# **74AUP3G07**

# Low-power triple buffer with open-drain output Rev. 2 — 5 October 2016 P

**Product data sheet** 

#### **General description** 1.

The 74AUP3G07 is a triple non-inverting buffer with open-drain output. The output of the device is an open drain and can be connected to other open-drain outputs to implement active-LOW wired-OR or active-HIGH wired-AND functions.

Schmitt-trigger action at all inputs makes the circuit tolerant to slower input rise and fall times across the entire  $V_{CC}$  range from 0.8 V to 3.6 V.

This device ensures a very low static and dynamic power consumption across the entire V<sub>CC</sub> range from 0.8 V to 3.6 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.

#### 2. **Features and benefits**

- Wide supply voltage range from 0.8 V to 3.6 V
- High noise immunity
- 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
- Low static power consumption;  $I_{CC} = 0.9 \mu A$  (maximum)
- Latch-up performance exceeds 100 mA per JESD 78B 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



## Low-power triple buffer with open-drain output

## 3. Ordering information

Table 1. Ordering information

Type number	Package							
	Temperature range	Name	Description	Version				
74AUP3G07DC	-40 °C to +125 °C	VSSOP8	plastic very thin shrink small outline package; 8 leads; body width 2.3 mm	SOT765-1				
74AUP3G07GT	–40 °C to +125 °C	XSON8	plastic extremely thin small outline package; no leads; 8 terminals; body 1 $\times$ 1.95 $\times$ 0.5 mm	SOT833-1				
74AUP3G07GM	–40 °C to +125 °C	XQFN8	plastic, extremely thin quad flat package; no leads; 8 terminals; body 1.6 $\times$ 1.6 $\times$ 0.5 mm	SOT902-2				
74AUP3G07GN	–40 °C to +125 °C	XSON8	extremely thin small outline package; no leads; 8 terminals; body $1.2 \times 1.0 \times 0.35$ mm	SOT1116				
74AUP3G07GS	–40 °C to +125 °C	XSON8	extremely thin small outline package; no leads; 8 terminals; body $1.35 \times 1.0 \times 0.35$ mm	SOT1203				

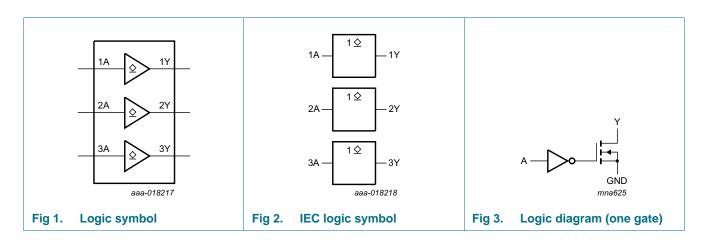
## 4. Marking

## Table 2. Marking codes

Type number	Marking code <sup>[1]</sup>
74AUP3G07DC	p07
74AUP3G07GT	p07
74AUP3G07GM	p07
74AUP3G07GN	р7
74AUP3G07GS	р7

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

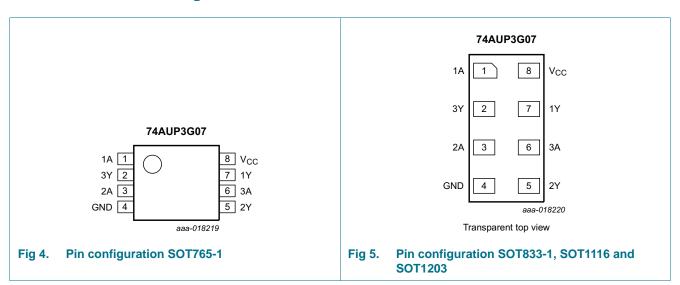
## 5. Functional diagram

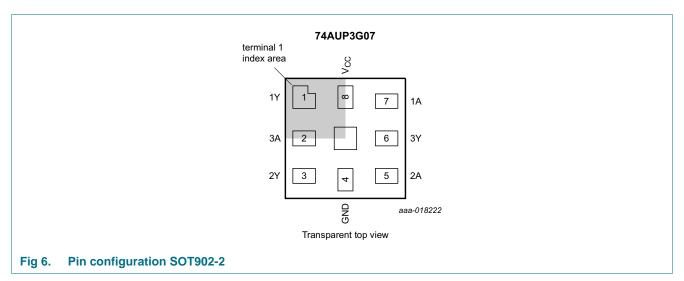


#### Low-power triple buffer with open-drain output

## 6. Pinning information

#### 6.1 Pinning





## 6.2 Pin description

Table 3. Pin description

Symbol	Pin	Description	
	SOT765-1, SOT833-1, SOT1116 and SOT1203	SOT902-2	
1A, 2A, 3A	1, 3, 6	7, 5, 2	data input
1Y, 2Y, 3Y	7, 5, 2	1, 3, 6	data output
GND	4	4	ground (0 V)
V <sub>CC</sub>	8	8	supply voltage

#### Low-power triple buffer with open-drain output

## 7. Functional description

Table 4. Function table[1]

Input nA	Output nY
L	L
Н	Z

<sup>[1]</sup> H = HIGH voltage level; L = LOW voltage level; Z = high-impedance OFF-state.

## 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
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
Io	output current	$V_O = 0 \text{ V to } V_{CC}$	-	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	$T_{amb} = -40  ^{\circ}\text{C} \text{ to } +125  ^{\circ}\text{C}$	-	250	mW

<sup>[1]</sup> The minimum 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 <sub>CC</sub>	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 <sub>amb</sub>	ambient temperature		-40	+125	°C
Δt/ΔV	input transition rise and fall rate	V <sub>CC</sub> = 0.8 V to 3.6 V	0	200	ns/V

<sup>[2]</sup> For VSSOP8 packages: above 110 °C, the value of  $P_{tot}$  derates linearly with 8.0 mW/K. For XSON8 and XQFN8 packages: above 118 °C, the value of  $P_{tot}$  derates linearly with 7.8 mW/K.

## Low-power triple buffer with open-drain output

## 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>IH</sub>	HIGH-level input voltage	V <sub>CC</sub> = 0.8 V	$0.70 \times V_{CC}$	-	-	V
		V <sub>CC</sub> = 0.9 V to 1.95 V	$0.65 \times V_{CC}$	-	-	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.6	-	-	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	2.0	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 0.8 V	-	-	$0.30 \times V_{CC}$	V
		V <sub>CC</sub> = 0.9 V to 1.95 V	-	-	$0.35 \times V_{CC}$	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	-	0.7	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	-	-	0.9	V
V <sub>OL</sub>	LOW-level output voltage	$V_I = V_{IH}$ or $V_{IL}$				
		$I_O = 20 \mu A; V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	-	-	0.1	V
		I <sub>O</sub> = 1.1 mA; V <sub>CC</sub> = 1.1 V	-	-	$0.3 \times V_{CC}$	V
		I <sub>O</sub> = 1.7 mA; V <sub>CC</sub> = 1.4 V	-	-	0.31	V
		I <sub>O</sub> = 1.9 mA; V <sub>CC</sub> = 1.65 V	-	-	0.31	V
		$I_{O}$ = 2.3 mA; $V_{CC}$ = 2.3 V	-	-	0.31	V
		$I_{O} = 3.1 \text{ mA}; V_{CC} = 2.3 \text{ V}$	-	-	0.44	V
		$I_{O} = 2.7 \text{ mA}; V_{CC} = 3.0 \text{ V}$	-	-	0.31	V
		$I_{O} = 4.0 \text{ mA}; V_{CC} = 3.0 \text{ V}$	-	-	0.44	V
I <sub>I</sub>	input leakage current	$V_I$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 V	-	-	±0.1	μΑ
l <sub>OZ</sub>	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 <sub>OFF</sub>	power-off leakage current	$V_{I}$ or $V_{O} = 0 \text{ V}$ to 3.6 V; $V_{CC} = 0 \text{ V}$	-	-	±0.2	μА
$\Delta I_{OFF}$	additional power-off leakage current	$V_{I}$ or $V_{O} = 0$ V to 3.6 V; $V_{CC} = 0$ V to 0.2 V	-	-	±0.2	μΑ
I <sub>CC</sub>	supply current	$V_I = GND \text{ or } V_{CC}; I_O = 0 \text{ A};$ $V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	-	-	0.5	μΑ
$\Delta I_{CC}$	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$	-	-	40	μΑ
Cı	input capacitance	$V_{CC} = 0 \text{ V to } 3.6 \text{ V; } V_{I} = \text{GND or } V_{CC}$	-	0.7	-	pF
Co	output capacitance	$V_O = GND; V_{CC} = 0 V$	-	0.9	-	pF
T <sub>amb</sub> = -	40 °C to +85 °C	-				1
V <sub>IH</sub>	HIGH-level input voltage	V <sub>CC</sub> = 0.8 V	$0.70 \times V_{CC}$	-	-	V
		V <sub>CC</sub> = 0.9 V to 1.95 V	0.65 × V <sub>CC</sub>	-	-	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.6	-	-	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	2.0	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 0.8 V	-	-	0.30 × V <sub>CC</sub>	V
		V <sub>CC</sub> = 0.9 V to 1.95 V	-	-	0.35 × V <sub>CC</sub>	V
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	-	0.7	V
		V <sub>CC</sub> = 3.0 V to 3.6 V	-	-	0.9	V

## Low-power triple buffer with open-drain output

**Table 7. Static characteristics** ...continued
At recommended operating conditions; voltages are referenced to GND (ground = 0 V).

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

## Low-power triple buffer with open-drain output

 Table 7.
 Static characteristics ...continued

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

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
$\Delta I_{OFF}$	additional power-off leakage current	$V_1$ or $V_O = 0$ V to 3.6 V; $V_{CC} = 0$ V to 0.2 V	-	-	±0.75	μΑ
I <sub>CC</sub>	supply current	$V_I = GND \text{ or } V_{CC}; I_O = 0 \text{ A};$ $V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	-	-	1.4	μА
$\Delta I_{CC}$	additional supply current	$V_I = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$	-	-	75	μΑ

## 11. Dynamic characteristics

#### Table 8. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit, see Figure 8.

Symbol	Parameter	Conditions		25 °C			–40 °C to +125 °C		
			Min	Typ[1]	Max	Min	Max (85 °C)	Max (125 °C)	
C <sub>L</sub> = 5 pl	F			•					
t <sub>pd</sub>	propagation delay	nA to nY; see Figure 7							
		V <sub>CC</sub> = 0.8 V	-	11.6	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	2.1	4.1	7.5	1.7	9.1	10.0	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	1.6	3.0	5.1	1.3	6.1	6.7	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	1.6	2.7	4.0	1.2	5.0	5.5	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.1	2.1	3.2	0.9	4.0	4.4	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	1.4	2.2	2.8	1.1	3.3	3.6	ns
C <sub>L</sub> = 10	ρF	1							
t <sub>pd</sub>	propagation delay	nA to nY; see Figure 7							
		V <sub>CC</sub> = 0.8 V	-	14.7	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	3.0	5.1	9.0	2.4	11.2	12.3	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	2.3	3.8	6.1	2.0	7.4	8.1	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	2.4	3.6	4.8	1.8	6.1	6.7	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.7	2.8	3.8	1.3	4.8	5.3	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	2.2	3.1	4.2	1.6	4.5	5.0	ns
C <sub>L</sub> = 15	ρF							1	
t <sub>pd</sub>	propagation delay	nA to nY; see Figure 7							
		V <sub>CC</sub> = 0.8 V	-	17.7	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	3.5	6.1	10.4	3.2	13.1	14.5	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	3.0	4.5	6.8	2.6	8.6	9.4	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	2.8	4.4	6.7	2.2	7.8	8.6	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	2.4	3.4	4.5	1.9	5.3	5.8	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	2.2	4.0	5.7	1.9	6.1	6.7	ns

#### Low-power triple buffer with open-drain output

 Table 8.
 Dynamic characteristics ...continued

Voltages are referenced to GND (ground = 0 V); for test circuit, see Figure 8.

Symbol	Parameter	Conditions		25 °C		-4	0 °C to +	125 °C	Unit
			Min	Typ[1]	Max	Min	Max (85 °C)	Max (125 °C)	
C <sub>L</sub> = 30 p	οF								
t <sub>pd</sub>	propagation delay	nA to nY; see Figure 7							
		V <sub>CC</sub> = 0.8 V	-	26.7	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	4.8	9.0	15.6	4.3	18.8	20.7	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	4.1	6.7	9.4	3.7	11.8	13.0	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	3.8	6.8	9.7	3.2	11.0	12.1	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	3.7	5.2	6.7	3.0	7.1	7.8	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	3.6	6.4	9.7	2.8	10.4	11.4	ns
C <sub>L</sub> = 5 pl	F, 10 pF, 15 pF and	30 pF						1	
C <sub>PD</sub>	power dissipation	$f_i = 1 \text{ MHz}; V_I = \text{GND to } V_{CC}$ [3][4]							
	capacitance	V <sub>CC</sub> = 0.8 V	-	0.5	-	-	-	-	рF
		V <sub>CC</sub> = 1.1 V to 1.3 V	-	0.6	-	-	-	-	рF
		V <sub>CC</sub> = 1.4 V to 1.6 V	-	0.6	-	-	-	-	рF
		V <sub>CC</sub> = 1.65 V to 1.95 V	-	0.7	-	-	-	-	рF
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	0.9	-	-	-	-	pF
		V <sub>CC</sub> = 3.0 V to 3.6 V	-	1.2	-	-	-	-	рF

- [1] All typical values are measured at nominal V<sub>CC</sub>.
- [2]  $t_{pd}$  is the same as  $t_{PZL}$  and  $t_{PLZ}$ .
- [3] All specified values are the average typical values over all stated loads.
- [4]  $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu W$ ).

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

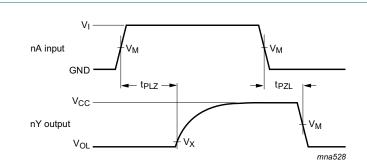
 $f_i$  = input frequency in MHz;

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

N = number of inputs switching.

#### Low-power triple buffer with open-drain output

## 12. Waveforms



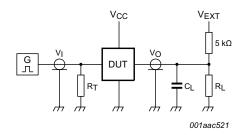
Measurement points are given in Table 9.

Logic level:  $V_{OL}$  is the typical output voltage level that occurs with the output load.

Fig 7. The data input (nA) to output (nY) propagation delays

Table 9. Measurement points

Supply voltage	Input	Output	
V <sub>CC</sub>	V <sub>M</sub>	V <sub>M</sub>	V <sub>X</sub>
0.8 V to 1.6 V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$	V <sub>OL</sub> + 0.1 V
1.65 V to 2.7 V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$	V <sub>OL</sub> + 0.15 V
3.0 V to 3.6 V	$0.5 \times V_{CC}$	$0.5 \times V_{CC}$	V <sub>OL</sub> + 0.3 V



Test data is given in Table 10.

Definitions for test circuit:

R<sub>L</sub> = Load resistance.

C<sub>L</sub> = Load capacitance including jig and probe capacitance.

 $R_T$  = Termination resistance should be equal to the output impedance  $Z_0$  of the pulse generator.

 $V_{\text{EXT}}$  = External voltage for measuring switching times.

Fig 8. Test circuit for measuring switching times

Table 10. Test data

Supply voltage	Input		Load		V <sub>EXT</sub>		
V <sub>CC</sub>	VI	t <sub>r</sub> , t <sub>f</sub>	CL	R <sub>L</sub> [1]	t <sub>PLH</sub> , t <sub>PHL</sub>	t <sub>PZH</sub> , t <sub>PHZ</sub>	$t_{PZL}, t_{PLZ}$
0.8 V to 3.6 V	V <sub>CC</sub>	≤ 3 ns	5 pF, 10 pF, 15 pF and 30 pF	$5$ k $\Omega$ or $1$ M $\Omega$	open	GND	$2\times V_{CC}$

<sup>[1]</sup> For measuring enable and disable times  $R_L$  = 5 k $\Omega$ , for measuring propagation delays, set-up and hold times and pulse width  $R_L$  = 1 M $\Omega$ .

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#### Low-power triple buffer with open-drain output

## 13. Package outline

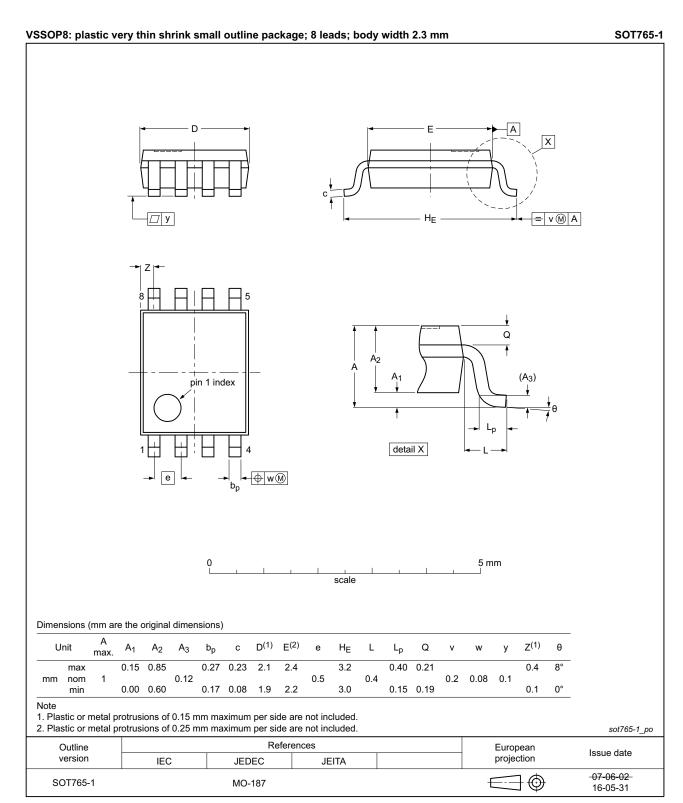


Fig 9. Package outline SOT765-1 (VSSOP8)

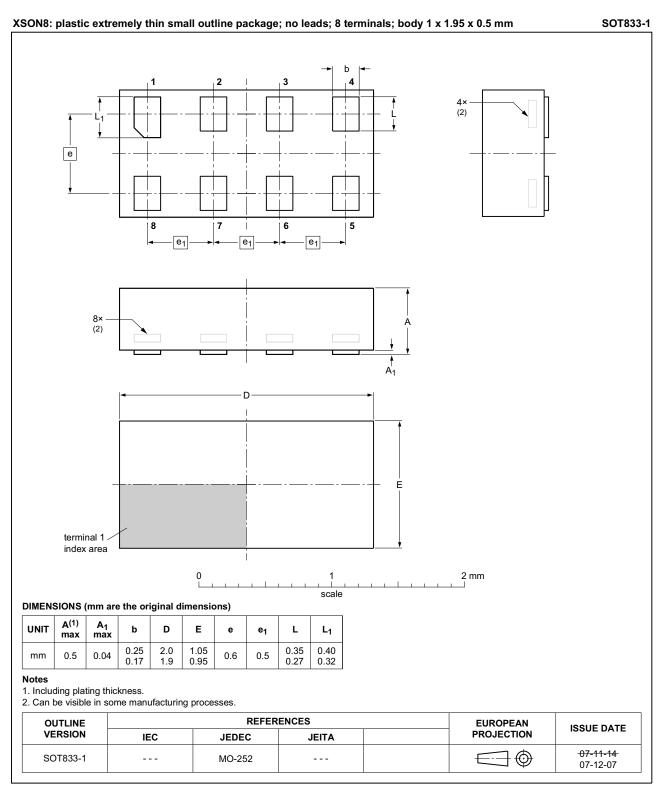


Fig 10. Package outline SOT833-1 (XSON8)

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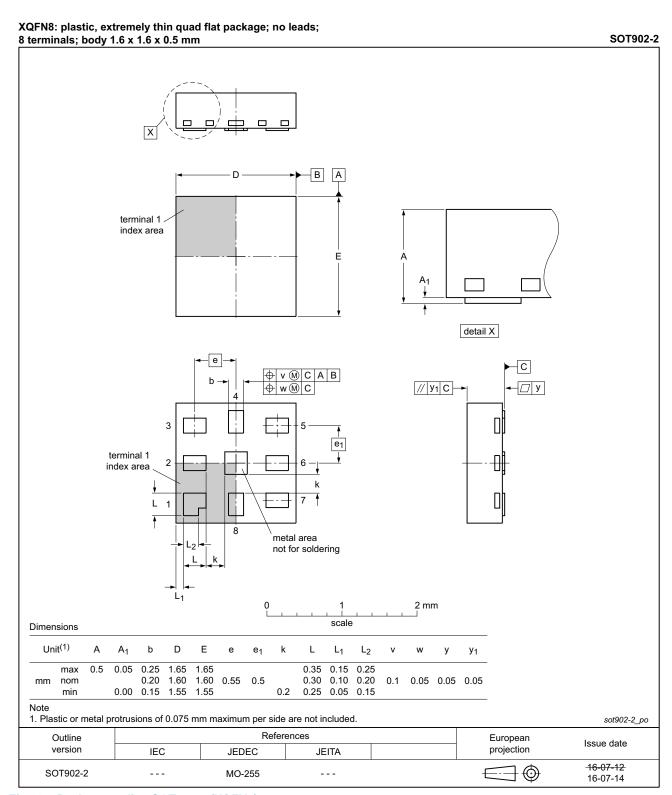


Fig 11. Package outline SOT902-2 (XQFN8)

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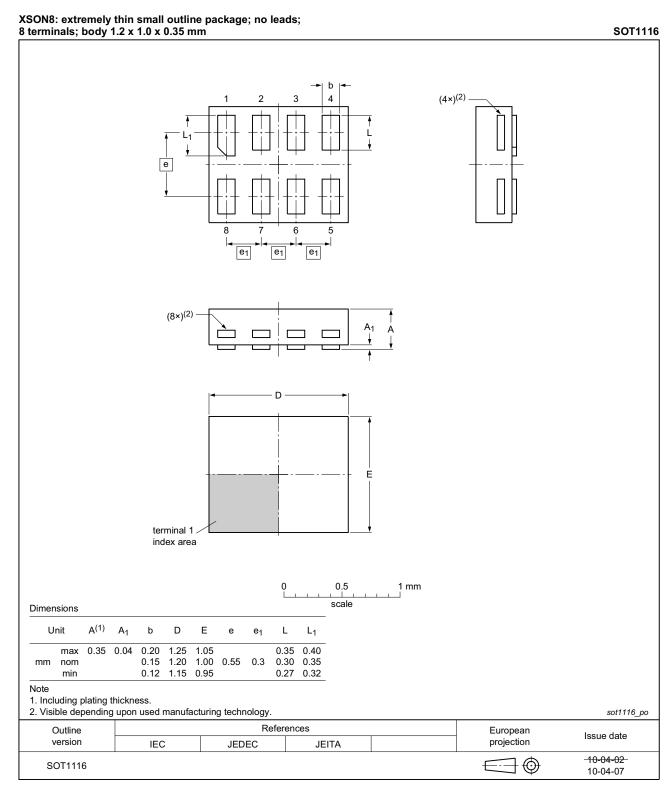


Fig 12. Package outline SOT1116 (XSON8)

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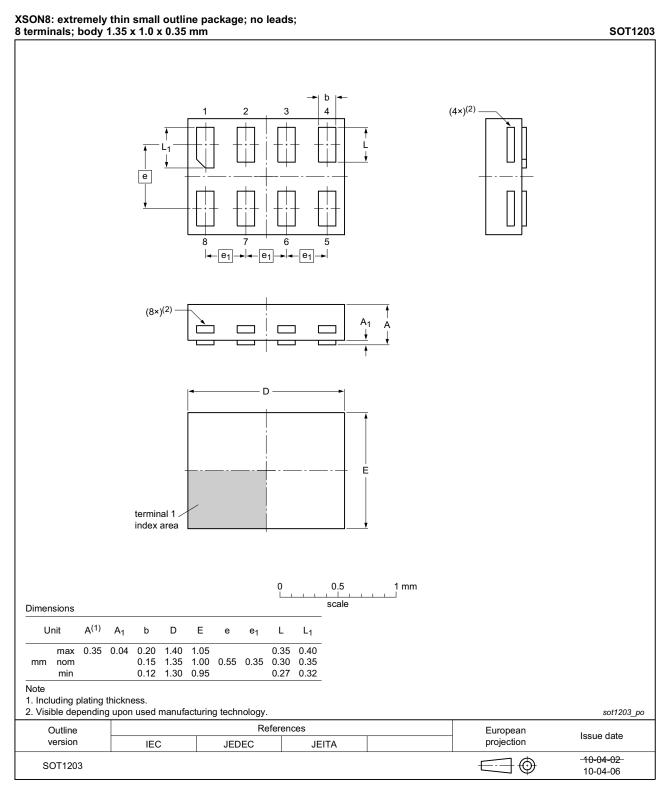


Fig 13. Package outline SOT1203 (XSON8)

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## 14. Abbreviations

#### Table 11. Abbreviations

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

## 15. Revision history

#### Table 12. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes
74AUP3G07 v.2	20161005	Product data sheet	-	74AUP3G07 v.1
Modifications:	Type numbers	3 74AUP3G07GD and 74AUP3	G07GF removed.	
74AUP3G07 v.1	20150608	Product data sheet	-	-

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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"
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