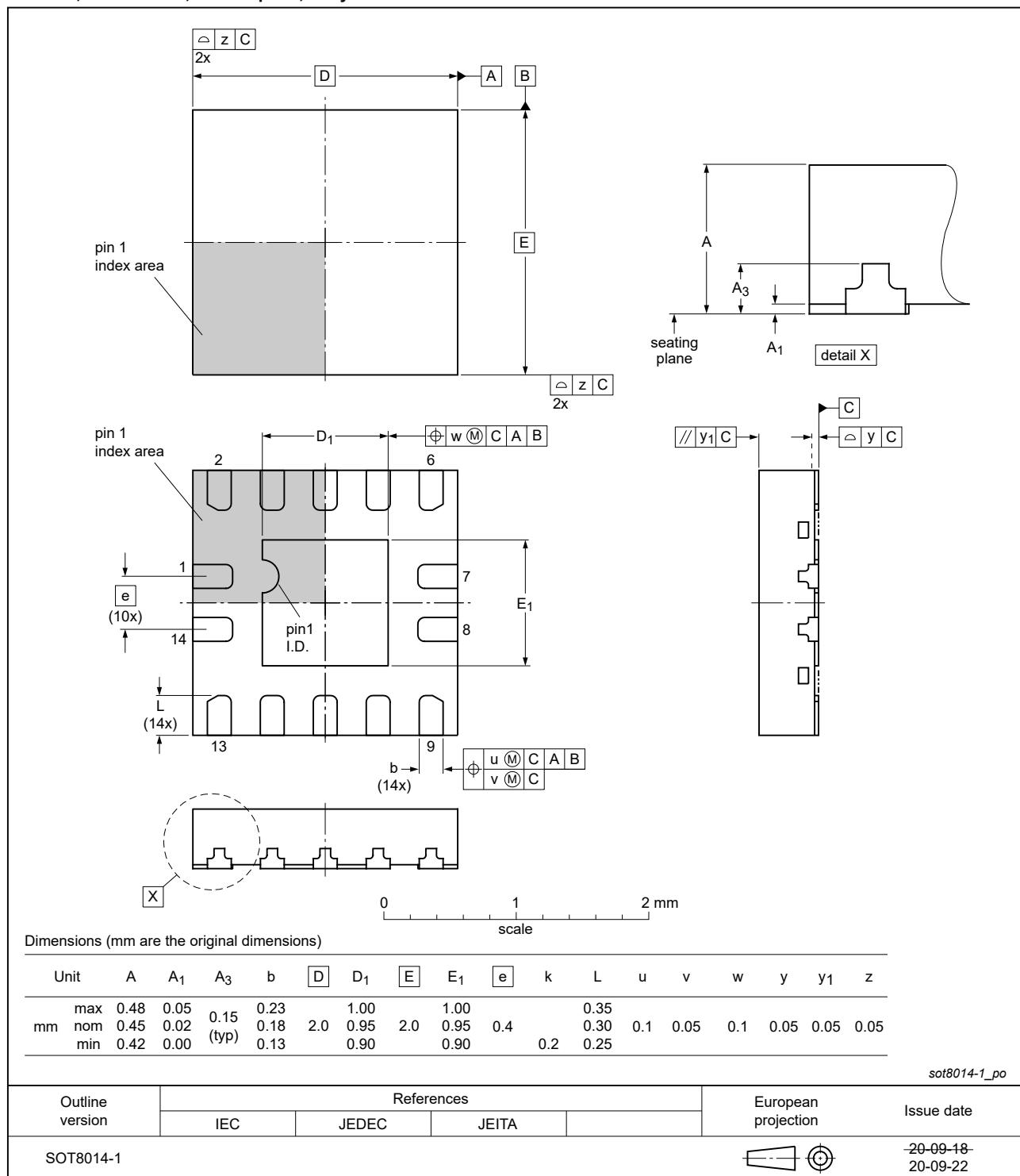


Fig. 11. Package outline SOT8014-1 (DHXQFN14)

## 12. Abbreviations

**Table 10. Abbreviations**

Acronym	Description
ANSI	American National Standards Institute
CDM	Charged Device Model
CMOS	Complementary Metal-Oxide Semiconductor
ESD	ElectroStatic Discharge
ESDA	ElectroStatic Discharge Association
HBM	Human Body Model
JEDEC	Joint Electron Device Engineering Council
LSTTL	Low-power Schottky Transistor-Transistor Logic
TTL	Transistor-Transistor Logic

## 13. Revision history

**Table 11. Revision history**

Document ID	Release date	Data sheet status	Change notice	Supersedes
74AHC_AHCT74 v.11	20250428	Product data sheet	-	74AHC_AHCT74 v.10
Modifications:				• Type numbers 74AHC74BZ and 74AHCT74BZ (SOT8014-1/DHXFNQ14) added.
74AHC_AHCT74 v.10	20240307	Product data sheet	-	74AHC_AHCT74 v.9
Modifications:				• <a href="#">Fig. 8</a> , <a href="#">Fig. 9</a> : Aligned SO and TSSOP package outline drawings to JEDEC MS-012 and MO-153.
74AHC_AHCT74 v.9	20231006	Product data sheet	-	74AHC_AHCT74 v.8
Modifications:				• <a href="#">Section 2</a> : ESD specification updated according to the latest JEDEC standard.
74AHC_AHCT74 v.8	20200422	Product data sheet	-	74AHC_AHCT74 v.7
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. • <a href="#">Section 5.1</a> : Corrected pin configuration drawings (errata). • <a href="#">Table 4</a> : Derating values for $P_{tot}$ total power dissipation updated. • <a href="#">Fig. 10</a> : Package outline drawing SOT762-1 (DHVQFN14) updated.
74AHC_AHCT74 v.7	20150421	Product data sheet	-	74AHC_AHCT74 v.6
Modifications:				• <a href="#">Table 7</a> : minimum $f_{max}$ values at 3.0 V to 3.6 V for 74AHC74 corrected (errata).
74AHC_AHCT74 v.6	20141020	Product data sheet	-	74AHC_AHCT74 v.5
Modifications:				• <a href="#">Table 3</a> corrected (errata).
74AHC_AHCT74 v.5	20080609	Product data sheet	-	74AHC_AHCT74 v.4
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. • <a href="#">Table 6</a> : the conditions for input leakage current have been changed.
74AHC_AHCT74 v.4	20050207	Product data sheet	-	74AHC_AHCT74 v.3
74AHC_AHCT74 v.3	20040429	Product specification	-	74AHC_AHCT74 v.2
74AHC_AHCT74 v.2	19990923	Product specification	-	74AHC_AHCT74 v.1
74AHC_AHCT74 v.1	19990805	Product specification	-	-

## 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.

- [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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