74AUP1G0832

Low-power 3-input AND-OR gate

Rev. 6 — 14 January 2022

Product data sheet

1. General description

The 74AUP1G0832 is a single 3-input AND-OR gate. Schmitt-trigger action at all inputs makes the circuit tolerant of slower input rise and fall times. This device ensures 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 potentially 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
- CMOS low power dissipation
- · High noise immunity
- · 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
- Latch-up performance exceeds 100 mA per JESD 78 Class II Level B
- Low static power consumption; I_{CC} = 0.9 μA (maximum)
- · Complies with JEDEC standards:
 - JESD8-12 (0.8 V to 1.3 V)
 - JESD8-11 (0.9 V to 1.65 V)
 - JESD8-7 (1.2 V to 1.95 V)
 - JESD8-5 (1.8 V to 2.7 V)
 - JESD8-B (2.7 V to 3.6 V)
- ESD protection:
 - HBM JESD22-A114F Class 3A exceeds 5000 V
 - MM JESD22-A115-A exceeds 200 V
 - CDM JESD22-C101E exceeds 1000 V
- Multiple package options
- Specified from -40 °C to +85 °C and -40 °C to +125 °C

3. Ordering information

Table 1. Ordering information

Type number	Package							
	Temperature range	Name	Description	Version				
74AUP1G0832GW	-40 °C to +125 °C	TSSOP6	plastic thin shrink small outline package; 6 leads; body width 1.25 mm	SOT363-2				
74AUP1G0832GM	-40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body 1 × 1.45 × 0.5 mm	SOT886				
74AUP1G0832GN	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 0.9 × 1.0 × 0.35 mm	SOT1115				
74AUP1G0832GS	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 1.0 × 1.0 × 0.35 mm	SOT1202				



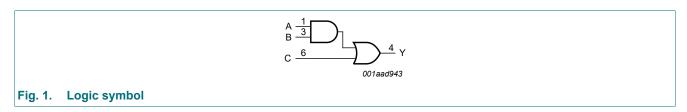
4. Marking

Table 2. Marking

Type number	Marking code[1]
74AUP1G0832GW	aY
74AUP1G0832GM	aY
74AUP1G0832GN	aY
74AUP1G0832GS	аҮ

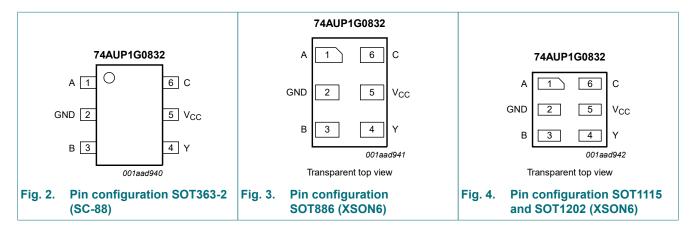
^[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

5. Functional diagram



6. Pinning information

6.1. Pinning



6.2. Pin description

Table 3. Pin description

Symbol	Pin	Description
A	1	data input A
GND	2	ground (0 V)
В	3	data input B
Υ	4	data output Y
V _{CC}	5	supply voltage
С	6	data input C

7. Functional description

Table 4. Function table

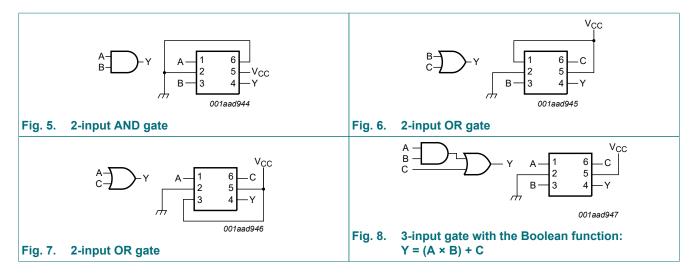
 $H = HIGH \ voltage \ level; \ L = LOW \ voltage \ level.$

Input	Output		
С	В	A	Υ
L	L	L	L
L	L	Н	L
L	Н	L	L
L	Н	Н	Н
Н	L	L	Н
Н	L	Н	Н
Н	Н	L	Н
Н	Н	Н	Н

7.1. Logic configurations

Table 5. Function selection table

Logic function	Figure
2-input AND	see Fig. 5
2-input OR	see Fig. 6 and Fig. 7
3-input gate with the Boolean function: Y = (A × B) + C	see Fig. 8



Low-power 3-input AND-OR gate

8. Limiting values

Table 6. 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
lok	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	$T_{amb} = -40 ^{\circ}\text{C} \text{ to } +125 ^{\circ}\text{C}$ [2]	-	250	mW

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

9. Recommended operating conditions

Table 7. 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	0	V _{CC}	V
		Power-down mode; V _{CC} = 0 V	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

10. Static characteristics

Table 8. 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
		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

^[2] For SOT363-2 (TSSOP6) package: Ptot derates linearly with 3.7 mW/K above 83 °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.

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V _{OH}	HIGH-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I _O = -20 μA; V _{CC} = 0.8 V to 3.6 V	V _{CC} - 0.1	-	-	V
		I _O = -1.1 mA; V _{CC} = 1.1 V	0.75 × V _{CC}	-	-	V
		I _O = -1.7 mA; V _{CC} = 1.4 V	1.11	-	-	V
		I _O = -1.9 mA; V _{CC} = 1.65 V	1.32	-	-	V
		I _O = -2.3 mA; V _{CC} = 2.3 V	2.05	-	-	V
		I _O = -3.1 mA; V _{CC} = 2.3 V	1.9	-	-	V
		I _O = -2.7 mA; V _{CC} = 3.0 V	2.72	-	-	V
		I _O = -4.0 mA; V _{CC} = 3.0 V	2.6	-	-	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
I _I	input leakage current	V _I = GND to 3.6 V; V _{CC} = 0 V to 3.6 V	-	-	±0.1	μA
I _{OFF}	power-off leakage current	V _I or V _O = 0 V to 3.6 V; V _{CC} = 0 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	μΑ
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	μΑ
ΔI_{CC}	additional supply current	$V_1 = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$ [1]	-	-	40	μΑ
Cı	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 _{amb} = -	40 °C to +85 °C				1	
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	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

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V _{OH}	HIGH-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I _O = -20 μA; V _{CC} = 0.8 V to 3.6 V	V _{CC} - 0.1	-	Max	V
		I _O = -1.1 mA; V _{CC} = 1.1 V	Or V	V		
		I _O = -1.7 mA; V _{CC} = 1.4 V	1.03	-	-	V
V _{OL} LOW-leve I _I input leaka I _{OFF} power-off ΔI _{OFF} additional leakage cu I _{CC} supply cur ΔI _{CC} additional T _{amb} = -40 °C to +1 V _{IH} HIGH-leve		I _O = -1.9 mA; V _{CC} = 1.65 V	1.30	-	-	V
		I _O = -2.3 mA; V _{CC} = 2.3 V	1.97	-		V
		I _O = -3.1 mA; V _{CC} = 2.3 V	1.85	-	-	V
		I _O = -2.7 mA; V _{CC} = 3.0 V	2.67	-	-	V
		I _O = -4.0 mA; V _{CC} = 3.0 V	2.55	-	-	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	-	-		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	V 0.3 × V _{CC} V V 0.37 V 5 V 0.35 V V 0.33 V V 0.45 V V 0.45 V V 0.45 V O V to 3.6 V ±0.5 μA cc = 0 V - ±0.5 μA cc = 0 V to 0.2 V - ±0.6 μA V _{CC} = 3.3 V [1] - 50 μA	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	μA
I _{OFF}	power-off leakage current	V_{I} or $V_{O} = 0$ V to 3.6 V; $V_{CC} = 0$ V	-	-	±0.5	μΑ
Δl _{OFF}	additional power-off leakage current	1/ 1/ 01/1 00/1			±0.6	μΑ
I _{CC}	supply current	$V_I = GND \text{ or } V_{CC}; I_O = 0 \text{ A};$ $V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	-	-	0.9	μΑ
ΔI_{CC}	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$ [1]	-	-	50	μA
T _{amb} = -	40 °C to +125 °C					
V _{IH}	HIGH-level input voltage	V _{CC} = 0.8 V	0.75 × V _{CC}	CC V V V V V V V V V V V 0.3 × V _{CC} V - 0.35 V - 0.35 V - 0.35 V - 0.45 V - 0.33 V - 0.45 V - ±0.5 µ/ - ±0.5 µ/ - ±0.6 µ/ - 50 µ/ - 50 µ/ - 0.9 V - 0.25 × V _{CC} V - 0.30 × V _{CC} V - 0.9 V - V - 0.9 V - V	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	-		V	
		V _{CC} = 3.0 V to 3.6 V	-	-	0.9	V
V _{OH}	HIGH-level output voltage	$V_I = V_{IH}$ or V_{IL}				
		I _O = -20 μA; V _{CC} = 0.8 V to 3.6 V	V _{CC} - 0.11	-	-	V
		I _O = -1.1 mA; V _{CC} = 1.1 V	0.6 × V _{CC}	-	-	V
		I _O = -1.7 mA; V _{CC} = 1.4 V	0.93	-	-	V
		I _O = -1.9 mA; V _{CC} = 1.65 V	1.17	-	-	V
		I _O = -2.3 mA; V _{CC} = 2.3 V	1.77	-	-	V
		I _O = -3.1 mA; V _{CC} = 2.3 V	1.67	-	-	V
		I _O = -2.7 mA; V _{CC} = 3.0 V	2.40	-	-	V
		I _O = -4.0 mA; V _{CC} = 3.0 V	2.30	-	-	V

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Symbol	Parameter	Conditions	Min	Тур	Max	Unit
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	input leakage current	V _I = GND to 3.6 V; V _{CC} = 0 V to 3.6 V	-	-	±0.75	μΑ
I _{OFF}	power-off leakage current	V _I or V _O = 0 V to 3.6 V; V _{CC} = 0 V	-	-	±0.75	μΑ
ΔI_{OFF}	additional power-off leakage current	V_{I} or $V_{O} = 0$ V to 3.6 V; $V_{CC} = 0$ V to 0.2 V	-	-	±0.75	μΑ
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	μΑ
ΔI_{CC}	additional supply current	$V_1 = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$ [1]	-	-	75	μΑ

^[1] One input at V_{CC} - 0.6 V, other input at V_{CC} or GND.

11. Dynamic characteristics

Table 9. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit see Fig. 10.

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									•
t _{pd}	propagation	A, B or C to Y; see Fig. 9 [2]								
	delay	V _{CC} = 0.8 V	-	19.5	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	2.5	5.6	11.1	2.2	11.3	2.2	12.4	ns
		V _{CC} = 1.4 V to 1.6 V	1.9	3.9	6.4	2.0	6.9	2.0	7.6	ns
		V _{CC} = 1.65 V to 1.95 V	1.6	3.1	5.1	1.5	5.7	1.5	6.3	ns
		V _{CC} = 2.3 V to 2.7 V	1.4	2.4	3.7	1.3	4.2	1.3	4.6	ns
		V _{CC} = 3.0 V to 3.6 V	1.3	2.2	3.2	1.2	3.5	1.2	3.9	ns
C _L = 10	pF									•
t _{pd}	propagation	A, B or C to Y; see Fig. 9 [2]								
	delay	V _{CC} = 0.8 V	-	23.1	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	2.8	6.5	12.7	2.5	12.9	2.5	14.2	ns
		V _{CC} = 1.4 V to 1.6 V	2.2	4.5	7.4	2.3	8.0	2.3	8.8	ns
		V _{CC} = 1.65 V to 1.95 V	2.0	3.7	5.9	1.8	6.6	1.8	7.3	ns
		V _{CC} = 2.3 V to 2.7 V	1.8	3.0	4.4	1.6	4.9	1.6	5.4	ns
		V _{CC} = 3.0 V to 3.6 V	1.6	2.7	3.9	1.5	4.2	1.5	4.6	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 = 15	pF									
t _{pd}	propagation	A, B or C to Y; see Fig. 9 [2]								
	delay	V _{CC} = 0.8 V	-	26.6	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	3.2	7.3	14.2	2.8	14.7	2.8	16.2	ns
		V _{CC} = 1.4 V to 1.6 V	2.5	5.1	8.3	2.6	9.1	2.6	10.0	ns
		V _{CC} = 1.65 V to 1.95 V	2.3	4.2	6.7	2.0	7.5	2.0	8.3	ns
		V _{CC} = 2.3 V to 2.7 V	2.1	3.4	5.0	1.9	5.6	1.9	6.2	ns
		V _{CC} = 3.0 V to 3.6 V	1.9	3.2	4.5	1.8	4.8	1.8	5.3	ns
C _L = 30	pF								•	•
t _{pd}	propagation	A, B or C to Y; see Fig. 9 [2]								
	delay	V _{CC} = 0.8 V	-	34.8	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	4.1	9.5	19.0	3.6	19.8	3.6	21.8	ns
		V _{CC} = 1.4 V to 1.6 V	3.3	6.6	11.0	3.3	12.1	3.3	13.3	ns
		V _{CC} = 1.65 V to 1.95 V	3.0	5.5	8.8	2.6	10.0	2.6	11.0	ns
		V _{CC} = 2.3 V to 2.7 V	2.8	4.5	6.6	2.5	7.4	2.5	8.3	ns
		V _{CC} = 3.0 V to 3.6 V	2.6	4.3	5.9	2.4	6.4	2.4	7.0	ns
T _{amb} = 2	5 °C								•	
C _{PD}	power dissipation capacitance	$f_i = 1 \text{ MHz};$ [3] $V_I = \text{GND to } V_{CC}$								
		V _{CC} = 0.8 V	-	2.5	-	-	-	-	-	pF
		V _{CC} = 1.1 V to 1.3 V	-	2.7	-	-	-	-	-	pF
		V _{CC} = 1.4 V to 1.6 V	-	2.8	-	-	-	-	-	pF
		V _{CC} = 1.65 V to 1.95 V	-	2.9	-	-	-	-	-	pF
		V _{CC} = 2.3 V to 2.7 V	-	3.4	-	-	-	-	-	pF
		V _{CC} = 3.0 V to 3.6 V	-	4.0	-	-	-	-	-	pF

- [1] All typical values are measured at nominal V_{CC} .
- [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} × V_{CC}² × f_i × N + Σ(C_L × V_{CC}² × 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; $\Sigma (C_L \times V_{CC}^{\ 2} \times f_o) = \text{sum of the outputs}.$

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11.1. Waveforms and test circuit

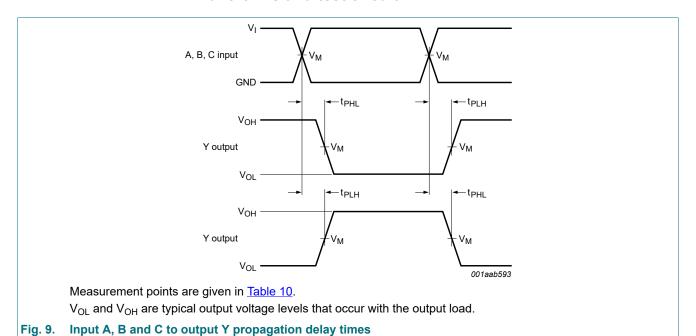
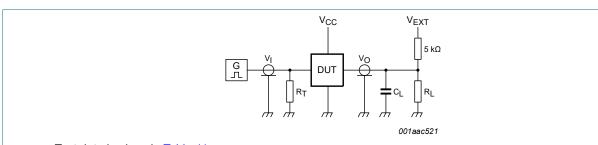


Table 10. Measurement points

Supply voltage	Output	Input		
V _{CC}	V _M	V _M	VI	$t_r = t_f$
0.8 V to 3.6 V	0.5 × V _{CC}	0.5 × V _{CC}	V _{CC}	≤ 3.0 ns



Test data is given in Table 11.

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. 10. Test circuit for measuring switching times

Table 11. Test data

Supply voltage	Load	V _{EXT}			
V _{CC}	CL	R _L [1]	t _{PLH} , 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 $k\Omega.$

For measuring propagation delays, setup and hold times and pulse width R_L = 1 $M\Omega$.

12. Package outline

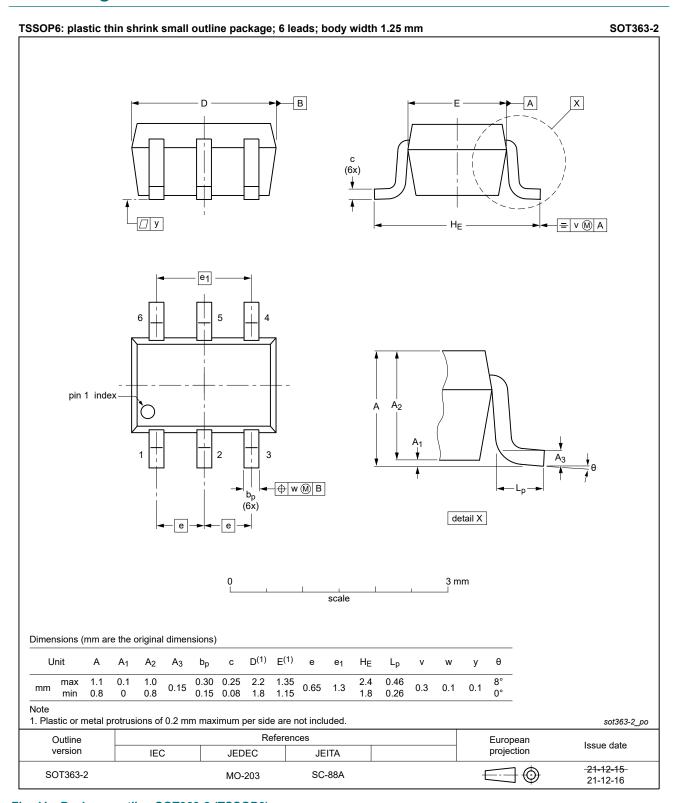


Fig. 11. Package outline SOT363-2 (TSSOP6)

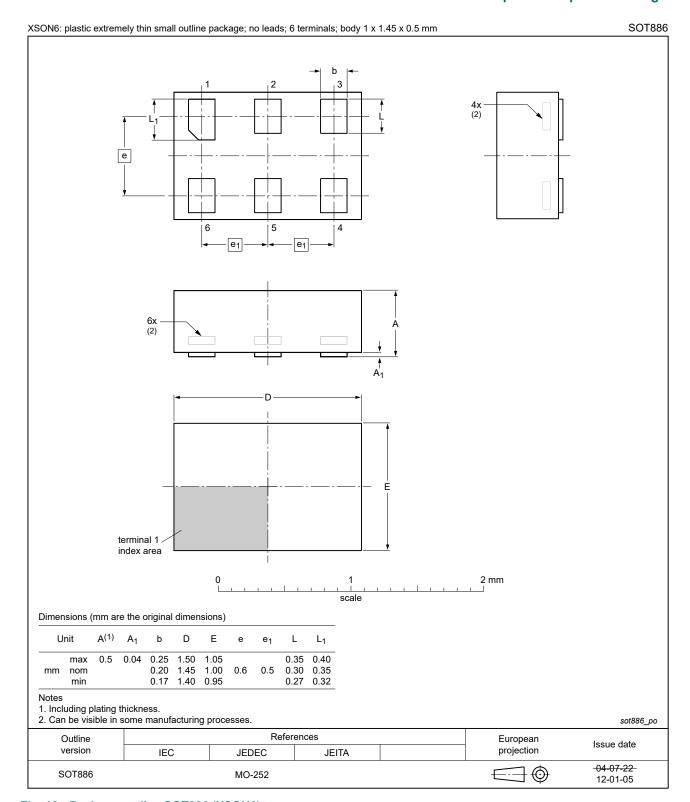


Fig. 12. Package outline SOT886 (XSON6)

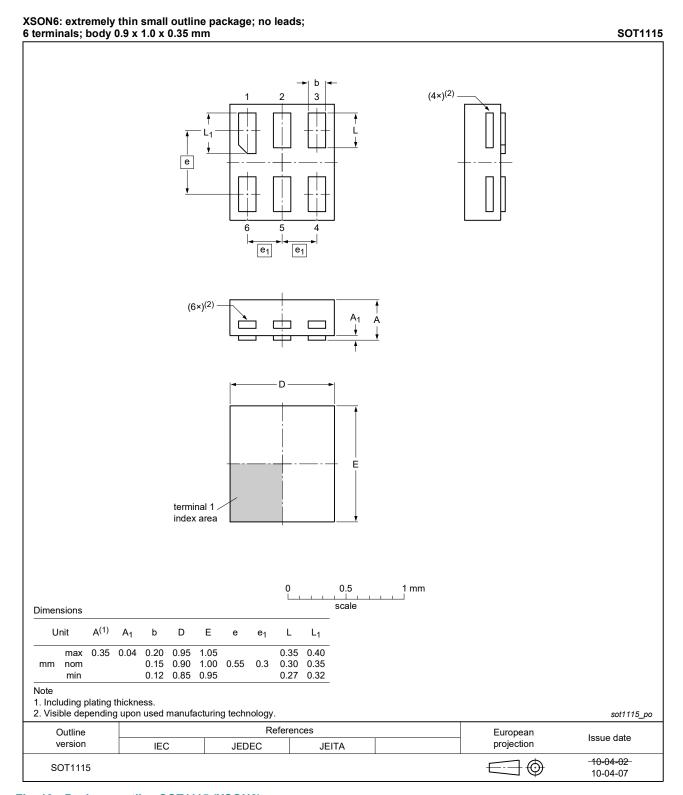


Fig. 13. Package outline SOT1115 (XSON6)

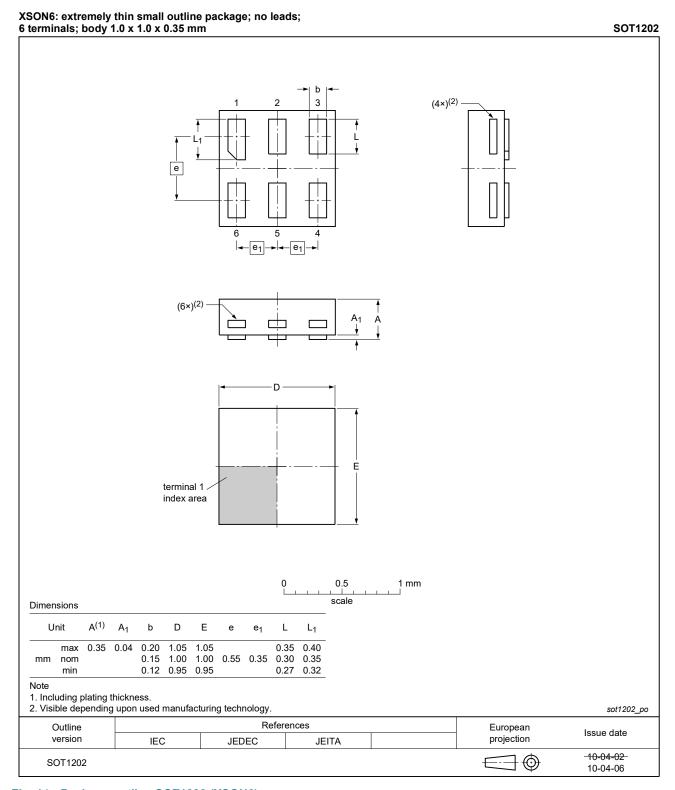


Fig. 14. Package outline SOT1202 (XSON6)

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13. Abbreviations

Table 12. Abbreviations

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

14. Revision history

Table 13. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes		
74AUP1G0832 v.6	20220114	Product data sheet	-	74AUP1G0832 v.5		
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. Section 1 and Section 2 updated. Table 6: Derating values for P_{tot} total power dissipation updated. Package SOT363 (SC-88) changed to SOT363-2 (SC-88). Type number 74AUP1G0832GF (SOT891/XSON6) removed. 					
74AUP1G0832 v.5	20120622	Product data sheet	-	74AUP1G0832 v.4		
Modifications:	Package outline drawing of SOT886 (Fig. 12) modified.					
74AUP1G0832 v.4	20111115	Product data sheet	-	74AUP1G0832 v.3		
Modifications:	Legal pages updated.					
74AUP1G0832 v.3	20101005	Product data sheet	-	74AUP1G0832 v.2		
74AUP1G0832 v.2	20090703	Product data sheet	-	74AUP1G0832 v.1		
74AUP1G0832 v.1	20061108	Product data sheet	-	-		

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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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74AUP1G0832

Low-power 3-input AND-OR gate

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