74AUP2G97

Low-power dual PCB configurable multiple function gate Rev. 3 — 22 July 2019 Product data sheet

1. General description

The 74AUP2G97 is a dual configurable multiple function gate with Schmitt-trigger inputs. Each gate within the device can be configured as any of the following logic functions MUX, AND, OR, NAND, NOR, inverter and buffer; using the 3-bit input. All inputs can be connected directly to V_{CC} or GND.

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
- · High noise immunity
- ESD protection:
 - HBM JESD22-A114F exceeds 5000 V
 - MM JESD22-A115-A exceeds 200 V
 - CDM JESD22-C101E exceeds 1000 V
- Low static power consumption; I_{CC} = 0.9 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_{CC}
- I_{OFF} circuitry provides partial power-down mode operation
- 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 Ve								
74AUP2G97DP	-40 °C to +125 °C	TSSOP10	plastic thin shrink small outline package; 10 leads; body width 3 mm	SOT552-1					
74AUP2G97GU	-40 °C to +125 °C	XQFN10	plastic, extremely thin quad flat package; no leads; 10 terminals; body 1.40 × 1.80 × 0.50 mm	SOT1160-1					



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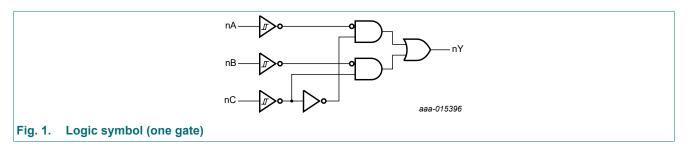
4. Marking

Table 2. Marking

Type number	Marking code [1]
74AUP2G97DP	aV
74AUP2G97GU	aV

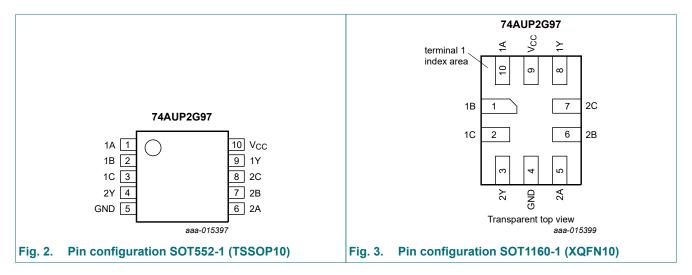
[1] The pin 1 indicator is located on the lower left corner of the device, below the marking code.

5. Functional diagram



6. Pinning information

6.1. Pinning



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6.2. Pin description

Table 3. Pin description

Symbol	Pin	Pin		
	SOT552-1	SOT1160-1		
1A, 2A	1, 6	10, 5	data input	
1B, 2B	2, 7	1, 6	data input	
1C, 2C	3, 8	2, 7	data input	
1Y, 2Y	9, 4	8, 3	data output	
GND	5	4	ground (0 V)	
V _{CC}	10	9	supply voltage	

7. Functional description

Table 4. Function table

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

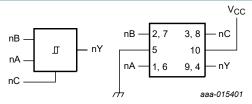
Input			Output
nC	nB	nA	nY
L	L	L	L
L	L	Н	L
L	Н	L	Н
L	Н	Н	Н
Н	L	L	L
Н	L	Н	Н
Н	Н	L	L
Н	Н	Н	Н

7.1. Logic configurations

Table 5. Function selection table

Figure
see Fig. 4
see Fig. 5
see Fig. 6
see Fig. 6
see Fig. 7
see Fig. 7
see Fig. 8
see Fig. 9
see Fig. 10

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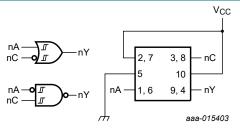


Pin numbers are not valid for SOT1160-1 package

nC 10 9, 4 aaa-015402

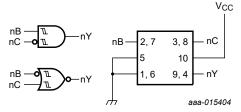
Pin numbers are not valid for SOT1160-1 package

Fig. 5. 2-input AND gate



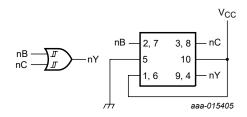
Pin numbers are not valid for SOT1160-1 package

Fig. 6. 2-input NAND gate with input A inverted or 2-input OR gate with input C inverted



Pin numbers are not valid for SOT1160-1 package

Fig. 7. 2-input NOR gate with input B inverted or 2-input AND gate with input C inverted

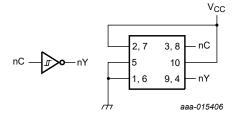


Pin numbers are not valid for SOT1160-1 package

Fig. 8. 2-input OR gate

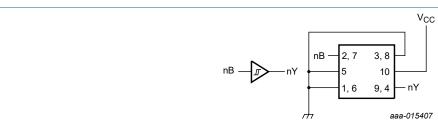
Fig. 4.

2-input MUX



Pin numbers are not valid for SOT1160-1 package

Fig. 9. Inverter



Pin numbers are not valid for SOT1160-1 package

Fig. 10. Buffer

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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	$V_O = 0 V \text{ to } V_{CC}$	-	±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

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 _{OH}	HIGH-level output voltage	$V_I = V_{T+} \text{ or } V_{T-}$				
		I_O = -20 μ A; 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
		$I_O = -1.9 \text{ mA}; V_{CC} = 1.65 \text{ V}$	1.32	-	-	V
		$I_O = -2.3 \text{ mA}; V_{CC} = 2.3 \text{ V}$	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

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^[2] For SOT552-1 (TSSOP10) packages: P_{tot} derates linearly with 8.3 mW/K above 120 °C. For SOT1160-1 (XQFN10) packages: P_{tot} derates linearly with 7.1 mW/K above 115 °C.

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Symbol	Parameter	Conditions	Min	Тур	Max	Unit
V _{OL}	LOW-level output voltage	$V_I = V_{T+}$ or V_{T-}				
		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
	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 _I or V _O = 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	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]	-	-	40	μΑ
Cı	input capacitance	V_{CC} = 0 V to 3.6 V; V_I = GND or V_{CC}	-	1.1	-	pF
Co	output capacitance	$V_O = GND; V_{CC} = 0 V$	-	1.7	-	pF
T _{amb} = -4	40 °C to +85 °C			·		
V _{OH}	HIGH-level output voltage	$V_I = V_{T+}$ or V_{T-}				
		$I_O = -20 \mu A$; $V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	V _{CC} - 0.1	-	-	V
		I _O = -1.1 mA; V _{CC} = 1.1 V	0.7 × V _{CC}	-	-	V
		I _O = -1.7 mA; V _{CC} = 1.4 V	1.03	-	-	V
		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	$V_I = V_{T+}$ or V_{T-}				
C _I i C _O (T _{amb} = -41		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
IOFF ΔIOFF ICC ΔICC CI CO Tamb = -4 VOH VOL II IOFF ΔIOFF ICC		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	μA
	power-off leakage current	V_1 or $V_0 = 0$ V to 3.6 V; $V_{CC} = 0$ V	-	-	±0.5	μA
Δl _{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	-	-	±0.6	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	$V_1 = V_{CC} - 0.6 \text{ V}; I_O = 0 \text{ A}; V_{CC} = 3.3 \text{ V}$ [1]	-	-	50	μΑ

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Symbol	Parameter	Conditions	Min	Тур	Max	Unit
T _{amb} = -	40 °C to +125 °C					
V _{OH}	HIGH-level output voltage	$V_I = V_{T+}$ or V_{T-}				
		I_{O} = -20 μ A; 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
V _{OL}	LOW-level output voltage	$V_I = V_{T+}$ or V_{T-}				
		$I_O = 20 \mu A; V_{CC} = 0.8 \text{ V to } 3.6 \text{ V}$	-	-	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
l _l	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
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	-	-	±0.75	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 $\rm V_{\rm CC}$ - 0.6 V, other input at $\rm V_{\rm CC}$ or GND.

10.1. Transfer characteristics

Table 9. Transfer characteristics

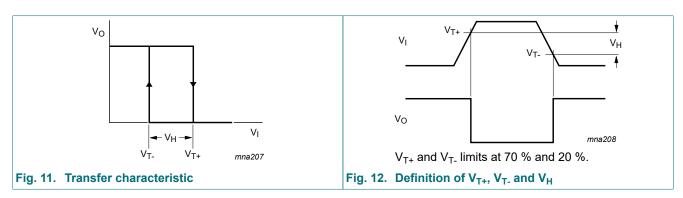
Voltages are referenced to GND (ground = 0 V); for test circuit, see Fig. 16.

Symbol	Parameter	Conditions		25 °C		-	C to	-	°C to 5 °C	Unit
			Min	Тур	Max	Min	Max	Min	Max	
V_{T+}	positive-going	see <u>Fig. 11</u> and <u>Fig. 12</u>								
	threshold voltage	V _{CC} = 0.8 V	0.30	-	0.60	0.30	0.60	0.30	0.62	V
		V _{CC} = 1.1 V	0.53	-	0.90	0.53	0.90	0.53	0.92	V
		V _{CC} = 1.4 V	0.74	-	1.11	0.74	1.11	0.74	1.13	V
		V _{CC} = 1.65 V	0.91	-	1.29	0.91	1.29	0.91	1.31	V
		V _{CC} = 2.3 V	1.37	-	1.77	1.37	1.77	1.37	1.80	V
		V _{CC} = 3.0 V	1.88	-	2.29	1.88	2.29	1.88	2.32	V

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Symbol	Parameter	Conditions		25 °C		-40 °C to +85 °C		-40 °C to +125 °C		Unit
			Min	Тур	Max	Min	Max	Min	Max	
V _{T-}	negative-going	see Fig. 11 and Fig. 12								
	threshold voltage	V _{CC} = 0.8 V	0.10	-	0.60	0.10	0.60	0.10	0.60	V
		V _{CC} = 1.1 V	0.26	-	0.65	0.26	0.65	0.26	0.65	V
		V _{CC} = 1.4 V	0.39	-	0.75	0.39	0.75	0.39	0.75	V
		V _{CC} = 1.65 V	0.47	-	0.84	0.47	0.84	0.47	0.84	V
		V _{CC} = 2.3 V	0.69	-	1.04	0.69	1.04	0.69	1.04	V
		V _{CC} = 3.0 V	0.88	-	1.24	0.88	1.24	0.88	1.24	V
V _H	hysteresis voltage	(V _{T+} - V _{T-}); see <u>Fig. 11</u> , <u>Fig. 12</u> , <u>Fig. 13</u> and <u>Fig. 14</u>								
		V _{CC} = 0.8 V	0.07	-	0.50	0.07	0.50	0.07	0.50	V
		V _{CC} = 1.1 V	0.08	-	0.46	0.08	0.46	0.08	0.46	V
		V _{CC} = 1.4 V	0.18	-	0.56	0.18	0.56	0.18	0.56	V
		V _{CC} = 1.65 V	0.27	-	0.66	0.27	0.66	0.27	0.66	V
		V _{CC} = 2.3 V	0.53	-	0.92	0.53	0.92	0.53	0.92	V
		V _{CC} = 3.0 V	0.79	-	1.31	0.79	1.31	0.79	1.31	V

10.2. Waveforms transfer characteristics



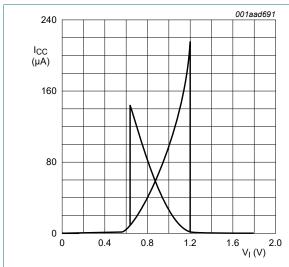
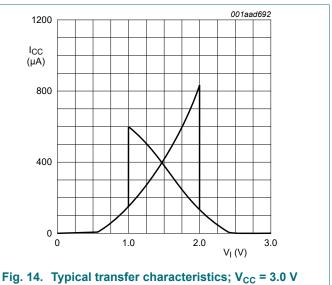


Fig. 13. Typical transfer characteristics; V_{CC} = 1.8 V



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11. Dynamic characteristics

Table 10. Dynamic characteristics

Voltages are referenced to GND (ground = 0 V); for test circuit, see Fig. 16.

Symbol Parameter		Conditions		25 °C			°C to 5 °C	-40 °C to +125 °C		Unit
			Min	Typ [1]	Max	Min	Max	Min	Max	
C _L = 5 p	F									
t _{pd}	propagation	nA, nB, nC to nY; see Fig. 15 [2]								
	delay	V _{CC} = 0.8 V	-	23.0	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	2.8	6.6	12.6	2.5	13.0	2.5	13.2	ns
		V _{CC} = 1.4 V to 1.6 V	2.3	4.7	7.6	2.5	8.2	2.5	8.6	ns
		V _{CC} = 1.65 V to 1.95 V	2.2	3.9	6.2	2.0	6.8	2.0	7.2	ns
		V _{CC} = 2.3 V to 2.7 V	2.0	3.2	4.5	1.7	5.1	1.7	5.3	ns
		V _{CC} = 3.0 V to 3.6 V	1.9	2.8	3.9	1.5	4.1	1.5	4.3	ns
C _L = 10	pF		'				'	'	1	
t _{pd}	propagation	nA, nB, nC to nY; see Fig. 15 [2]								
	delay	V _{CC} = 0.8 V	-	26.6	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	3.2	7.4	14.3	2.9	14.9	2.9	15.2	ns
		V _{CC} = 1.4 V to 1.6 V		5.3	8.7	2.8	9.4	2.8	9.8	ns
		V _{CC} = 1.65 V to 1.95 V		4.5	7.0	2.3	7.8	2.3	8.2	ns
		V _{CC} = 2.3 V to 2.7 V		3.7	5.2	2.1	5.9	2.1	6.1	ns
		V _{CC} = 3.0 V to 3.6 V		3.4	4.6	1.9	4.9	1.9	5.1	ns
C _L = 15	pF						_		1	
t _{pd}	propagation	nA, nB, nC to nY; see Fig. 15 [2]								
	delay	V _{CC} = 0.8 V	-	30.1	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	3.6	8.2	16.0	3.2	16.7	3.2	17.0	ns
		V _{CC} = 1.4 V to 1.6 V	2.9	5.9	9.6	3.1	10.4	3.1	10.9	ns
		V _{CC} = 1.65 V to 1.95 V	2.8	5.0	7.8	2.5	8.7	2.5	9.1	ns
		V _{CC} = 2.3 V to 2.7 V	2.7	4.2	5.8	2.4	6.5	2.4	6.9	ns
		V _{CC} = 3.0 V to 3.6 V	2.5	3.8	5.1	2.2	5.5	2.2	5.7	ns
C _L = 30	pF		'				'	'	'	
t _{pd}	propagation	nA, nB, nC to nY; see Fig. 15 [2]								
	delay	V _{CC} = 0.8 V	-	38.3	-	-	-	-	-	ns
		V _{CC} = 1.1 V to 1.3 V	4.6	10.5	20.9	4.0	21.8	4.0	22.2	ns
		V _{CC} = 1.4 V to 1.6 V	3.7	7.4	12.2	3.8	13.3	3.8	14.0	ns
		V _{CC} = 1.65 V to 1.95 V	3.5	6.3	9.9	3.2	11.1	3.2	11.8	ns
		V _{CC} = 2.3 V to 2.7 V	3.4	5.3	7.4	3.1	8.3	3.1	8.8	ns
		V _{CC} = 3.0 V to 3.6 V	3.2	4.9	6.6	2.8	7.0	2.8	7.4	ns

Low-power dual PCB configurable multiple function gate

Symbol	Parameter	Conditions		25 °C			-40 °C to +85 °C		-40 °C to +125 °C	
			Min	Typ [1]	Max	Min	Max	Min	Max	
$C_L = 5 p$	F, 10 pF, 15 pl	F 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	-	2.6	-	-	-	-	-	pF
	capacitarioc	V _{CC} = 1.1 V to 1.3 V	-	2.8	-	-	-	-	-	pF
		V _{CC} = 1.4 V to 1.6 V	-	2.9	-	-	-	-	-	pF
		V _{CC} = 1.65 V to 1.95 V	-	3.1	-	-	-	-	-	pF
		V _{CC} = 2.3 V to 2.7 V	-	3.7	-	-	-	-	-	pF
		V _{CC} = 3.0 V to 3.6 V	-	4.3	-	-	-	-	-	pF

- 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;

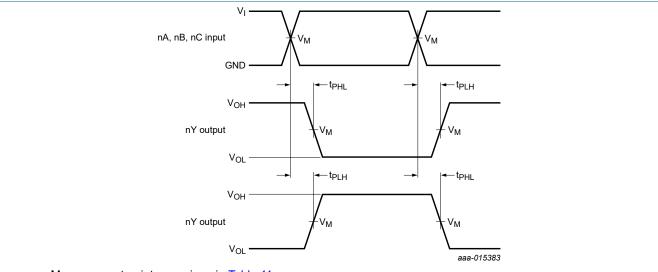
V_{CC} = supply voltage in V;

N = number of inputs switching;

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

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11.1. Waveforms and test circuit



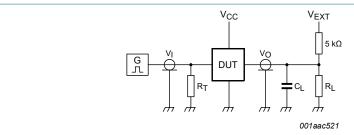
Measurement points are given in Table 11.

 V_{OL} and V_{OH} are typical output voltage levels that occur with the output load.

Fig. 15. Input nA, nB and nC to output nY propagation delay times

Table 11. 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 12.

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. 16. Test circuit for measuring switching times

Table 12. 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 k Ω or 1 M Ω	open	GND	2V _{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 .

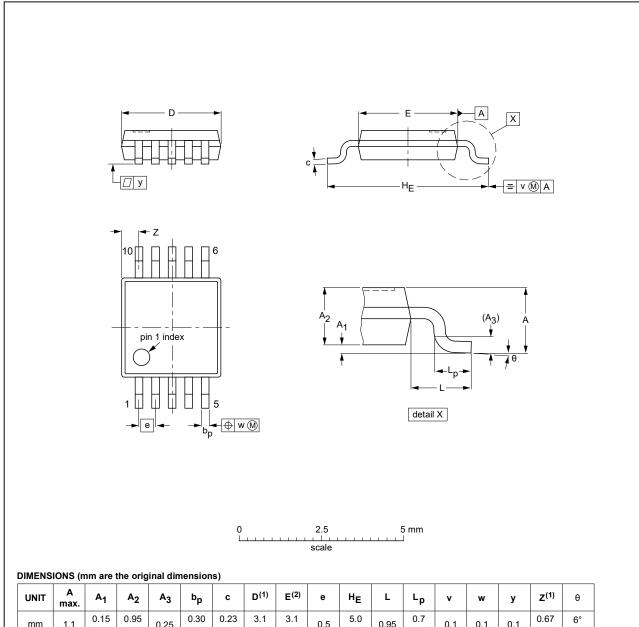
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12. Package outline

TSSOP10: plastic thin shrink small outline package; 10 leads; body width 3 mm

SOT552-1



UNIT	A max.	A ₁	A ₂	А3	bp	С	D ⁽¹⁾	E ⁽²⁾	е	HE	L	Lp	v	w	у	Z ⁽¹⁾	θ
mm	1.1	0.15 0.05	0.95 0.80	0.25	0.30 0.15	0.23 0.15	3.1 2.9	3.1 2.9	0.5	5.0 4.8	0.95	0.7 0.4	0.1	0.1	0.1	0.67 0.34	6° 0°

Notes

- 1. Plastic or metal protrusions of 0.15 mm maximum per side are not included.
- 2. Plastic or metal protrusions of 0.25 mm maximum per side are not included.

OUTLINE		REFER	RENCES	EUROPEAN	ISSUE DATE	
VERSION	IEC	JEDEC	JEITA	PROJECTION	ISSUE DATE	
SOT552-1					99-07-29 03-02-18	

Fig. 17. Package outline SOT552-1 (TSSOP10)

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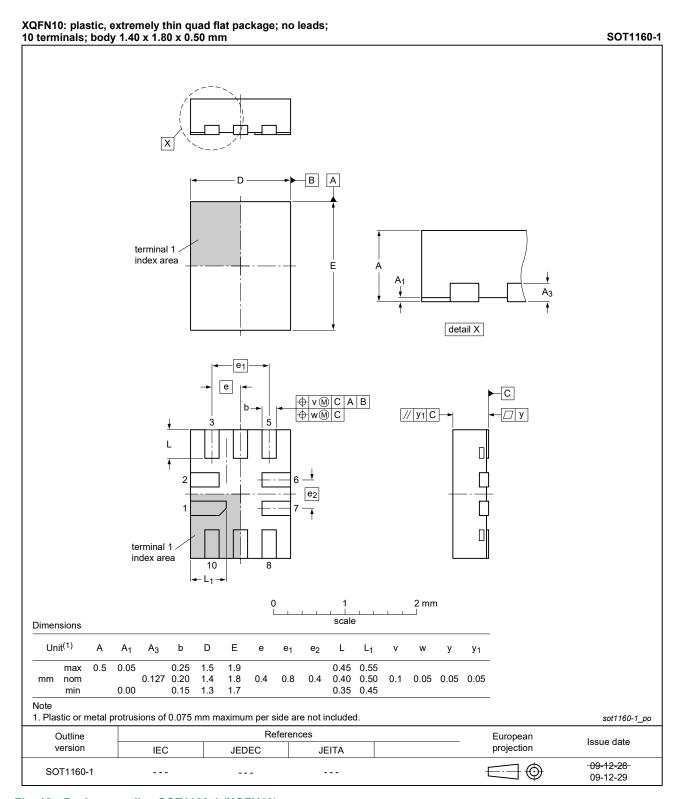


Fig. 18. Package outline SOT1160-1 (XQFN10)

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13. Abbreviations

Table 13. Abbreviations

Acronym	Description
CDM	Charged Device Model
DUT	Device Under Test
ESD	ElectroStatic Discharge
НВМ	Human Body Model
MM	Machine Model
PCB	Printed-Circuit Board

14. Revision history

Table 14. Revision history

Document ID	Release date	Data sheet status	Change notice	Supersedes				
74AUP2G97 v.3	20190722	Product data sheet	-	74AUP2G97 v.2				
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. Type number 74AUP2G97GF (SOT1081-2) removed. 							
74AUP2G97 v.2	20151202	Product data sheet	-	74AUP2G97 v.1				
Modifications:	 Maximum value temperature range TSSOP10 (74AUP2G97DP) changed from 85 °C to 125 °C. Removed 74AUP2G97GM (SOT1049-3). 							
74AUP2G97 v.1	20141104	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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