# **74AUP2GU04**

## Low-power dual unbuffered inverter

Rev. 6 — 28 January 2019

**Product data sheet** 

## 1. General description

The 74AUP2GU04 provides two unbuffered inverting gates.

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

### 2. Features and benefits

- Wide supply voltage range from 0.8 V to 3.6 V
- · High noise immunity
- 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 78 Class II
- Inputs accept voltages up to 3.6 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	Package								
	Temperature range	Name	Description	Version						
74AUP2GU04GW	-40 °C to +125 °C	SC-88	plastic surface-mounted package; 6 leads	SOT363						
74AUP2GU04GM	-40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body 1 x 1.45 x 0.5 mm	SOT886						
74AUP2GU04GF	-40 °C to +125 °C	XSON6	plastic extremely thin small outline package; no leads; 6 terminals; body 1 x 1 x 0.5 mm	SOT891						
74AUP2GU04GN	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 0.9 x 1.0 x 0.35 mm	SOT1115						
74AUP2GU04GS	-40 °C to +125 °C	XSON6	extremely thin small outline package; no leads; 6 terminals; body 1.0 x 1.0 x 0.35 mm	SOT1202						

## 4. Marking

#### Table 2. Marking

Type number	Marking code[1]
74AUP2GU04GW	aD
74AUP2GU04GM	aD
74AUP2GU04GF	aD

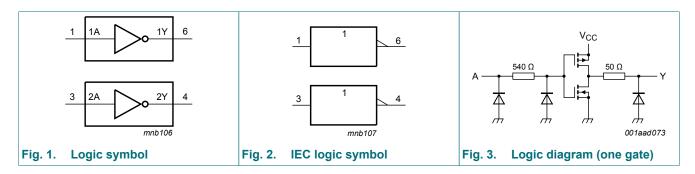


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Type number	Marking code[1]
74AUP2GU04GN	aD
74AUP2GU04GS	aD

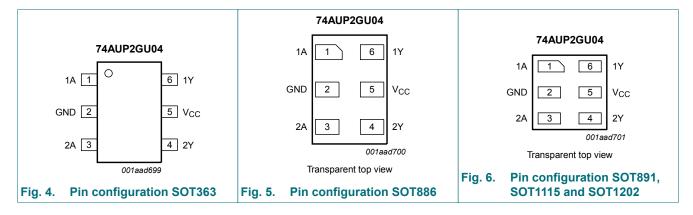
[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

## 5. Functional diagram



## 6. Pinning information

### 6.1. Pinning



### 6.2. Pin description

Table 3. Pin description

Symbol	Pin	Description
1A	1	data input
GND	2	ground (0 V)
2A	3	data input
2Y	4	data output
V <sub>CC</sub>	5	supply voltage
1Y	6	data output

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## 7. Functional description

#### **Table 4. Function table**

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

Input	Output
nA	nY
L	Н
Н	L

## 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 <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	[2]	-0.5	V <sub>CC</sub> + 0.5	V
Io	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	$T_{amb} = -40  ^{\circ}\text{C} \text{ to } +125  ^{\circ}\text{C}$ [3]	-	250	mW

<sup>[1]</sup> The minimum input voltage ratings may be exceeded if the input 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
V <sub>O</sub>	output voltage		0	V <sub>CC</sub>	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> The output voltage ratings may be exceeded if the output current ratings are observed.

<sup>[3]</sup> For SC-88 packages: above 87.5 °C the value of P<sub>tot</sub> derates linearly with 4.0 mW/K. For XSON6 packages: above 118 °C the value of P<sub>tot</sub> derates linearly with 7.8 mW/K.

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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 <sub>amb</sub> = 2	25 °C				<u>'</u>	
V <sub>IH</sub>	HIGH-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	0.75 × V <sub>CC</sub>	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	-	-	0.25 × V <sub>CC</sub>	V
V <sub>OH</sub>	HIGH-level output voltage	$V_I = GND \text{ or } V_{CC}$				
		I <sub>O</sub> = -20 μA; V <sub>CC</sub> = 0.8 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -1.1 mA; V <sub>CC</sub> = 1.1 V	0.75 × V <sub>CC</sub>	-	-	V
		I <sub>O</sub> = -1.7 mA; V <sub>CC</sub> = 1.4 V	1.11	-	-	V
		I <sub>O</sub> = -1.9 mA; V <sub>CC</sub> = 1.65 V	1.32	-	-	V
		$I_{O}$ = -2.3 mA; $V_{CC}$ = 2.3 V	2.05	-	-	V
		I <sub>O</sub> = -3.1 mA; V <sub>CC</sub> = 2.3 V	1.9	-	-	V
		I <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	$V_I = GND \text{ or } V_{CC}$				
		I <sub>O</sub> = 20 μA; V <sub>CC</sub> = 0.8 V to 3.6 V	-	-	0.1	V
		I <sub>O</sub> = 1.1 mA; V <sub>CC</sub> = 1.1 V	-	-	0.3 × V <sub>CC</sub>	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 <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
l <sub>l</sub>	input leakage current	$V_{I}$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 V	-	-	±0.1	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
Cı	input capacitance	$V_{CC}$ = 0 V to 3.6 V; $V_I$ = GND or $V_{CC}$	-	1.5	-	pF
Co	output capacitance	V <sub>O</sub> = GND; V <sub>CC</sub> = 0 V	-	1.8	-	pF
T <sub>amb</sub> = -	40 °C to +85 °C					
V <sub>IH</sub>	HIGH-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	0.75 × V <sub>CC</sub>	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	-	-	0.25 × V <sub>CC</sub>	V
V <sub>OH</sub>	HIGH-level output voltage	V <sub>I</sub> = GND or V <sub>CC</sub>				
		$I_{O}$ = -20 $\mu$ A; $V_{CC}$ = 0.8 V to 3.6 V	V <sub>CC</sub> - 0.1	-	-	V
		I <sub>O</sub> = -1.1 mA; V <sub>CC</sub> = 1.1 V	0.7 × V <sub>CC</sub>	-	-	V
		I <sub>O</sub> = -1.7 mA; V <sub>CC</sub> = 1.4 V	1.03	-	-	V
		I <sub>O</sub> = -1.9 mA; V <sub>CC</sub> = 1.65 V	1.30	-	-	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

Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = GND or V <sub>CC</sub>				
		I <sub>O</sub> = 20 μA; V <sub>CC</sub> = 0.8 V to 3.6 V	-	-	0.1	V
		I <sub>O</sub> = 1.1 mA; V <sub>CC</sub> = 1.1 V	-	-	0.3 × V <sub>CC</sub>	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 mA; $V_{CC}$ = 2.3 V	-	-	0.45	V
		$I_{O}$ = 2.7 mA; $V_{CC}$ = 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	μΑ
I <sub>CC</sub>	supply current	$V_I$ = GND or $V_{CC}$ ; $I_O$ = 0 A; $V_{CC}$ = 0.8 V to 3.6 V		-	0.9	μA
T <sub>amb</sub> = -4	40 °C to +125 °C					
$V_{IH}$	HIGH-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	0.75 × V <sub>CC</sub>	-	-	V
V <sub>IL</sub>	LOW-level input voltage	V <sub>CC</sub> = 0.8 V to 3.6 V	-	-	0.25 × V <sub>CC</sub>	V
$V_{OH}$	HIGH-level output voltage	$V_I = GND \text{ or } V_{CC}$				
		$I_{O}$ = -20 $\mu$ A; $V_{CC}$ = 0.8 V to 3.6 V	V <sub>CC</sub> - 0.11	-	-	V
		$I_{O}$ = -1.1 mA; $V_{CC}$ = 1.1 V	0.6 × V <sub>CC</sub>	-	-	V
		I <sub>O</sub> = -1.7 mA; V <sub>CC</sub> = 1.4 V	0.93	-	-	V
		I <sub>O</sub> = -1.9 mA; V <sub>CC</sub> = 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 <sub>O</sub> = -2.7 mA; V <sub>CC</sub> = 3.0 V	2.40	-	-	V
		$I_{O}$ = -4.0 mA; $V_{CC}$ = 3.0 V	2.30	-	-	V
V <sub>OL</sub>	LOW-level output voltage	V <sub>I</sub> = GND or V <sub>CC</sub>				
		$I_{O}$ = 20 $\mu$ A; $V_{CC}$ = 0.8 V to 3.6 V	-	-	0.11	V
		I <sub>O</sub> = 1.1 mA; V <sub>CC</sub> = 1.1 V	-	-	0.33 × V <sub>CC</sub>	V
		I <sub>O</sub> = 1.7 mA; V <sub>CC</sub> = 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 <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
l <sub>l</sub>	input leakage current	$V_I$ = GND to 3.6 V; $V_{CC}$ = 0 V to 3.6 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	μA

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## 11. Dynamic characteristics

#### **Table 8. Dynamic characteristics**

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

Symbol	Parameter	Conditions		25 °C		-40 °C to +125 °C			Unit
			Min	Typ[1]	Max	Min	Max (85 °C)	Max (125 °C)	
C <sub>L</sub> = 5 p	F						•	-	
t <sub>pd</sub>	propagation delay	nA to nY; see Fig. 7 [2]							
		V <sub>CC</sub> = 0.8 V	-	6.2	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	0.9	2.3	4.4	0.9	4.8	5.3	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	0.7	1.7	3.1	0.6	3.4	3.8	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	0.5	1.4	2.6	0.5	2.9	3.2	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.4	1.1	2.0	0.4	2.3	2.6	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.3	1.0	1.8	0.3	2.1	2.4	ns
C <sub>L</sub> = 10	pF								
t <sub>pd</sub>	propagation delay	nA to nY; see Fig. 7 [2]							
		V <sub>CC</sub> = 0.8 V	-	9.6	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	1.2	3.1	6.1	1.2	6.8	7.5	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	1.0	2.3	4.0	0.9	4.6	5.1	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	0.8	1.9	3.3	0.7	3.8	4.2	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.6	1.5	2.7	0.6	3.1	3.5	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.5	1.3	2.4	0.5	2.7	3.0	ns
C <sub>L</sub> = 15	pF			'			•	1	•
t <sub>pd</sub>	propagation delay	nA to nY; see Fig. 7 [2]							
		V <sub>CC</sub> = 0.8 V	-	13.0	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	1.6	3.8	7.9	1.4	8.8	9.7	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	1.3	2.8	4.9	1.1	5.7	6.3	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	1.0	2.3	4.0	0.9	4.7	5.2	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	0.8	1.9	3.2	0.8	3.7	4.1	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	0.7	1.6	2.9	0.7	3.3	3.7	ns
C <sub>L</sub> = 30	pF			'			•	1	'
t <sub>pd</sub>	propagation delay	nA to nY; see Fig. 7 [2]							
		V <sub>CC</sub> = 0.8 V	-	23.2	-	-	-	-	ns
		V <sub>CC</sub> = 1.1 V to 1.3 V	2.4	6.0	13.1	2.2	14.8	16.3	ns
		V <sub>CC</sub> = 1.4 V to 1.6 V	2.0	4.2	7.6	1.8	9.0	9.9	ns
		V <sub>CC</sub> = 1.65 V to 1.95 V	1.7	3.6	6.1	1.5	7.2	8.0	ns
		V <sub>CC</sub> = 2.3 V to 2.7 V	1.4	2.9	4.8	1.3	5.7	6.3	ns
		V <sub>CC</sub> = 3.0 V to 3.6 V	1.2	2.5	4.3	1.1	5.1	5.7	ns

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Symbol	Parameter	Conditions	25 °C		-40	°C to +12	25 °C	Unit	
			Min	Typ[1]	Max	Min	Max (85 °C)	Max (125 °C)	
C <sub>L</sub> = 5 pl	, 10 pF, 15 pF and	30 pF							•
C <sub>PD</sub>		$f_i = 1 \text{ MHz}; V_I = \text{GND to } V_{CC}$ [3][4]							
capacitance	capacitance	V <sub>CC</sub> = 0.8 V	-	1.1	-	-	-	-	pF
		V <sub>CC</sub> = 1.1 V to 1.3 V	-	1.1	-	-	-	-	pF
		V <sub>CC</sub> = 1.4 V to 1.6 V	-	1.3	-	-	-	-	pF
	V <sub>CC</sub> = 1.65 V to 1.95 V	-	1.5	-	-	-	-	pF	
		V <sub>CC</sub> = 2.3 V to 2.7 V	-	3.0	-	-	-	-	pF
		V <sub>CC</sub> = 3.0 V to 3.6 V	-	4.5	-	-	-	-	pF

- All typical values are measured at nominal V<sub>CC</sub>.
- $t_{\text{pd}}$  is the same as  $t_{\text{PLH}}$  and  $t_{\text{PHL}}.$ [2]
- All specified values are the average typical values over all stated loads.
- $C_{PD}$  is used to determine the dynamic power dissipation ( $P_D$  in  $\mu$ W).  $P_D = C_{PD} \times V_{CC}^2 \times f_i \times N + \Sigma (C_L \times V_{CC}^2 \times f_o)$  where:

 $f_i$  = input frequency in MHz;

f<sub>o</sub> = output frequency in MHz;

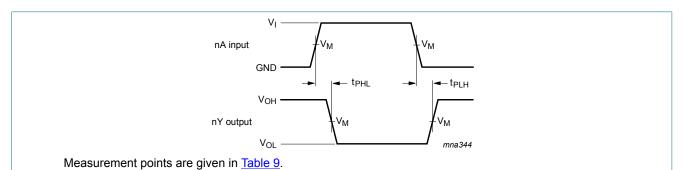
C<sub>L</sub> = load capacitance in pF;

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.

#### 11.1. Waveforms and test circuit



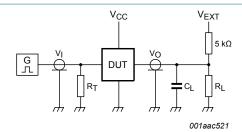
The data input (nA) to output (nY) propagation delays

**Table 9. Measurement points** 

Supply voltage	Output	Input					
V <sub>CC</sub>	V <sub>M</sub>	V <sub>M</sub>	V <sub>I</sub>	$t_r = t_f$			
0.8 V to 3.6 V	0.5 × V <sub>CC</sub>	0.5 × V <sub>CC</sub>	V <sub>CC</sub>	≤ 3.0 ns			

Logic levels: V<sub>OL</sub> and V<sub>OH</sub> are typical output voltage drops that occur with the output load.

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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  $Z_0$  of the pulse generator.

V<sub>EXT</sub> = External voltage for measuring switching times.

#### Fig. 8. Test circuit for measuring switching times

#### Table 10. Test data

Supply voltage	Load		V <sub>EXT</sub>		
V <sub>CC</sub>	CL	R <sub>L</sub> [1]	t <sub>PLH</sub> , t <sub>PHL</sub>	t <sub>PZH</sub> , t <sub>PHZ</sub>	t <sub>PZL</sub> , t <sub>PLZ</sub>
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 <sub>CC</sub>

[1] 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 $\Omega$ .

### 12. Additional characteristics

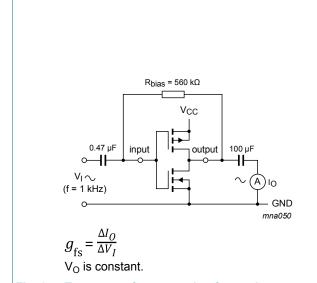


Fig. 9. Test set-up for measuring forward transconductance

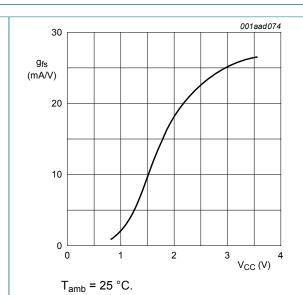


Fig. 10. Typical forward transconductance as a function of supply voltage

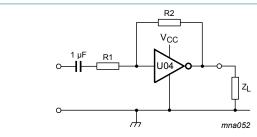
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## 13. Application information

Some applications for the 74AUP2GU04 are:

- Linear amplifier (see Fig. 11)
- Crystal oscillator (see Fig. 12)

Remark: All values given are typical values unless otherwise specified.



 $Z_L > 10 \text{ k}\Omega$ .

R1 ≥ 3 k $\Omega$ .

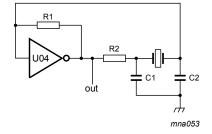
R2 ≤ 1 M $\Omega$ .

Open loop amplification:  $A_{OL} = 20$ .

Voltage amplification: 
$$A_V = -\frac{A_{\rm OL}}{1 + \frac{{\rm R1}}{{\rm R2}} \left(1 + A_{\rm OL}\right)}$$

 $V_{o(p-p)} = V_{CC}$  - 1.5 V centered at 0.5 ×  $V_{CC}$ . Unity gain bandwidth product is 5 MHz.

Fig. 11. Linear amplifier application



C1 = 47 pF.

C2 = 22 pF.

R1 = 1 M $\Omega$  to 10 M $\Omega$ .

R2 optimum value depends on the frequency and required stability against changes in  $V_{CC}$  or average minimum  $I_{CC}$  ( $I_{CC}$  = 2 mA at  $V_{CC}$  = 3.3 V and f = 10 MHz).

Fig. 12. Crystal oscillator application

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#### Low-power dual unbuffered inverter

## 14. Package outline

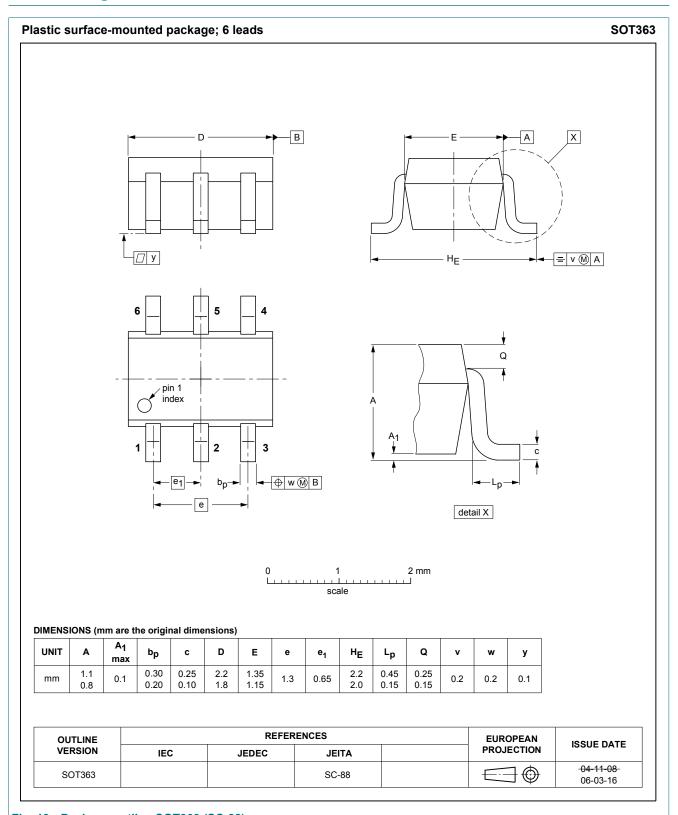


Fig. 13. Package outline SOT363 (SC-88)

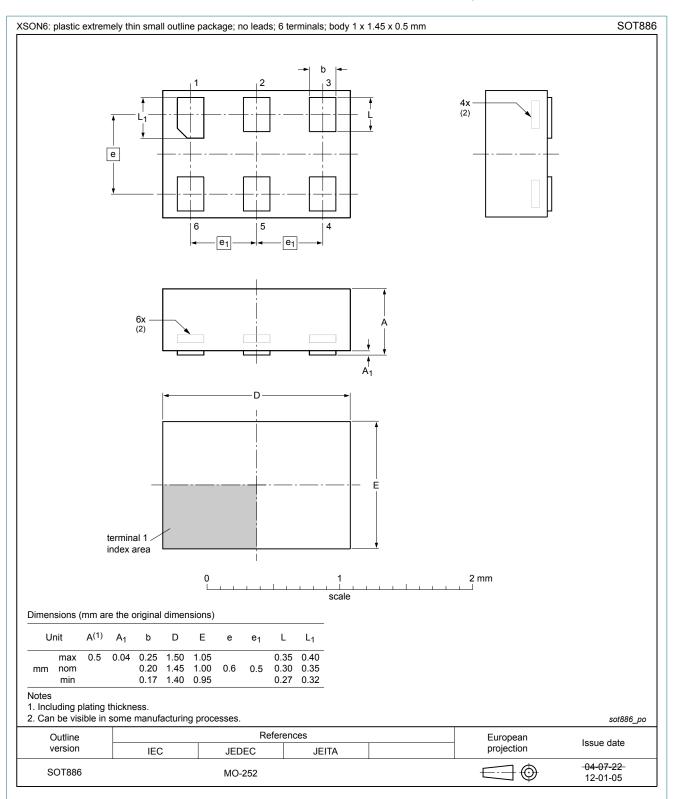


Fig. 14. Package outline SOT886 (XSON6)

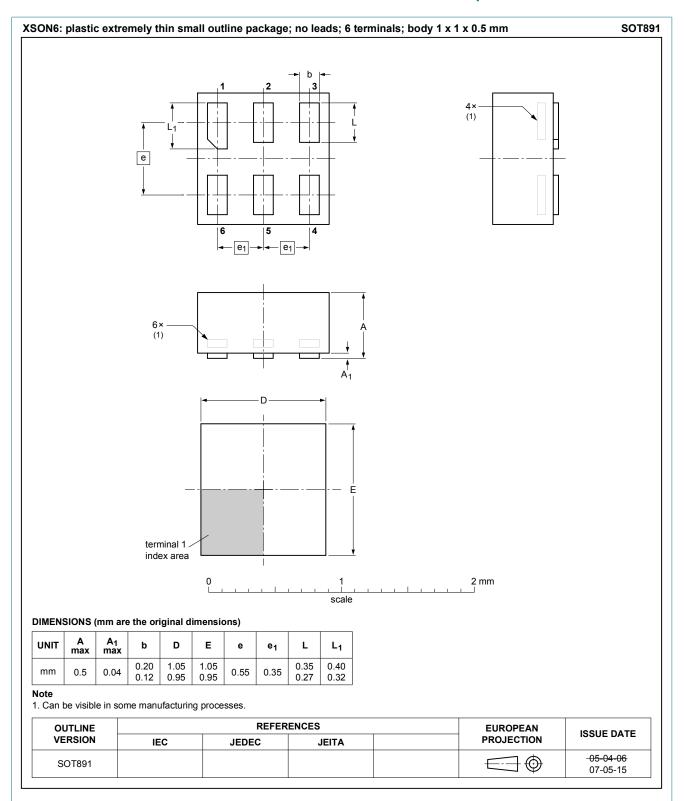


Fig. 15. Package outline SOT891 (XSON6)

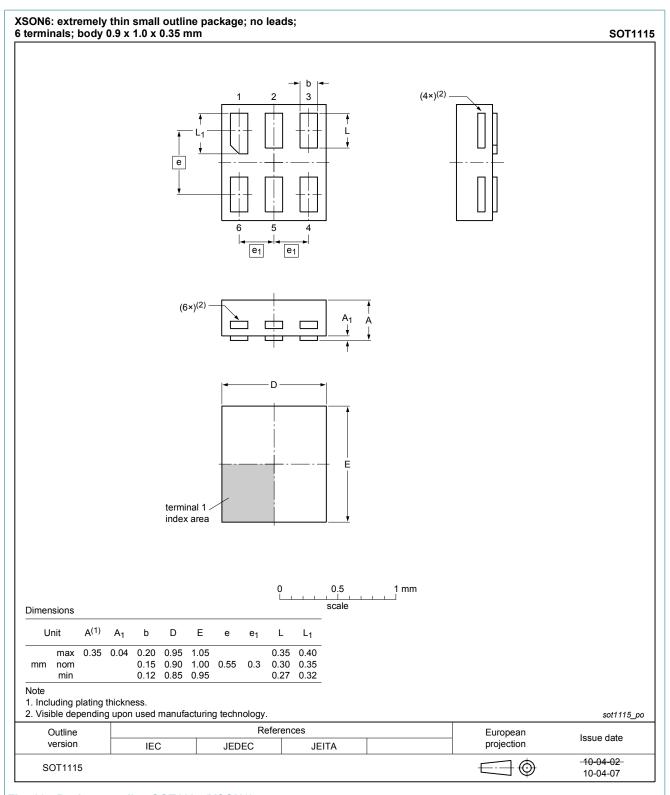


Fig. 16. Package outline SOT1115 (XSON6)

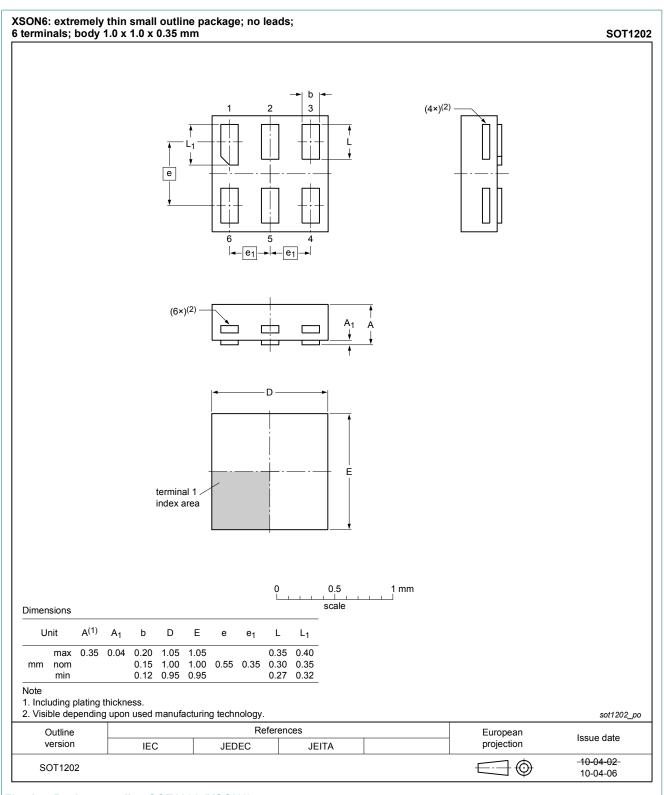


Fig. 17. Package outline SOT1202 (XSON6)

### Low-power dual unbuffered inverter

## 15. Abbreviations

#### **Table 11. Abbreviations**

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

## 16. Revision history

#### **Table 12. Revision history**

Document ID	Release date	Data sheet status	Change notice	Supersedes		
74AUP2GU04 v.6	20190128	Product data sheet	-	74AUP2GU04 v.5		
Modifications:	<ul> <li>The format of this data sheet has been redesigned to comply with the identity guidelines of Nexperia.</li> <li>Legal texts have been adapted to the new company name where appropriate.</li> </ul>					
74AUP2GU04 v.5	20131011	Product data sheet	-	74AUP2GU04 v.4		
Modifications:	Package out	Package outline drawing of SOT886 (Fig. 14) modified.				
74AUP2GU04 v.4	20111207	Product data sheet	-	74AUP2GU04 v.3		
Modifications:	Legal pages updated.					
74AUP2GU04 v.3	20101110	Product data sheet	-	74AUP2GU04 v.2		
74AUP2GU04 v.2	20090703	Product data sheet	-	74AUP2GU04 v.1		
74AUP2GU04 v.1	20061215	Product data sheet	-	-		

#### Low-power dual unbuffered inverter

### 17. 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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