

# 74AUP1T17

## Low-power buffer with voltage-level translator

Rev. 4 — 26 July 2023

Product data sheet

### 1. General description

The 74AUP1T17 provides the single buffer function. This device ensures a very low static and dynamic power consumption across the entire  $V_{CC}$  range from 2.3 V to 3.6 V.

The 74AUP1T17 is designed for logic-level translation applications with input switching levels that accept 1.8 V low-voltage CMOS signals, while operating from either a single 2.5 V or 3.3 V supply voltage.

The wide supply voltage range ensures normal operation as battery voltage drops from 3.6 V to 2.3 V.

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

Schmitt trigger inputs make the circuit tolerant to slower input rise and fall times across the entire  $V_{CC}$  range.

### 2. Features and benefits

- Wide supply voltage range from 2.3 V to 3.6 V
- High noise immunity
- Low static power consumption;  $I_{CC} = 1.5 \mu A$  (maximum)
- Latch-up performance exceeds 100 mA per JESD 78 Class II
- Inputs accept voltages up to 3.6 V
- Low noise overshoot and undershoot  $< 10\%$  of  $V_{CC}$
- $I_{OFF}$  circuitry provides partial power-down mode operation
- ESD protection:
  - HBM: ANSI/ESDA/JEDEC JS-001 class 3A exceeds 5000 V
  - CDM: ANSI/ESDA/JEDEC JS-002 class C3 exceeds 1000 V
- Specified from  $-40\text{ }^{\circ}\text{C}$  to  $+85\text{ }^{\circ}\text{C}$  and  $-40\text{ }^{\circ}\text{C}$  to  $+125\text{ }^{\circ}\text{C}$

### 3. Ordering information

Table 1. Ordering information

Type number	Package			
	Temperature range	Name	Description	Version
<a href="#">74AUP1T17GW</a>	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$	TSSOP5	plastic thin shrink small outline package; 5 leads; body width 1.25 mm	<a href="#">SOT353-1</a>
<a href="#">74AUP1T17GX</a>	$-40\text{ }^{\circ}\text{C}$ to $+125\text{ }^{\circ}\text{C}$	X2SON5	plastic thermal enhanced extremely thin small outline package; no leads; 5 terminals; body $0.8 \times 0.8 \times 0.32$ mm	<a href="#">SOT1226-3</a>

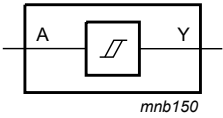
4. Marking

Table 2. Marking

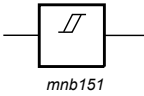
Type number	Marking code <sup>[1]</sup>
74AUP1T17GW	57
74AUP1T17GX	57

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

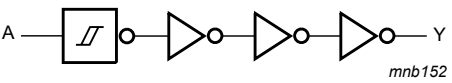
5. Functional diagram



**Fig. 1. Logic symbol**



**Fig. 2. IEC logic symbol**

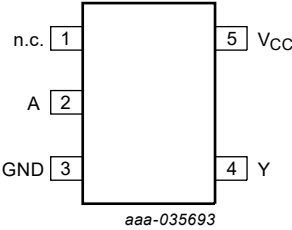


**Fig. 3. Logic diagram**

6. Pinning information

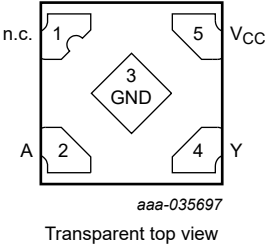
6.1. Pinning

**GW package**  
**SOT353-1 (TSSOP5)**



aaa-035693

**GX package**  
**SOT1226-3 (X2SON5)**



aaa-035697  
Transparent top view

6.2. Pin description

Table 3. Pin description

Symbol	Pin	Description
n.c.	1	not connected
A	2	data input
GND	3	ground (0 V)
Y	4	data output
V <sub>CC</sub>	5	supply voltage

7. Functional description

Table 4. Function table

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

Input	Output
A	Y
L	L
H	H

8. Limiting values

Table 5. Limiting values

In accordance with the Absolute Maximum Rating System (IEC 60134). Voltages are referenced to GND (ground = 0 V).

Symbol	Parameter	Conditions	Min	Max	Unit
V <sub>CC</sub>	supply voltage		-0.5	+4.6	V
I <sub>IK</sub>	input clamping current	V <sub>I</sub> < 0 V	-50	-	mA
V <sub>I</sub>	input voltage	[1]	-0.5	+4.6	V
I <sub>OK</sub>	output clamping current	V <sub>O</sub> < 0 V	-50	-	mA
V <sub>O</sub>	output voltage	Active mode and Power-down mode [1]	-0.5	+4.6	V
I <sub>O</sub>	output current	V <sub>O</sub> = 0 V to V <sub>CC</sub>	-	±20	mA
I <sub>CC</sub>	supply current		-	50	mA
I <sub>GND</sub>	ground current		-50	-	mA
T <sub>stg</sub>	storage temperature		-65	+150	°C
P <sub>tot</sub>	total power dissipation	T <sub>amb</sub> = -40 °C to +125 °C [2]	-	250	mW

- [1] The minimum input and output voltage ratings may be exceeded if the input and output current ratings are observed.  
[2] For SOT353-1 (TSSOP5) package: P<sub>tot</sub> derates linearly with 3.3 mW/K above 74 °C.  
For SOT1226-3 (X2SON5) package: P<sub>tot</sub> derates linearly with 3.0 mW/K above 67 °C.

9. Recommended operating conditions

Table 6. Recommended operating conditions

Symbol	Parameter	Conditions	Min	Max	Unit
V <sub>CC</sub>	supply voltage		2.3	3.6	V
V <sub>I</sub>	input voltage		0	3.6	V
V <sub>O</sub>	output voltage	Active mode	0	V <sub>CC</sub>	V
		Power-down mode; V <sub>CC</sub> = 0 V	0	3.6	V
T <sub>amb</sub>	ambient temperature		-40	+125	°C

## 10. Static characteristics

**Table 7. Static characteristics**

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

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
<b>T<sub>amb</sub> = 25 °C</b>						
V <sub>T+</sub>	positive-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.60	-	1.10	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.16	V
V <sub>T-</sub>	negative-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.35	-	0.60	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.50	-	0.85	V
V <sub>H</sub>	hysteresis voltage	(V <sub>H</sub> = V <sub>T+</sub> - V <sub>T-</sub> )				
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.23	-	0.60	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.25	-	0.56	V
V <sub>OH</sub>	HIGH-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = -20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -2.3 mA; V <sub>CC</sub> = 2.3 V	2.05	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.9	-	-	V
		I <sub>O</sub> = -2.7 mA; V <sub>CC</sub> = 3.0 V	2.72	-	-	V
		I <sub>O</sub> = -4.0 mA; V <sub>CC</sub> = 3.0 V	2.6	-	-	V
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = 20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	0.10	V
		I <sub>O</sub> = 2.3 mA; V <sub>CC</sub> = 2.3 V	-	-	0.31	V
		I <sub>O</sub> = 3.1 mA; V <sub>CC</sub> = 2.3 V	-	-	0.44	V
		I <sub>O</sub> = 2.7 mA; V <sub>CC</sub> = 3.0 V	-	-	0.31	V
		I <sub>O</sub> = 4.0 mA; V <sub>CC</sub> = 3.0 V	-	-	0.44	V
I <sub>I</sub>	input leakage current	V <sub>I</sub> = GND to 3.6 V; V <sub>CC</sub> = 0 V to 3.6 V	-	-	±0.1	µA
I <sub>OFF</sub>	power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V	-	-	±0.1	µA
ΔI <sub>OFF</sub>	additional power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V to 0.2 V	-	-	±0.1	µA
I <sub>CC</sub>	supply current	V <sub>I</sub> = GND or V <sub>CC</sub> ; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	1.2	µA
C <sub>I</sub>	input capacitance	V <sub>CC</sub> = 0 V to 3.6 V; V <sub>I</sub> = GND or V <sub>CC</sub>	-	0.8	-	pF
C <sub>O</sub>	output capacitance	V <sub>O</sub> = GND; V <sub>CC</sub> = 0 V	-	1.7	-	pF

## Low-power buffer with voltage-level translator

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
<b>T<sub>amb</sub> = -40 °C to +85 °C</b>						
V <sub>T+</sub>	positive-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.60	-	1.10	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.19	V
V <sub>T-</sub>	negative-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.35	-	0.60	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.50	-	0.85	V
V <sub>H</sub>	hysteresis voltage	(V <sub>H</sub> = V <sub>T+</sub> - V <sub>T-</sub> )				
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.10	-	0.60	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.15	-	0.56	V
V <sub>OH</sub>	HIGH-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = -20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -2.3 mA; V <sub>CC</sub> = 2.3 V	1.97	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.85	-	-	V
		I <sub>O</sub> = -2.7 mA; V <sub>CC</sub> = 3.0 V	2.67	-	-	V
		I <sub>O</sub> = -4.0 mA; V <sub>CC</sub> = 3.0 V	2.55	-	-	V
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = 20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	0.1	V
		I <sub>O</sub> = 2.3 mA; V <sub>CC</sub> = 2.3 V	-	-	0.33	V
		I <sub>O</sub> = 3.1 mA; V <sub>CC</sub> = 2.3 V	-	-	0.45	V
		I <sub>O</sub> = 2.7 mA; V <sub>CC</sub> = 3.0 V	-	-	0.33	V
		I <sub>O</sub> = 4.0 mA; V <sub>CC</sub> = 3.0 V	-	-	0.45	V
I <sub>I</sub>	input leakage current	V <sub>I</sub> = GND to 3.6 V; V <sub>CC</sub> = 0 V to 3.6 V	-	-	±0.5	µA
I <sub>OFF</sub>	power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V	-	-	±0.5	µA
ΔI <sub>OFF</sub>	additional power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V to 0.2 V	-	-	±0.5	µA
I <sub>CC</sub>	supply current	V <sub>I</sub> = GND or V <sub>CC</sub> ; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	1.5	µA
ΔI <sub>CC</sub>	additional supply current	V <sub>CC</sub> = 2.3 V to 2.7 V; I <sub>O</sub> = 0 A [1]	-	-	0.6	µA
		V <sub>CC</sub> = 3.0 V to 3.6 V; I <sub>O</sub> = 0 A [2]	-	-	10	µA

Symbol	Parameter	Conditions	Min	Typ	Max	Unit
<b>T<sub>amb</sub> = -40 °C to +125 °C</b>						
V <sub>T+</sub>	positive-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.60	-	1.10	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.19	V
V <sub>T-</sub>	negative-going threshold voltage	V <sub>CC</sub> = 2.3 V to 2.7 V	0.33	-	0.64	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.46	-	0.85	V
V <sub>H</sub>	hysteresis voltage	(V <sub>H</sub> = V <sub>T+</sub> - V <sub>T-</sub> )				
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.10	-	0.60	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.15	-	0.56	V
V <sub>OH</sub>	HIGH-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = -20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.11	-	-	V
		I <sub>O</sub> = -2.3 mA; V <sub>CC</sub> = 2.3 V	1.77	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.67	-	-	V
		I <sub>O</sub> = -2.7 mA; V <sub>CC</sub> = 3.0 V	2.40	-	-	V
		I <sub>O</sub> = -4.0 mA; V <sub>CC</sub> = 3.0 V	2.30	-	-	V
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = V <sub>T+</sub> or V <sub>T-</sub>				
		I <sub>O</sub> = 20 µA; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	0.11	V
		I <sub>O</sub> = 2.3 mA; V <sub>CC</sub> = 2.3 V	-	-	0.36	V
		I <sub>O</sub> = 3.1 mA; V <sub>CC</sub> = 2.3 V	-	-	0.50	V
		I <sub>O</sub> = 2.7 mA; V <sub>CC</sub> = 3.0 V	-	-	0.36	V
		I <sub>O</sub> = 4.0 mA; V <sub>CC</sub> = 3.0 V	-	-	0.50	V
I <sub>I</sub>	input leakage current	V <sub>I</sub> = GND to 3.6 V; V <sub>CC</sub> = 0 V to 3.6 V	-	-	±0.75	µA
I <sub>OFF</sub>	power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V	-	-	±0.75	µA
ΔI <sub>OFF</sub>	additional power-off leakage current	V <sub>I</sub> or V <sub>O</sub> = 0 V to 3.6 V; V <sub>CC</sub> = 0 V to 0.2 V	-	-	±0.75	µA
I <sub>CC</sub>	supply current	V <sub>I</sub> = GND or V <sub>CC</sub> ; I <sub>O</sub> = 0 A; V <sub>CC</sub> = 2.3 V to 3.6 V	-	-	3.5	µA
ΔI <sub>CC</sub>	additional supply current	V <sub>CC</sub> = 2.3 V to 2.7 V; I <sub>O</sub> = 0 A [1]	-	-	1.8	µA
		V <sub>CC</sub> = 3.0 V to 3.6 V; I <sub>O</sub> = 0 A [2]	-	-	18	µA

[1] One input at 0.3 V or 1.1 V, other input at V<sub>CC</sub> or GND.

[2] One input at 0.45 V or 1.2 V, other input at V<sub>CC</sub> or GND.

## 11. Dynamic characteristics

**Table 8. Dynamic characteristics**

Voltages are referenced to GND (ground = 0 V); for test circuit see Fig. 5.

Symbol	Parameter	Conditions	25 °C			-40 °C to +85 °C		-40 °C to +125 °C		Unit
			Min	Typ[1]	Max	Min	Max	Min	Max	
V <sub>CC</sub> = 2.3 V to 2.7 V; V <sub>I</sub> = 1.65 V to 1.95 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	2.0	3.2	4.9	0.5	6.8	0.5	7.5	ns
		C <sub>L</sub> = 10 pF	2.4	3.8	5.6	1.0	7.9	1.0	8.7	ns
		C <sub>L</sub> = 15 pF	2.7	4.3	6.1	1.0	8.7	1.0	9.6	ns
		C <sub>L</sub> = 30 pF	3.6	5.4	7.6	1.5	10.8	1.5	11.9	ns
V <sub>CC</sub> = 2.3 V to 2.7 V; V <sub>I</sub> = 2.3 V to 2.7 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	1.6	3.1	5.0	0.5	6.0	0.5	6.6	ns
		C <sub>L</sub> = 10 pF	2.0	3.7	5.7	1.0	7.1	1.0	7.9	ns
		C <sub>L</sub> = 15 pF	2.3	4.1	6.3	1.0	7.9	1.0	8.7	ns
		C <sub>L</sub> = 30 pF	3.2	5.3	7.8	1.5	10.0	1.5	11.0	ns
V <sub>CC</sub> = 2.3 V to 2.7 V; V <sub>I</sub> = 3.0 V to 3.6 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	1.2	2.8	4.5	0.5	5.5	0.5	6.1	ns
		C <sub>L</sub> = 10 pF	1.7	3.4	5.1	1.0	6.5	1.0	7.2	ns
		C <sub>L</sub> = 15 pF	2.0	3.9	5.7	1.0	7.4	1.0	8.2	ns
		C <sub>L</sub> = 30 pF	2.8	5.0	7.2	1.5	9.5	1.5	10.5	ns
V <sub>CC</sub> = 3.0 V to 3.6 V; V <sub>I</sub> = 1.65 V to 1.95 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	1.8	2.7	3.7	0.5	8.0	0.5	8.8	ns
		C <sub>L</sub> = 10 pF	2.2	3.2	4.4	1.0	8.5	1.0	9.4	ns
		C <sub>L</sub> = 15 pF	2.7	3.7	5.0	1.0	9.1	1.0	10.1	ns
		C <sub>L</sub> = 30 pF	3.5	4.9	6.3	1.5	9.8	1.5	10.8	ns
V <sub>CC</sub> = 3.0 V to 3.6 V; V <sub>I</sub> = 2.3 V to 2.7 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	1.4	2.6	3.8	0.5	5.3	0.5	5.9	ns
		C <sub>L</sub> = 10 pF	1.9	3.1	4.5	1.0	6.1	1.0	6.8	ns
		C <sub>L</sub> = 15 pF	2.2	3.6	5.1	1.0	6.8	1.0	7.5	ns
		C <sub>L</sub> = 30 pF	3.0	4.8	6.6	1.5	8.5	1.5	9.4	ns
V <sub>CC</sub> = 3.0 V to 3.6 V; V <sub>I</sub> = 3.0 V to 3.6 V										
t <sub>pd</sub>	propagation delay	A to Y; see <a href="#">Fig. 4</a> [2]								
		C <sub>L</sub> = 5 pF	1.1	2.5	4.0	0.5	4.7	0.5	5.2	ns
		C <sub>L</sub> = 10 pF	1.6	3.1	4.5	1.0	5.7	1.0	6.3	ns
		C <sub>L</sub> = 15 pF	1.9	3.6	5.1	1.0	6.2	1.0	6.9	ns
		C <sub>L</sub> = 30 pF	2.7	4.7	6.6	1.5	7.8	1.5	8.6	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>amb</sub> = 25 °C										
C <sub>PD</sub>	power dissipation capacitance	f <sub>i</sub> = 1 MHz; V <sub>I</sub> = GND to V <sub>CC</sub> [3]								
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	4	-	-	-	-	-	pF
		V <sub>CC</sub> = 3.0 V to 3.6 V	-	5	-	-	-	-	-	pF

- [1] All typical values are measured at nominal V<sub>CC</sub>.
- [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 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<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;
  - Σ(C<sub>L</sub> × V<sub>CC</sub><sup>2</sup> × f<sub>o</sub>) = sum of the outputs.

11.1. Waveforms and test circuit

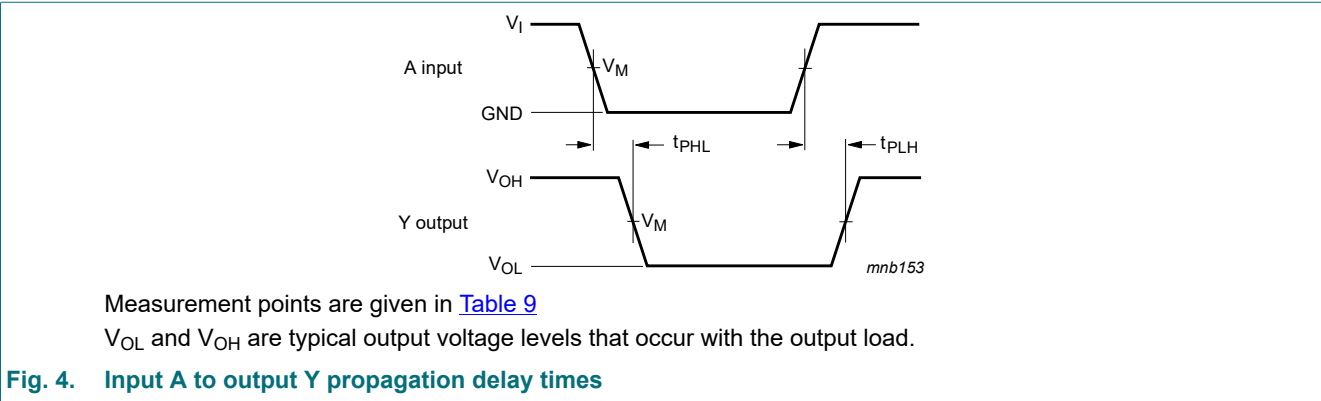
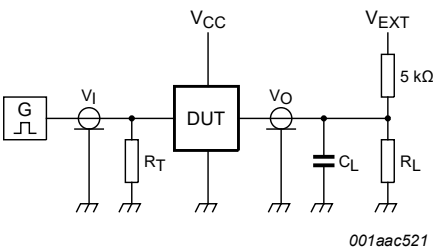


Table 9. Measurement points

Supply voltage	Output	Input		
V <sub>CC</sub>	V <sub>M</sub>	V <sub>M</sub>	V <sub>I</sub>	t <sub>r</sub> = t <sub>f</sub>
2.3 V to 3.6 V	0.5 × V <sub>CC</sub>	0.5 × V <sub>I</sub>	1.65 V to 3.6 V	≤ 3.0 ns





Test data is given in [Table 10](#).  
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 the output impedance  $Z_o$  of the pulse generator;  
 $V_{EXT}$  = External voltage for measuring switching times.

Fig. 5. Test circuit for measuring switching times

Table 10. Test data

Supply voltage	Load		$V_{EXT}$		
$V_{CC}$	$C_L$	$R_L$ [1]	$t_{PLH}$ , $t_{PHL}$	$t_{PZH}$ , $t_{PHZ}$	$t_{PZL}$ , $t_{PLZ}$
2.3 V to 3.6 V	5 pF, 10 pF, 15 pF and 30 pF	5 kΩ or 1 MΩ	open	GND	$2 \times V_{CC}$

[1] For measuring enable and disable times  $R_L = 5\text{ k}\Omega$ .  
For measuring propagation delays, setup and hold times and pulse width  $R_L = 1\text{ M}\Omega$ .

12. Package outline

TSSOP5: plastic thin shrink small outline package; 5 leads; body width 1.25 mm

SOT353-1

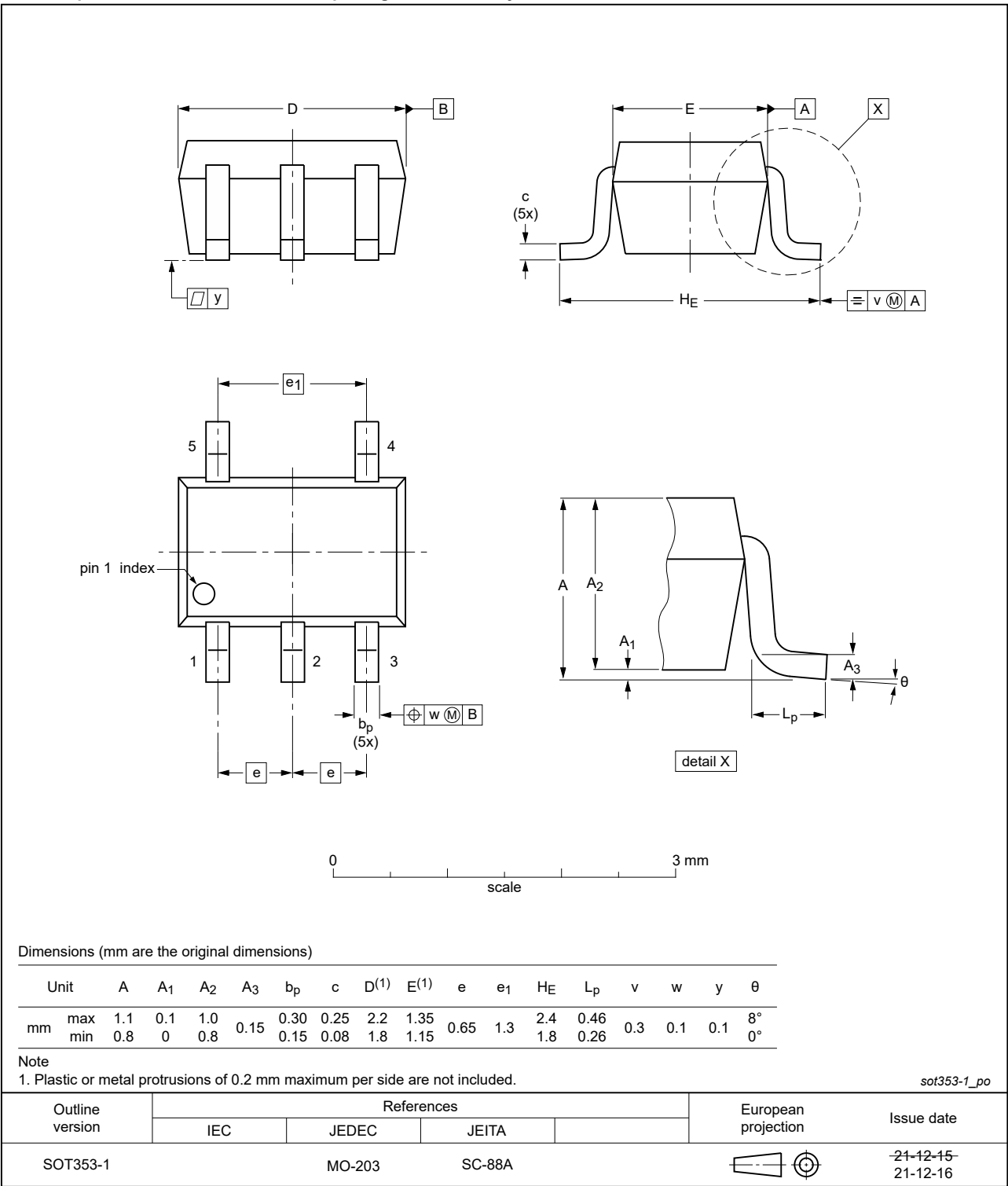


Fig. 6. Package outline SOT353-1 (TSSOP5)

X2SON5: plastic thermal enhanced extremely thin small outline package; no leads;  
5 terminals; body 0.8 x 0.8 x 0.32 mm

SOT1226-3

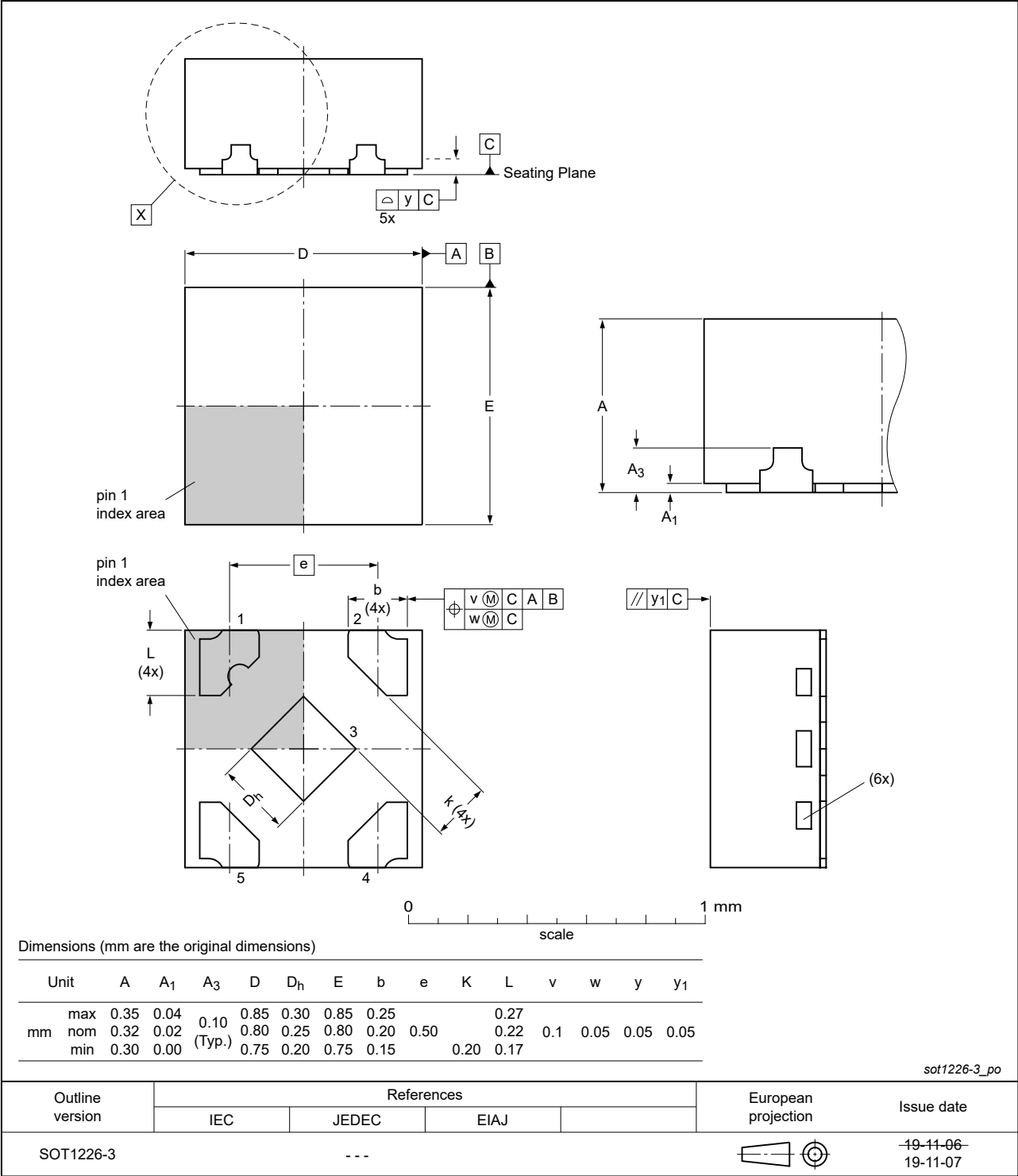


Fig. 7. Package outline SOT1226-3 (X2SON5)

## 13. Abbreviations

Table 11. Abbreviations

Acronym	Description
CDM	Charged Device Model
CMOS	Complementary Metal-Oxide Semiconductor
DUT	Device Under Test
ESD	ElectroStatic Discharge
HBM	Human Body Model

## 14. Revision history

Table 12. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes
74AUP1T17 v.4	20230726	Product data sheet	-	74AUP1T17 v.3
Modifications:	<ul style="list-style-type: none"><li><a href="#">Section 2</a>: ESD specification updated according to the latest JEDEC standard.</li></ul>			
74AUP1T17 v.3	20220125	Product data sheet	-	74AUP1T17 v.2
Modifications:	<ul style="list-style-type: none"><li><a href="#">Fig. 6</a>: Package outline drawing for SOT353-1 (TSSOP5) has changed.</li></ul>			
74AUP1T17 v.2	20210719	Product data sheet	-	74AUP1T17 v.1
Modifications:	<ul style="list-style-type: none"><li>SOT1226 (X2SON5) package changed to SOT1226-3 (X2SON5) package.</li><li><a href="#">Table 5</a>: Derating values for <math>P_{tot}</math> total power dissipation updated.</li></ul>			
74AUP1T17 v.1	20171128	Product data sheet	-	-

## 15. 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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