74AUP1G07

Low-power buffer with open-drain output

Rev. 10 — 13 January 2022

Product data sheet

1. General description

The 74AUP1G07 is a single buffer with open-drain output.

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

This device ensures a very low static and dynamic power consumption across the entire V_{CC} range from 0.8 V to 3.6 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.

2. Features and benefits

- Wide supply voltage range from 0.8 V to 3.6 V
- · High noise immunity
- CMOS low power dissipation
- · Complies with JEDEC standards:
 - JESD8-12 (0.8 V to 1.3 V)
 - JESD8-11 (0.9 V to 1.65 V)
 - JESD8-7 (1.65 V to 1.95 V)
 - JESD8-5 (2.3 V to 2.7 V)
 - JESD8C (2.7 V to 3.6 V)
- ESD protection:
 - HBM: ANSI/ESDA/JEDEC JS-001 Class 3A exceeds 5000 V
 - CDM: ANSI/ESDA/JEDEC JS-002 Class C3 exceeds 1000 V
 - MM: JESD22-A115-A exceeds 200 V
- Low static power consumption; I_{CC} = 0.9 μA (maximum)
- Latch-up performance exceeds 100 mA per JESD 78 Class II
- Overvoltage tolerant inputs to 3.6 V
- Low noise overshoot and undershoot < 10 % of V_{CC}
- I_{OFF} circuitry provides partial Power-down mode operation
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C



Low-power buffer with open-drain output

3. Ordering information

Table 1. Ordering information

Type number	Package								
	Temperature range	Name	Description	Version					
74AUP1G07GW	-40 °C to +125 °C	TSSOP5	plastic thin shrink small outline package; 5 leads; body width 1.25 mm	SOT353-1					
74AUP1G07GM	-40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body 1 × 1.45 × 0.5 mm	SOT886					
74AUP1G07GN	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 0.9 × 1.0 × 0.35 mm	SOT1115					
74AUP1G07GS	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 1.0 × 1.0 × 0.35 mm	SOT1202					
74AUP1G07GX	-40 °C to +125 °C	X2SON5	plastic thermal enhanced extremely thin small outline package; no leads; 5 terminals; body 0.8 × 0.8 × 0.32 mm	SOT1226-3					
74AUP1G07GX4	-40 °C to +125 °C	X2SON4	plastic thermal enhanced extremely thin small outline package; no leads; 4 terminals; body 0.6 × 0.6 × 0.32 mm	SOT1269-2					

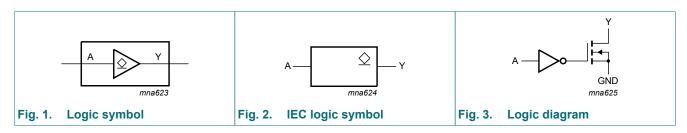
4. Marking

Table 2. Marking

abio 2: marking						
Marking code[1]						
pS						
pS						
pS						
pS						
pS						
pS						

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

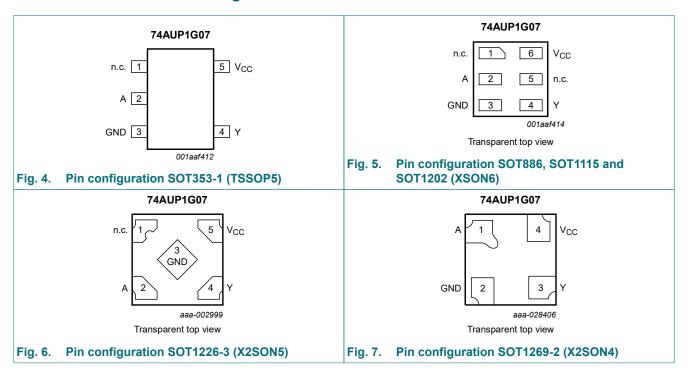
5. Functional diagram



Low-power buffer with open-drain output

6. Pinning information

6.1. Pinning



6.2. Pin description

Table 3. Pin description

Symbol	Pin	Pin						
	TSSOP5 and X2SON5	XSON6	X2SON4					
n.c.	1	1, 5	-	not connected				
A	2	2	1	data input				
GND	3	3	2	ground (0 V)				
Υ	4	4	3	data output				
V _{CC}	5	6	4	supply voltage				

7. Functional description

Table 4. Function table

H = HIGH voltage level; L = LOW voltage level; Z = high-impedance OFF state.

Input	Output
A	Υ
L	L
Н	Z

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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 _{CC}	supply voltage			-0.5	+4.6	V
I _{IK}	input clamping current	V _I < 0 V		-50	-	mA
VI	input voltage		[1]	-0.5	+4.6	V
I _{OK}	output clamping current	V _O < 0 V		-50	-	mA
Vo	output voltage	Active mode and Power-down mode	[1]	-0.5	+4.6	V
Io	output current	V _O = 0 V to V _{CC}		-	20	mA
I _{CC}	supply current			-	50	mA
I _{GND}	ground current			-50	-	mA
T _{stg}	storage temperature			-65	+150	°C
P _{tot}	total power dissipation	T _{amb} = -40 °C to +125 °C				
		TSSOP5, XSON6 and X2SON5 package	[2]	-	250	mW
		X2SON4 package	[3]	-	150	mW

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

9. Recommended operating conditions

Table 6. Recommended operating conditions

Symbol	Parameter	Conditions	Min	Max	Unit
V _{CC}	supply voltage		0.8	3.6	V
VI	input voltage		0	3.6	V
Vo	output voltage	Active mode and Power-down mode	0	3.6	V
T _{amb}	ambient temperature		-40	+125	°C
Δt/ΔV	input transition rise and fall rate	V _{CC} = 0.8 V to 3.6 V	0	200	ns/V

^[2] For SOT353-1 (TSSOP5) package: Ptot derates linearly with 3.3 mW/K above 74 °C.

For SOT886 (XSON6) package: P_{tot} derates linearly with 3.3 mW/K above 74 °C.

For SOT1115 (XSON6) package: Ptot derates linearly with 3.2 mW/K above 71 °C.

For SOT1202 (XSON6) package: Ptot derates linearly with 3.3 mW/K above 74 °C.

For SOT1226-3 (X2SON5) package: P_{tot} derates linearly with 3.0 mW/K above 67 °C.

^[3] For SOT1269-2 (X2SON4) package: Ptot derates linearly with 1.7 mW/K above 57 °C.

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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 _{amb} = 2	5 °C					
V _{IH}	HIGH-level input voltage	V _{CC} = 0.8 V	0.70×V _{CC}	-	-	V
▼IH		V _{CC} = 0.9 V to 1.95 V	0.65×V _{CC}	-	-	V
		V _{CC} = 2.3 V to 2.7 V	1.6	-	-	V
		V _{CC} = 3.0 V to 3.6 V	2.0	-	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 0.8 V	-	-	0.30×V _{CC}	V
		V _{CC} = 0.9 V to 1.95 V	-	-	0.35×V _{CC}	V
		V _{CC} = 2.3 V to 2.7 V	-	-	0.7	V
		V _{CC} = 3.0 V to 3.6 V	-	-	0.9	V
V _{OL}	LOW-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I _O = 20 μA; V _{CC} = 0.8 V to 3.6 V	-	-	0.1	V
		I _O = 1.1 mA; V _{CC} = 1.1 V	-	-	0.3×V _{CC}	V
		I _O = 1.7 mA; V _{CC} = 1.4 V	-	-	0.31	V
		I _O = 1.9 mA; V _{CC} = 1.65 V	-	-	0.31	V
		I _O = 2.3 mA; V _{CC} = 2.3 V	-	-	0.31	V
		I _O = 3.1 mA; V _{CC} = 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 _l	input leakage current	V _I = GND to 3.6 V; V _{CC} = 0 V to 3.6 V	-	-	±0.1	μΑ
l _{OZ}	OFF-state output current	V _I = V _{IH} ; V _O = 0 V to 3.6 V; V _{CC} = 0 V to 3.6 V	-	-	±0.1	μΑ
I _{OFF}	power-off leakage current	V_{I} or $V_{O} = 0 \text{ V}$ to 3.6 V; $V_{CC} = 0 \text{ V}$	-	-	±0.2	μA
Δl _{OFF}	additional power-off leakage current	V_1 or $V_0 = 0$ V to 3.6 V; $V_{CC} = 0$ V to 0.2 V	-	-	±0.2	μA
I _{CC}	supply current	V_I = GND or V_{CC} ; I_O = 0 A; V_{CC} = 0.8 V to 3.6 V	-	-	0.5	μA
ΔI _{CC}	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$	-	-	40	μA
Cı	input capacitance	$V_{CC} = 0 \text{ V to } 3.6 \text{ V}; V_I = \text{GND or } V_{CC}$	-	0.8	-	pF
Co	output capacitance	output enabled; V _O = GND; V _{CC} = 0 V	-	1.7	-	pF
		output disabled; V _O = GND; V _{CC} = 0 V	-	1.1	-	pF
T _{amb} = -	40 °C to +85 °C					
V _{IH}	HIGH-level input voltage	V _{CC} = 0.8 V	0.70×V _{CC}	-	-	V
		V _{CC} = 0.9 V to 1.95 V	0.65×V _{CC}	-	-	V
		V _{CC} = 2.3 V to 2.7 V		-	-	V
		V _{CC} = 3.0 V to 3.6 V	2.0	-	-	V
V _{IL}	LOW-level input voltage	V _{CC} = 0.8 V	-	-	0.30×V _{CC}	V
		V _{CC} = 0.9 V to 1.95 V		-	0.35×V _{CC}	V
		V _{CC} = 2.3 V to 2.7 V	-	-	0.7	V
		V _{CC} = 3.0 V to 3.6 V	-	-	0.9	V

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V _{OL}	LOW-level output voltage	$V_I = V_{IH}$ or V_{IL}				
▼ OL		I _O = 20 μA; V _{CC} = 0.8 V to 3.6 V	-	-	0.1	V
		I _O = 1.1 mA; V _{CC} = 1.1 V	-	-	0.3×V _{CC}	V
		I _O = 1.7 mA; V _{CC} = 1.4 V	-	-	0.37	V
		I _O = 1.9 mA; V _{CC} = 1.65 V	-	-	0.35	V
		I _O = 2.3 mA; V _{CC} = 2.3 V	-	-	0.33	V
		I _O = 3.1 mA; V _{CC} = 2.3 V	-	-	0.45	V
		I _O = 2.7 mA; V _{CC} = 3.0 V	-	-	0.33	V
		I _O = 4.0 mA; V _{CC} = 3.0 V	-	-	0.45	V
I _I	input leakage current	V_{I} = GND to 3.6 V; V_{CC} = 0 V to 3.6 V	-	-	±0.5	μΑ
I _{OZ}	OFF-state output current	V _I = V _{IH} ; V _O = 0 V to 3.6 V; V _{CC} = 0 V to 3.6 V	-	-	±0.5	μΑ
I _{OFF}	power-off leakage current	V_{I} or $V_{O} = 0 \text{ V}$ to 3.6 V; $V_{CC} = 0 \text{ V}$	-	-	±0.5	μA
Δl _{OFF}	additional power-off leakage current	V_1 or $V_0 = 0$ V to 3.6 V; $V_{CC} = 0$ V to 0.2 V	-	-	±0.6	μA
I _{CC}	supply current	V_{I} = GND or V_{CC} ; I_{O} = 0 A; V_{CC} = 0.8 V to 3.6 V	-	-	0.9	μΑ
ΔI_{CC}	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$	-	-	50	μA
T _{amb} = -	40 °C to +125 °C					
V _{IH}	HIGH-level input voltage	V _{CC} = 0.8 V	0.75×V _{CC}	-	-	V
		V _{CC} = 0.9 V to 1.95 V	0.70×V _{CC}	-	-	V
		V _{CC} = 2.3 V to 2.7 V	1.6	-	-	V
		V _{CC} = 3.0 V to 3.6 V	2.0	-	-	V
V_{IL}	LOW-level input voltage	V _{CC} = 0.8 V	-	-	0.25×V _{CC}	V
		V _{CC} = 0.9 V to 1.95 V	-	-	0.30×V _{CC}	V
		V _{CC} = 2.3 V to 2.7 V	-	-	0.7	V
		V _{CC} = 3.0 V to 3.6 V	-	-	0.9	V
V_{OL}	LOW-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I _O = 20 μA; V _{CC} = 0.8 V to 3.6 V	-	-	0.11	V
		I _O = 1.1 mA; V _{CC} = 1.1 V	-	-	0.33×V _{CC}	V
		I _O = 1.7 mA; V _{CC} = 1.4 V	-	-	0.41	V
		I _O = 1.9 mA; V _{CC} = 1.65 V	-	-	0.39	V
		I _O = 2.3 mA; V _{CC} = 2.3 V	-	-	0.36	V
		I _O = 3.1 mA; V _{CC} = 2.3 V	-	-	0.50	V
		I _O = 2.7 mA; V _{CC} = 3.0 V	-	-	0.36	V
		I _O = 4.0 mA; V _{CC} = 3.0 V	-	-	0.50	V
I _I	input leakage current	$V_I = GND \text{ to } 3.6 \text{ V}; V_{CC} = 0 \text{ V to } 3.6 \text{ V}$	-	-	±0.75	μΑ
l _{OZ}	OFF-state output current	FF-state output current $V_I = V_{IH}$; $V_O = 0 \text{ V to } 3.6 \text{ V}$; $V_{CC} = 0 \text{ V to } 3.6 \text{ V}$		-	±0.75	μA
I _{OFF}	power-off leakage current	V_1 or $V_0 = 0$ V to 3.6 V; $V_{CC} = 0$ V	-	-	±0.75	μA
Δl _{OFF}	additional power-off leakage current			-	±0.75	μA
I _{CC}	supply current	V_{I} = GND or V_{CC} ; I_{O} = 0 A; V_{CC} = 0.8 V to 3.6 V	-	-	1.4	μA
ΔI_{CC}	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$	-	-	75	μΑ

Low-power buffer with open-drain output

11. Dynamic characteristics

Table 8. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit see Fig. 9.

Symbol	Parameter	Conditions		25 °C			°C to		°C to 5 °C	Unit
			Min	Typ[1]	Max	Min	Max	Min	Max	_
C _L = 5 p	F									
t _{pd}	propagation	A to Y; see <u>Fig. 8</u> [2]								
	delay	V _{CC} = 0.8 V	-	11.6	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	2.1	4.1	7.5	1.7	9.1	1.7	10.0	ns
		V _{CC} = 1.4 V to 1.6 V	1.6	3.0	5.1	1.3	6.1	1.3	6.7	ns
		V _{CC} = 1.65 V to 1.95 V	1.6	2.7	4.0	1.2	5.0	1.2	5.5	ns
		V _{CC} = 2.3 V to 2.7 V	1.1	2.1	3.2	0.9	4.0	0.9	4.4	ns
		V _{CC} = 3.0 V to 3.6 V	1.4	2.2	2.8	1.1	3.3	1.1	3.6	ns
C _L = 10	pF									
t _{pd}	propagation	A to Y; see <u>Fig. 8</u> [2]								
	delay	V _{CC} = 0.8 V	-	14.7	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	3.0	5.1	9.0	2.4	11.2	2.4	12.3	ns
		V _{CC} = 1.4 V to 1.6 V	2.3	3.8	6.1	2.0	7.4	2.0	8.1	ns
		V _{CC} = 1.65 V to 1.95 V	2.4	3.6	4.8	1.8	6.1	1.8	6.7	ns
		V _{CC} = 2.3 V to 2.7 V	1.7	2.8	3.8	1.3	4.8	1.3	5.3	ns
		V _{CC} = 3.0 V to 3.6 V	2.2	3.1	4.2	1.6	4.5	1.6	5.0	ns
C _L = 15	pF									
t _{pd}	propagation	A to Y; see <u>Fig. 8</u> [2]								
	delay	V _{CC} = 0.8 V	-	17.7	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	3.5	6.1	10.4	3.2	13.1	3.2	14.5	ns
		V _{CC} = 1.4 V to 1.6 V	3.0	4.5	6.8	2.6	8.6	2.6	9.4	ns
		V _{CC} = 1.65 V to 1.95 V	2.8	4.4	6.7	2.2	7.8	2.2	8.6	ns
		V _{CC} = 2.3 V to 2.7 V	2.4	3.4	4.5	1.9	5.3	1.9	5.8	ns
		V _{CC} = 3.0 V to 3.6 V	2.2	4.0	5.7	1.9	6.1	1.9	6.7	ns
C _L = 30	pF									
t _{pd}	propagation	A to Y; see <u>Fig. 8</u> [2]								
	delay	V _{CC} = 0.8 V	-	24.6	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	4.8	9.0	15.6	4.3	18.8	4.3	20.7	ns
		V _{CC} = 1.4 V to 1.6 V	4.1	6.7	9.4	3.7	11.8	3.7	13.0	ns
		V _{CC} = 1.65 V to 1.95 V	3.8	6.8	9.7	3.2	11.0	3.2	12.1	ns
		V _{CC} = 2.3 V to 2.7 V	3.7	5.2	6.7	3.0	7.1	3.0	7.8	ns
		V _{CC} = 3.0 V to 3.6 V	3.6	6.4	9.7	2.8	10.4	2.8	11.4	ns

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Symbol	Parameter	Conditions	25 °C		-40 °C to +85 °C		-40 °C to +125 °C		Unit		
			Min	Typ[1]	Max	Min	Max	Min	Max		
$C_L = 5 p$	F, 10 pF, 15 pF	and 30 pF									
C _{PD}	power	$f_i = 1 \text{ MHz}; V_I = \text{GND to } V_{CC}$ [3]									
	dissipation capacitance	V _{CC} = 0.8 V	-	0.5	-	-	-	-	-	pF	
	Capacitanico	V _{CC} = 1.1 V to 1.3 V	-	0.6	-	-	-	-	-	pF	
		V _{CC} = 1.4 V to 1.6 V	-	0.6	-	-	-	-	-	pF	
		V _{CC}	V _{CC} = 1.65 V to 1.95 V	-	0.7	-	-	-	-	-	pF
		V _{CC} = 2.3 V to 2.7 V	-	0.9	-	-	-	-	-	pF	
		V _{CC} = 3.0 V to 3.6 V	-	1.2	-	-	-	-	-	pF	

- [1] All typical values are measured at nominal V_{CC}.
- [2] t_{pd} is the same as t_{PZL} and t_{PLZ} .
- [3] C_{PD} is used to determine the dynamic power dissipation (P_D in μW).

 $P_D = C_{PD} \times V_{CC}^2 \times f_i \times N$ where:

 f_i = input frequency in MHz;

V_{CC} = supply voltage in V;

N = number of inputs switching.

11.1. Waveforms and test circuit

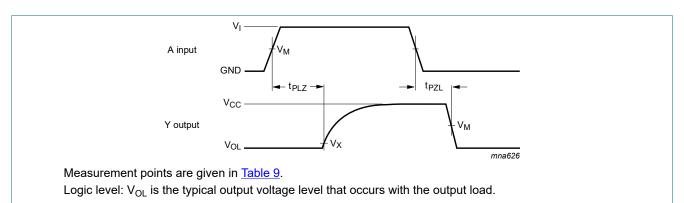
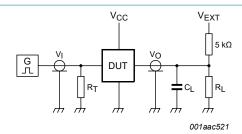


Fig. 8. The data input (A) to output (Y) propagation delays

Table 9. Measurement points

Supply voltage	Input			Output	
V _{CC}	V _M	VI	$t_r = t_f$	V _M	V _X
0.8 V to 1.6 V	0.5 × V _{CC}	V _{CC}	≤ 3.0 ns	0.5 × V _{CC}	V _{OL} + 0.1 V
1.65 V to 2.7 V	0.5 × V _{CC}	V _{CC}	≤ 3.0 ns	0.5 × V _{CC}	V _{OL} + 0.15 V
3.0 V to 3.6 V	0.5 × V _{CC}	V _{CC}	≤ 3.0 ns	0.5 × V _{CC}	V _{OL} + 0.3 V

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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. 9. 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 _{PHL} t _{PZH} , t _{PHZ} t _{PZL} , t _{PLZ}	
0.8 V to 3.6 V	5 pF, 10 pF, 15 pF and 30 pF	5 kΩ or 1 MΩ	open	GND	2 × V _{CC}

[1] For measuring enable and disable times, R_L = 5 k Ω . For measuring propagation delays, setup and hold times and pulse width, R_L = 1 M Ω .

Low-power buffer with open-drain output

12. Package outline

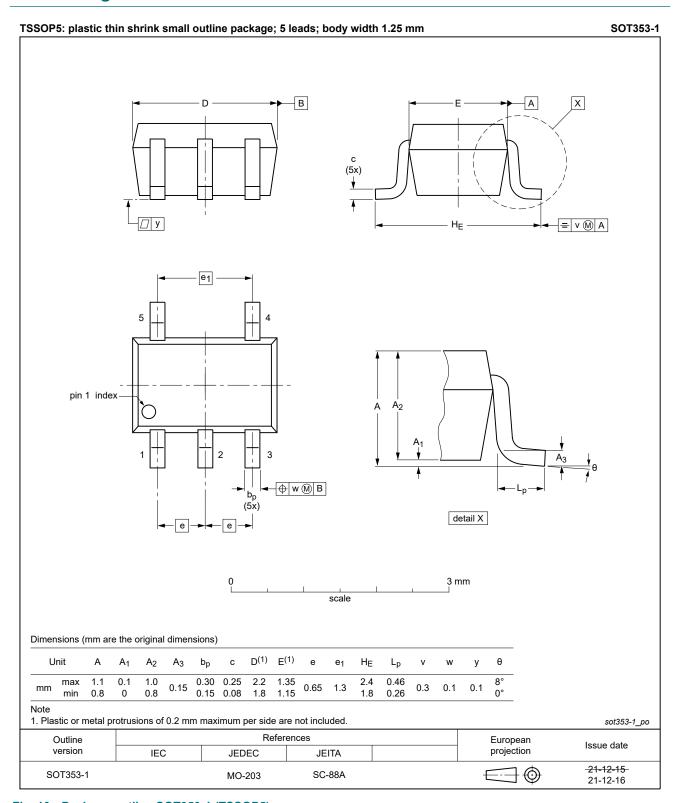


Fig. 10. Package outline SOT353-1 (TSSOP5)

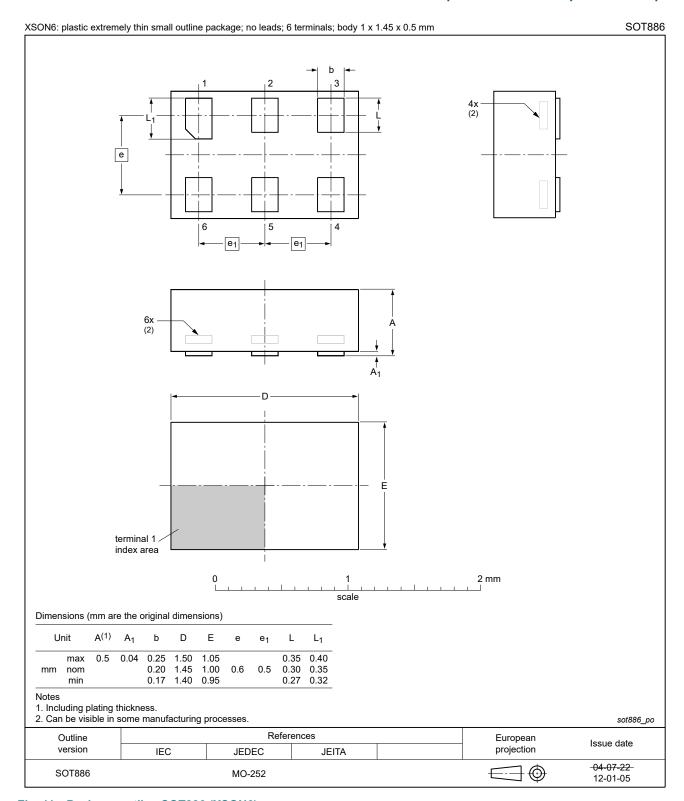


Fig. 11. Package outline SOT886 (XSON6)

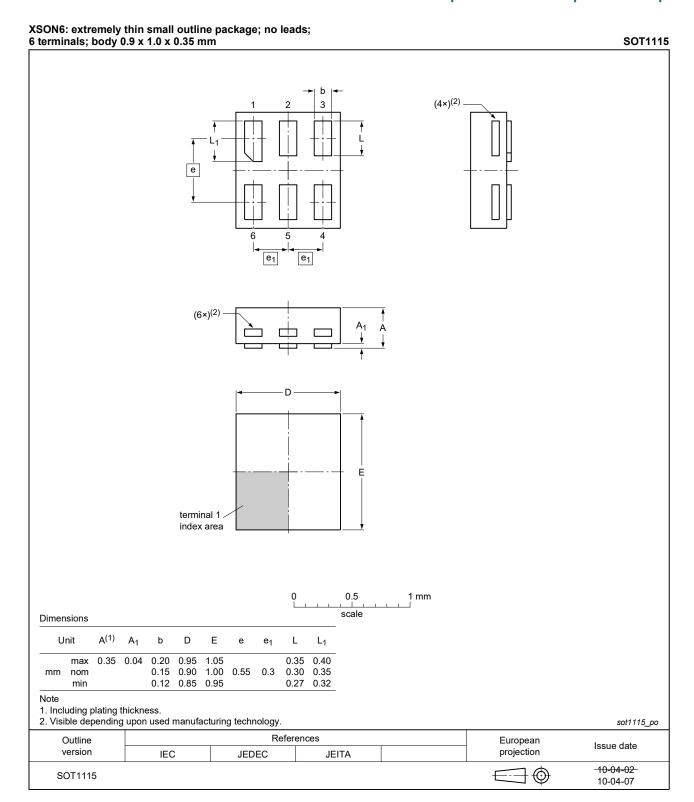


Fig. 12. Package outline SOT1115 (XSON6)

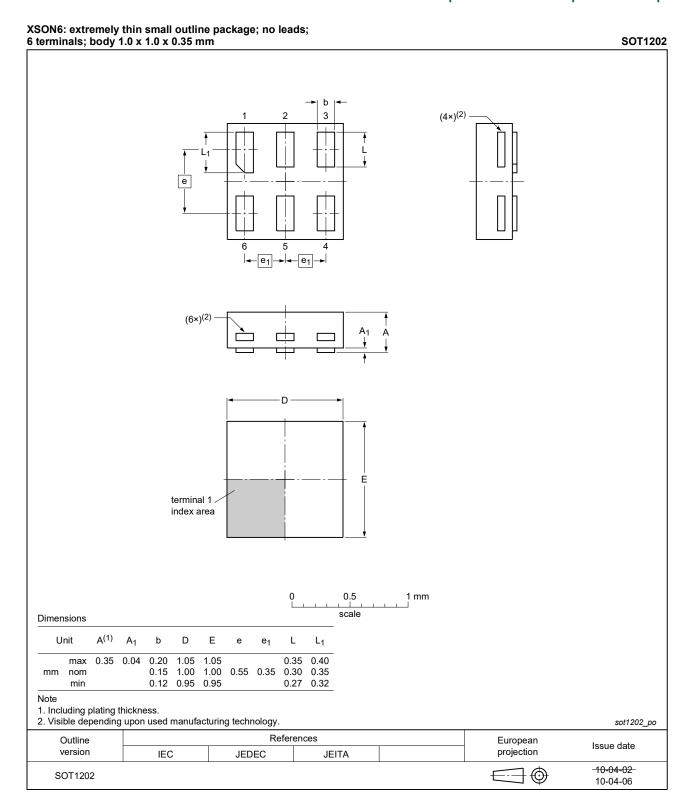


Fig. 13. Package outline SOT1202 (XSON6)

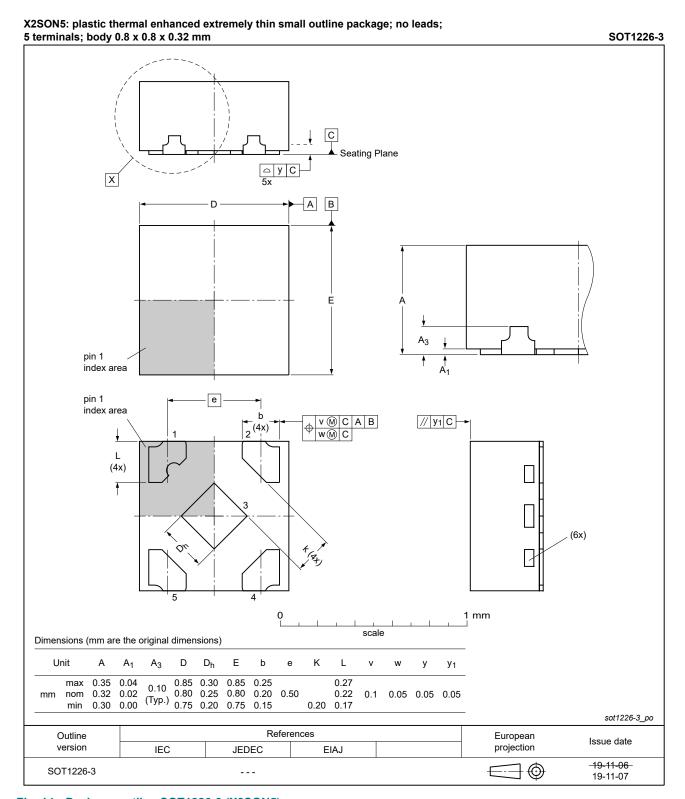


Fig. 14. Package outline SOT1226-3 (X2SON5)

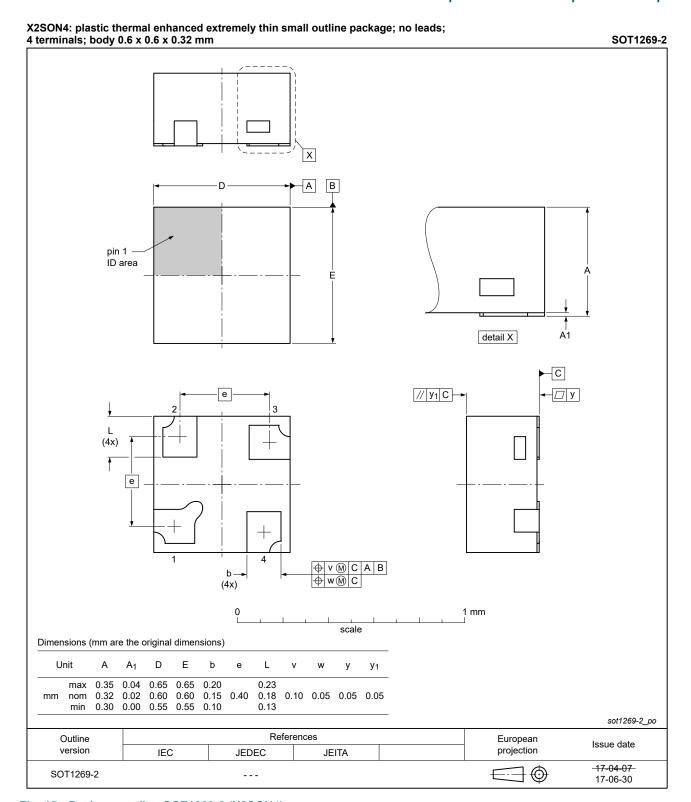


Fig. 15. Package outline SOT1269-2 (X2SON4)

Low-power buffer with open-drain output

13. Abbreviations

Table 11. Abbreviations

Acronym	Description
CDM	Charged Device Model
DUT	Device Under Test
ESD	ElectroStatic Discharge
НВМ	Human Body Model
MM	Machine Model

14. Revision history

Table 12. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes		
74AUP1G07 v.10	20220113	Product data sheet	-	74AUP1G07 v.9		
Modifications:		 <u>Section 1</u> and <u>Section 2</u> updated. <u>Fig. 10</u>: Package outline drawing of SOT353-1 (TSSOP5) has changed. 				
74AUP1G07 v.9	20210420	Product data sheet	-	74AUP1G07 v.8		
Modifications:	Type number	Type Hamber 7-7/01 Teoret (Certain) Temorea.				
74AUP1G07 v.8	20180608	Product data sheet	-	74AUP1G07 v.7		
Modifications:	guidelines o Legal texts	 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. Added type number 74AUP1G07GX4 (SOT1269-2) 				
74AUP1G07 v.7	20120716	Product data sheet	-	74AUP1G07 v.6		
Modifications:	Package out	Package outline drawing of SOT1226 modified.				
74AUP1G07 v.6	20120412	Product data sheet	-	74AUP1G07 v.5		
M1:£:4:		 Added type number 74AUP1G07GX (SOT1226) Package outline drawing of SOT886 (Fig. 11) modified. 				
Modifications:		•	,	74AUF 1607 V.5		
		•	,	74AUP1G07 v.4		
74AUP1G07 v.5	• Package ou	utline drawing of SOT886 (,			
74AUP1G07 v.5 Modifications:	• Package ou 20111115	utline drawing of SOT886 (,			
74AUP1G07 v.5 Modifications: 74AUP1G07 v.4	Package ou20111115Legal pages	ortline drawing of SOT886 (Product data sheet s updated.	,	74AUP1G07 v.4		
Modifications: 74AUP1G07 v.5 Modifications: 74AUP1G07 v.4 74AUP1G07 v.3 74AUP1G07 v.2	 Package ou 20111115 Legal pages 20100902 	Product data sheet s updated. Product data sheet	,	74AUP1G07 v.4 74AUP1G07 v.3		

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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.

- Please consult the most recently issued document before initiating or completing a design.
- [2] The term 'short data sheet' is explained in section "Definitions".
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