Low-power buffer with voltage-level translator Rev. 1 — 28 November 2017

**Product data sheet** 

#### **General description** 1

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<sub>OFF</sub>. The I<sub>OFF</sub> 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.

#### Features and benefits 2

- Wide supply voltage range from 2.3 V to 3.6 V
- High noise immunity
- ESD protection:
  - HBM JESD22-A114F Class 3A exceeds 5000 V
  - CDM JESD22-C101E exceeds 1000 V
- Low static power consumption; I<sub>CC</sub> = 1.5 μA (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<sub>CC</sub>
- I<sub>OFF</sub> circuitry provides partial power-down mode operation
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C

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### **3** Ordering information

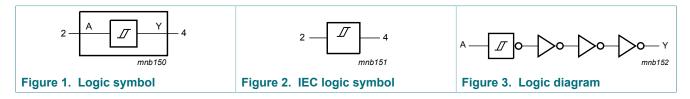
Table 1. Ordering information										
Type number	Package									
	Temperature range	Name	Description	Version						
74AUP1T17GW	-40 °C to +125 °C	TSSOP5	plastic thin shrink small outline package; 5 leads; body width 1.25 mm	SOT353-1						
74AUP1T17GX	-40 °C to +125 °C	X2SON5	plastic thermal enhanced extremely thin small outline package; no leads; 5 terminals; body 0.8 x 0.8 x 0.35 mm	SOT1226						

### 4 Marking

Table 2. Marking								
Type number	Marking code <sup>[1]</sup>							
74AUP1T17GW	57							
74AUP1T17GX	57							

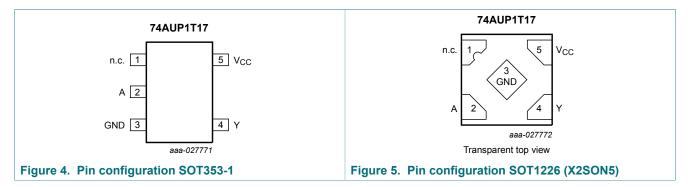
[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

### 5 Functional diagram



### 6 **Pinning information**

### 6.1 Pinning



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### 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						

#### **Functional description** 7

### Table 4. Function table <sup>[1]</sup>

Input	Output
A	Y
L	L
Н	Н

[1] H = HIGH voltage level;

L = LOW voltage level.

#### **Limiting values** 8

#### 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
l <sub>IK</sub>	input clamping current	V <sub>I</sub> < 0 V		-50	-	mA
VI	input voltage		[1]	-0.5	+4.6	V
I <sub>OK</sub>	output clamping current	V <sub>O</sub> < 0 V		-50	-	mA
Vo	output voltage	Active mode and Power-down mode	[1]	-0.5	+4.6	V
l <sub>O</sub>	output current	$V_{O} = 0 V$ to $V_{CC}$		-	±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	$T_{amb}$ = -40 °C to +125 °C	[2]	-	250	mW

The minimum input and output voltage ratings may be exceeded if the input and output current ratings are observed.
For TSSOP5 packages: above 87.5 °C the value of P<sub>tot</sub> derates linearly with 4.0 mW/K.
For X2SON5 packages: above 118 °C the value of P<sub>tot</sub> derates linearly with 7.8 mW/K.

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### 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
VI	input voltage		0	3.6	V
Vo	output voltage	Active mode	0	V <sub>CC</sub>	V
		Power-down mode; $V_{CC}$ = 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	Тур	Max	Unit
T <sub>amb</sub> = 2	5 °C					,
V <sub>T+</sub>	positive-going threshold	ing threshold $V_{CC}$ = 2.3 V to 2.7 V		-	1.10	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.16	V
V <sub>T-</sub>	negative-going threshold	$V_{CC}$ = 2.3 V to 2.7 V	0.35	-	0.60	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.50	-	0.85	V
V <sub>H</sub>	hysteresis voltage	$(V_{H} = V_{T+} - V_{T-})$				
		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	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = -20 µA; $V_{CC}$ = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		$I_{\rm O}$ = -2.3 mA; $V_{\rm CC}$ = 2.3 V	2.05	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.9	-	-	V
		$I_{\rm O}$ = -2.7 mA; $V_{\rm CC}$ = 3.0 V	2.72	-	-	V
		$I_{O}$ = -4.0 mA; $V_{CC}$ = 3.0 V	2.6	-	-	V
V <sub>OL</sub>	LOW-level output voltage	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = 20 µA; $V_{CC}$ = 2.3 V to 3.6 V	-	-	0.10	V
		$I_{\rm O}$ = 2.3 mA; $V_{\rm CC}$ = 2.3 V	-	-	0.31	V
		I <sub>O</sub> = 3.1 mA; V <sub>CC</sub> = 2.3 V	-	-	0.44	V
		$I_{O}$ = 2.7 mA; $V_{CC}$ = 3.0 V	-	-	0.31	V
		$I_{O}$ = 4.0 mA; $V_{CC}$ = 3.0 V	-	-	0.44	V
l <sub>l</sub>	input leakage current	$V_1$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 V	-	-	±0.1	μA
I <sub>OFF</sub>	power-off leakage current	$V_1 \text{ or } V_0 = 0 \text{ V to } 3.6 \text{ V}; V_{CC} = 0 \text{ V}$	-	-	±0.1	μA
Δl <sub>OFF</sub>	additional power-off leakage current	$V_1 \text{ or } V_0 = 0 \text{ V to } 3.6 \text{ V;}$ $V_{CC} = 0 \text{ V to } 0.2 \text{ V}$	-	-	±0.1	μA
I <sub>CC</sub>	supply current	$V_I$ = GND or $V_{CC}$ ; $I_O$ = 0 A; $V_{CC}$ = 2.3 V to 3.6 V	-	-	1.2	μA

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### Low-power buffer with voltage-level translator

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
CI	input capacitance	$V_{CC}$ = 0 V to 3.6 V; $V_{I}$ = GND or $V_{CC}$	-	0.8	-	pF
Co	output capacitance	$V_{O}$ = GND; $V_{CC}$ = 0 V	-	1.7	-	pF
T <sub>amb</sub> = -4	0 °C to +85 °C					
V <sub>T+</sub>	positive-going threshold	V <sub>CC</sub> = 2.3 V to 2.7 V	0.60	-	1.10	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.19	V
V <sub>T-</sub>	negative-going threshold	$V_{CC}$ = 2.3 V to 2.7 V	0.35	-	0.60	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.50	-	0.85	V
V <sub>H</sub>	hysteresis voltage	$(V_{H} = V_{T+} - V_{T-})$				
		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	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = -20 µA; $V_{CC}$ = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		$I_{\rm O}$ = -2.3 mA; $V_{\rm CC}$ = 2.3 V	1.97	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.85	-	-	V
		$I_{\rm O}$ = -2.7 mA; $V_{\rm CC}$ = 3.0 V	2.67	-	-	V
		$I_{\rm O}$ = -4.0 mA; $V_{\rm CC}$ = 3.0 V	2.55	-	-	V
V <sub>OL</sub>	LOW-level output voltage	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = 20 µA; $V_{CC}$ = 2.3 V to 3.6 V	-	-	0.1	V
		$I_{\rm O}$ = 2.3 mA; $V_{\rm CC}$ = 2.3 V	-	-	0.33	V
		I <sub>O</sub> = 3.1 mA; V <sub>CC</sub> = 2.3 V	-	-	0.45	V
		$I_{\rm O}$ = 2.7 mA; $V_{\rm CC}$ = 3.0 V	-	-	0.33	V
		$I_{O}$ = 4.0 mA; $V_{CC}$ = 3.0 V	-	-	0.45	V
lı	input leakage current	$V_{I}$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 V	-	-	±0.5	μA
I <sub>OFF</sub>	power-off leakage current	$V_1$ or $V_0$ = 0 V to 3.6 V; $V_{CC}$ = 0 V	-	-	±0.5	μA
Δl <sub>OFF</sub>	additional power-off leakage current	$V_{I} \text{ or } V_{O} = 0 \text{ V to } 3.6 \text{ V};$ $V_{CC} = 0 \text{ V to } 0.2 \text{ V}$	-	-	±0.5	μA
I <sub>CC</sub>	supply current	$V_I$ = GND or $V_{CC}$ ; $I_O$ = 0 A; $V_{CC}$ = 2.3 V to 3.6 V	-	-	1.5	μA
∆l <sub>CC</sub>	additional supply current	$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V; } I_0 = 0 \text{ A}$	1] _	-	0.6	μA
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V; } I_{O} = 0 \text{ A}$	2] _	-	10	μA

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### Low-power buffer with voltage-level translator

Symbol	Parameter	Conditions	Min	Тур	Мах	Unit
T <sub>amb</sub> = -4	10 °C to +125 °C				1	
V <sub>T+</sub>	positive-going threshold	$V_{CC}$ = 2.3 V to 2.7 V	0.60	-	1.10	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.75	-	1.19	V
V <sub>T-</sub>	negative-going threshold	$V_{CC}$ = 2.3 V to 2.7 V	0.33	-	0.64	V
	voltage	V <sub>CC</sub> = 3.0 V to 3.6 V	0.46	-	0.85	V
V <sub>H</sub>	hysteresis voltage	$(V_{H} = V_{T+} - V_{T-})$				
		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	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = -20 µA; $V_{CC}$ = 2.3 V to 3.6 V	V <sub>CC</sub> - 0.11	-	-	V
		$I_{\rm O}$ = -2.3 mA; $V_{\rm CC}$ = 2.3 V	1.77	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.67	-	-	V
		$I_{\rm O}$ = -2.7 mA; $V_{\rm CC}$ = 3.0 V	2.40	-	-	V
		$I_{\rm O}$ = -4.0 mA; $V_{\rm CC}$ = 3.0 V	2.30	-	-	V
V <sub>OL</sub>	LOW-level output voltage	$V_{I} = V_{T+}$ or $V_{T-}$				
		$I_{O}$ = 20 µA; $V_{CC}$ = 2.3 V to 3.6 V	-	-	0.11	V
		$I_{\rm O}$ = 2.3 mA; $V_{\rm CC}$ = 2.3 V	-	-	0.36	V
		$I_{O}$ = 3.1 mA; $V_{CC}$ = 2.3 V	-	-	0.50	V
		$I_{\rm O}$ = 2.7 mA; $V_{\rm CC}$ = 3.0 V	-	-	0.36	V
		$I_{O}$ = 4.0 mA; $V_{CC}$ = 3.0 V	-	-	0.50	V
I	input leakage current	$V_1$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 V	-	-	±0.75	μA
I <sub>OFF</sub>	power-off leakage current	$V_1$ or $V_0$ = 0 V to 3.6 V; $V_{CC}$ = 0 V	-	-	±0.75	μA
Δl <sub>OFF</sub>	additional power-off leakage current	$V_1 \text{ or } V_0 = 0 \text{ V to } 3.6 \text{ V};$ $V_{CC} = 0 \text{ V to } 0.2 \text{ V}$	-	-	±0.75	μA
I <sub>CC</sub>	supply current	$V_I$ = GND or $V_{CC}$ ; $I_O$ = 0 A; $V_{CC}$ = 2.3 V to 3.6 V	-	-	3.5	μA
ΔI <sub>CC</sub>	additional supply current	$V_{CC} = 2.3 \text{ V to } 2.7 \text{ V}; I_0 = 0 \text{ A}$	-	-	1.8	μA
		$V_{CC} = 3.0 \text{ V to } 3.6 \text{ V; } I_{O} = 0 \text{ A}$	2] _	-	18	μA

# **11** Dynamic characteristics

### Table 8. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit see Figure 7.

Symbol	Parameter	Conditions		25 °C		-40 °C to +125 °C			Unit
			Min	Typ <sup>[1]</sup>	Мах	Min	Max (85 °C)	Max (125 °C)	
V <sub>CC</sub> = 2.3	3 V to 2.7 V; V <sub>I</sub>	= 1.65 V to 1.95 V						1	
t <sub>pd</sub>	propagation	A, B to Y; see Figure 6	[2]						
	delay	C <sub>L</sub> = 5 pF	2.0	3.2	4.9	0.5	6.8	7.5	ns
		C <sub>L</sub> = 10 pF	2.4	3.8	5.6	1.0	7.9	8.7	ns
		C <sub>L</sub> = 15 pF	2.7	4.3	6.1	1.0	8.7	9.6	ns
		C <sub>L</sub> = 30 pF	3.6	5.4	7.6	1.5	10.8	11.9	ns
V <sub>CC</sub> = 2.3	3 V to 2.7 V; V <sub>I</sub>	= 2.3 V to 2.7 V					1	1	
	propagation	A, B to Y; see Figure 6	[2]						
	delay	C <sub>L</sub> = 5 pF	1.6	3.1	5.0	0.5	6.0	6.6	ns
		C <sub>L</sub> = 10 pF	2.0	3.7	5.7	1.0	7.1	7.9	ns
		C <sub>L</sub> = 15 pF	2.3	4.1	6.3	1.0	7.9	8.7	ns
		C <sub>L</sub> = 30 pF	3.2	5.3	7.8	1.5	10.0	11.0	ns
V <sub>CC</sub> = 2.3	3 V to 2.7 V; V <sub>I</sub>	= 3.0 V to 3.6 V							
t <sub>pd</sub>	propagation delay	A, B to Y; see Figure 6	[2]						
		C <sub>L</sub> = 5 pF	1.2	2.8	4.5	0.5	5.5	6.1	ns
		C <sub>L</sub> = 10 pF	1.7	3.4	5.1	1.0	6.5	7.2	ns
		C <sub>L</sub> = 15 pF	2.0	3.9	5.7	1.0	7.4	8.2	ns
		C <sub>L</sub> = 30 pF	2.8	5.0	7.2	1.5	9.5	10.5	ns
V <sub>CC</sub> = 3.0	0 V to 3.6 V; V <sub>I</sub>	= 1.65 V to 1.95 V							
t <sub>pd</sub>	propagation	A, B to Y; see Figure 6	[2]						
	delay	C <sub>L</sub> = 5 pF	1.8	2.7	3.7	0.5	8.0	8.8	ns
		C <sub>L</sub> = 10 pF	2.2	3.2	4.4	1.0	8.5	9.4	ns
		C <sub>L</sub> = 15 pF	2.7	3.7	5.0	1.0	9.1	10.1	ns
		C <sub>L</sub> = 30 pF	3.5	4.9	6.3	1.5	9.8	10.8	ns
V <sub>CC</sub> = 3.0	0 V to 3.6 V; V <sub>I</sub>	= 2.3 V to 2.7 V							
t <sub>pd</sub>	propagation	A, B to Y; see Figure 6	[2]						
	delay	C <sub>L</sub> = 5 pF	1.4	2.6	3.8	0.5	5.3	5.9	ns
		C <sub>L</sub> = 10 pF	1.9	3.1	4.5	1.0	6.1	6.8	ns
		C <sub>L</sub> = 15 pF	2.2	3.6	5.1	1.0	6.8	7.5	ns
		C <sub>L</sub> = 30 pF	3.0	4.8	6.6	1.5	8.5	9.4	ns

### Low-power buffer with voltage-level translator

Symbol	Parameter	neter Conditions		25 °C		-40 °C to +125 °C			Unit
			Min	Typ <sup>[1]</sup>	Max	Min	Мах (85 °С)	Max (125 °C)	
$V_{\rm CC}$ = 3.0	V to 3.6 V; V <sub>I</sub>	= 3.0 V to 3.6 V		1	1		-		
t <sub>pd</sub>	propagation	A, B to Y; see <u>Figure 6</u> <sup>[2]</sup>							
	delay	C <sub>L</sub> = 5 pF	1.1	2.5	4.0	0.5	4.7	5.2	ns
		C <sub>L</sub> = 10 pF	1.6	3.1	4.5	1.0	5.7	6.3	ns
		C <sub>L</sub> = 15 pF	1.9	3.6	5.1	1.0	6.2	6.9	ns
		C <sub>L</sub> = 30 pF	2.7	4.7	6.6	1.5	7.8	8.6	ns
T <sub>amb</sub> = 2	5 °C								
C <sub>PD</sub>	power	$f_i = 1 \text{ MHz}; V_I = \text{GND to } V_{\text{CC}}$ <sup>[3]</sup>							
	dissipation capacitance	V <sub>CC</sub> = 2.3 V to 2.7 V	-	4	-	-	-	-	pF
	capacitance	$V_{CC}$ = 3.0 V to 3.6 V	-	5	-	-	-	-	pF

[1] All typical values are measured at nominal V<sub>CC</sub>. [2]  $t_{pd}$  is the same as  $t_{PLH}$  and  $t_{PHL}$ [3]  $C_{PD}$  is used to determine the dynamic power dissipation (P<sub>D</sub> in µW). P<sub>D</sub> = C<sub>PD</sub> x V<sub>CC</sub><sup>2</sup> x f<sub>1</sub> x N +  $\Sigma$ (C<sub>L</sub> x V<sub>CC</sub><sup>2</sup> x f<sub>0</sub>) where: f<sub>1</sub> = input frequency in MHz;

fo = output frequency in MHz;

 $\tilde{C}_L$  = output load capacitance in pF;

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

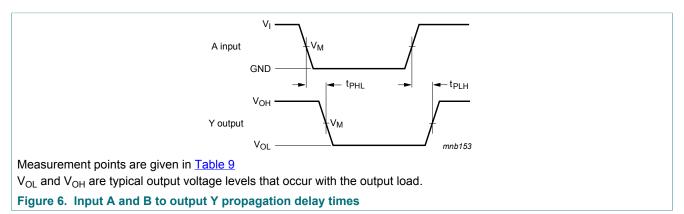
N = number of inputs switching;  $\Sigma(C_L \times V_{CC}^2 \times f_0)$  = sum of the outputs.

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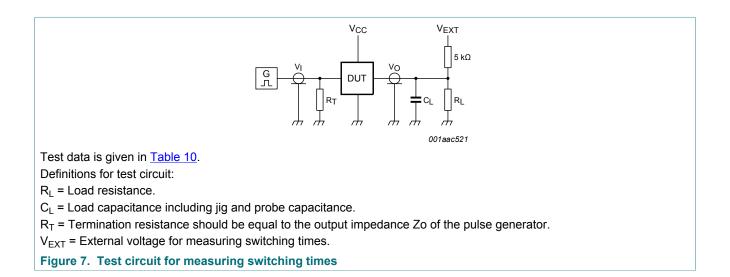
### Low-power buffer with voltage-level translator

### 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>	VI	t <sub>r</sub> = t <sub>f</sub>			
2.3 V to 3.6 V	$0.5 \times V_{CC}$	0.5 × V <sub>I</sub>	1.65 V to 3.6 V	≤ 3.0 ns			



#### Table 10. Test data

Supply voltage	Load		V <sub>EXT</sub>			
V <sub>cc</sub>	CL	R <sub>L</sub> <sup>[1]</sup>	t <sub>PLH</sub> , t <sub>PHL</sub>	t <sub>PZH</sub> , t <sub>PHZ</sub>	t <sub>PZL</sub> , t <sub>PLZ</sub>	
2.3 V to 3.6 V	5 pF, 10 pF, 15 pF and 30 pF	5 k $\Omega$ or 1 M $\Omega$	open	GND	$2 \times V_{CC}$	

[1] For measuring enable and disable times  $R_L = 5 k\Omega$ .

For measuring propagation delays, setup and hold times and pulse width R<sub>L</sub> = 1 M $\Omega$ .

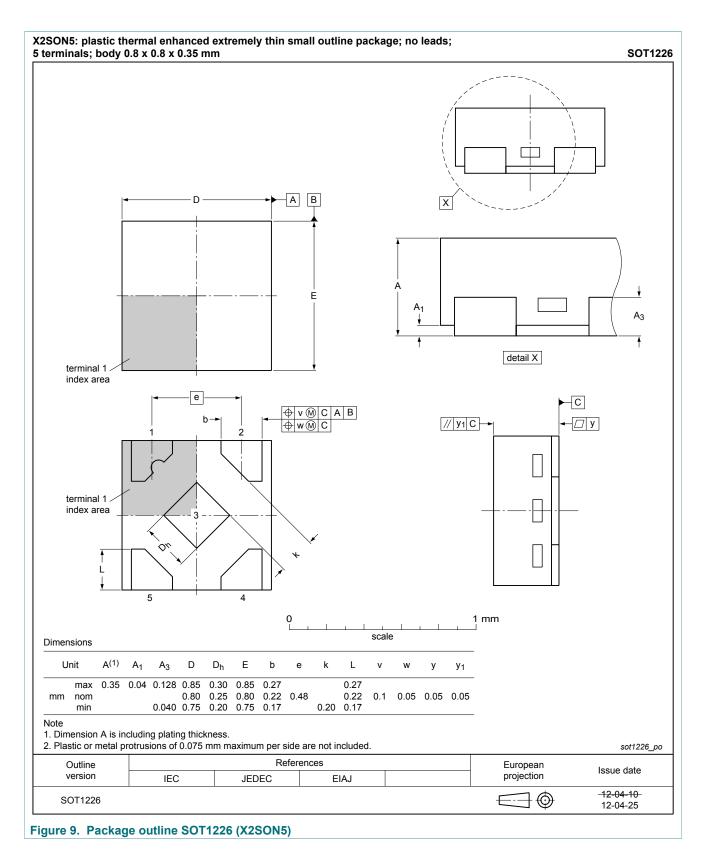
Low-power buffer with voltage-level translator

# 12 Package outline

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DIMENS	IONS (n A max.	A <sub>1</sub>	A <sub>2</sub>	e <sub>1</sub>	0 D D D D D D	s) c	1.5 sca	E <sup>(1)</sup>	e	3 mm	HE	L	Lp	v	w	У	Z <sup>(1)</sup>	θ
	Α			jinal din		s)	1.5 sca	le	е 0.65		H <sub>E</sub> 2.25 2.0				<b>w</b> 0.1	<b>y</b> 0.1	<b>Z(1)</b> 0.60 0.15	θ 7° 0°
UNIT mm Note	A max. 1.1	<b>A<sub>1</sub></b> 0.1 0	<b>A</b> <sub>2</sub> 1.0 0.8	jinal din A3 0.15	0 0 0.30 0.15	s) c 0.25 0.08	1.5 sca D(1) 2.25 1.85	E(1) 1.35 1.15	0.65	e <sub>1</sub>	2.25	L	<b>L</b> р 0.46				0.60	7°
UNIT mm lote . Plastic	A max. 1.1	<b>A<sub>1</sub></b> 0.1 0	<b>A</b> <sub>2</sub> 1.0 0.8	jinal din A3 0.15	0 0 0.30 0.15	s) c 0.25 0.08	1.5 sca D(1) 2.25	E(1) 1.35 1.15	0.65 cluded.	e <sub>1</sub>	2.25	L	<b>L</b> р 0.46	0.3	0.1	0.1	0.60 0.15	7° 0°
UNIT mm Note I. Plastic	A max. 1.1	<b>A<sub>1</sub></b> 0.1 0	A2 1.0 0.8	jinal din A3 0.15	0 0 0.30 0.15	s) c 0.25 0.08	1.5 sca D(1) 2.25 1.85 side are REFEF	E(1) 1.35 1.15	0.65 cluded.	<b>e</b> 1 1.3	2.25	L	<b>L</b> р 0.46		0.1 PEAN	0.1	0.60	7° 0°

Figure 8. Package outline SOT353-1 (TSSOP5)

### Low-power buffer with voltage-level translator



### **13 Abbreviations**

Table 11. Abbreviations						
Acronym	Description					
CDM	Charged Device Model					
CMOS	Complementary Metal-Oxide Semiconductor					
DUT	Device Under Test					
ESD	ElectroStatic Discharge					
НВМ	Human Body Model					

# 14 Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes
74AUP1T17 v.1	20171128	Product data sheet	-	-

### **15 Legal information**

### 15.1 Data sheet status

Document status <sup>[1][2]</sup>	Product status <sup>[3]</sup>	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.

Please consult the most recently issued document before initiating or completing a design. [1]

The term 'short data sheet' is explained in section "Definitions".

[2] [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 URL http://www.nexperia.com.

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### Low-power buffer with voltage-level translator

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# 74AUP1T17

### Low-power buffer with voltage-level translator

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