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Tel: +86-755-8981 8866 Fax: +86-755-8427 6832 Email & Skype: info@chipsmall.com Web: www.chipsmall.com Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China







74AUP1G08

SINGLE 2 INPUT POSITIVE AND GATE

Description

The Advanced, Ultra Low Power (AUP) CMOS logic family is designed for low power and extended battery life in portable applications.

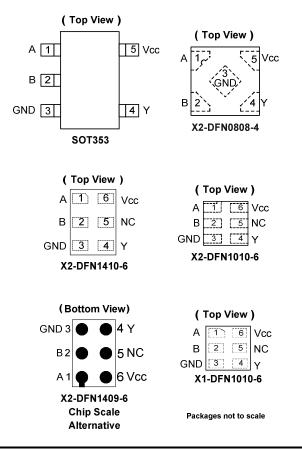
The 74AUP1G08 is a single, two-input, positive AND gate with a standard push-pull output designed for operation over a power supply range of 0.8V to 3.6V. The device is fully specified for partial power down applications using I_{OFF} . The I_{OFF} circuitry disables the output preventing damaging current backflow when the device is powered down. The gate performs the positive Boolean function:

$$Y = A \bullet B$$
 or $Y = \overline{\overline{A} + \overline{B}}$

Features

- Advanced Ultra Low Power (AUP) CMOS
- Supply Voltage Range from 0.8V to 3.6V
- ±4mA Output Drive at 3.0V
- Low Static Power Consumption lcc < 0.9μA
- Low Dynamic Power Consumption C_{PD} = 6.3 pF (Typical at 3.6V)
- Schmitt Trigger Action at All Inputs Make the Circuit Tolerant for Slower Input Rise and Fall Time. The hysteresis is typically 250mV at V_{CC} = 3.0V.
- I_{OFF} Supports Partial-Power-Down Mode Operation
- ESD Protection Exceeds JESD 22
 2000-V Human Body Model (A114)
 Exceeds 1000-V Charged Device Model (C101)
- Latch-Up Exceeds 100mA per JESD 78, Class I
- Leadless packages named per JESD30E
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)

Pin Assignments



Applications

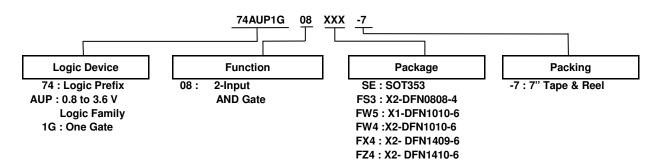
- Suited for battery and low power needs
- Wide array of products such as:
 - Tablets, E-readers
 - Cell Phones, Personal Navigation / GPS
 - MP3 Players ,Cameras, Video Recorders
 - PCs, Ultrabooks, Notebooks, Netbooks
 - Computer Peripherals, Hard Drives, SSDs, CD/DVD ROMs
 - TVs, DVDs, DVRs, Set-Top Boxess

Notes: 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant.

See http://www.diodes.com for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
 Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.



Ordering Information



Device	Package	Package	Package	7" Tape	and Reel
Device	Code	(Notes 4 & 5)	Size	Quantity	Part Number Suffix
74AUP1G08SE-7	SE	SOT353	2.0mm x 2.0mm x 1.1mm 0.65 mm lead pitch	3,000/Tape & Reel	-7
74AUP1G08FS3-7	FS3	X2-DFN0808-4	0.8mm x 0.8mm x 0.35mm 0.5 mm pad pitch (diamond)	5,000/Tape & Reel	-7
74AUP1G08FW5-7	FW5	X1-DFN1010-6	1.0mm x 1.0mm x 0.5mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74AUP1G08FW4-7	FW4	X2-DFN1010-6	1.0mm x 1.0mm x 0.4mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74AUP1G08FX4-7	FX4	X2-DFN1409-6 Chip scale alternative	1.4mm x 0.9mm x 0.4mm 0.5 mm pad pitch	5,000/Tape & Reel	-7
74AUP1G08FZ4-7	FZ4	X2-DFN1410-6	1.4mm x 1.0mm x 0.4mm 0.5 mm pad pitch	5,000/Tape & Reel	-7

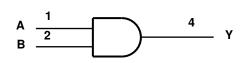
4. Pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on our website at Notes: http://www.diodes.com/datasheets/ap02001.pdf.

5. The taping orientation is located on our website at http://www.diodes.com/datasheets/ap02007.pdf.

Pin Descriptions

Pin Name	Function
А	Data Input
В	Data Input
GND	Ground
Y	Data Output
Vcc	Supply Voltage

Logic Diagram



Function Table

Inp	uts	Output
Α	В	Y
L	L	L
L	Н	L
Н	L	L
Н	Н	Н



Absolute Maximum Ratings (Notes 6 & 7) (@T_A = +25 °C, unless otherwise specified.)

Symbol	Parameter	Rating	Unit
ESD HBM	Human Body Model ESD Protection	2	kV
ESD CDM	Charged Device Model ESD Protection	1	kV
V _{CC}	Supply Voltage Range	-0.5 to +4.6	V
VI	Input Voltage Range	-0.5 to +4.6	V
Vo	Voltage applied to output in High or Low State	-0.5 to V _{CC} +0.5	V
I _{IK}	Input Clamp Current V ₁ < 0	50	mA
Ι _{ΟΚ}	Output Clamp Current (V _O < 0)	50	mA
lo	Continuous Output Current ($V_O = 0$ to V_{CC})	±20	mA
Icc	Continuous Current Through V _{CC}	50	mA
I _{GND}	Continuous Current Through GND	-50	mA
TJ	Operating Junction Temperature	-40 to +150	°C
T _{STG}	Storage Temperature	-65 to +150	°C

Notes: 6. Stresses beyond the absolute maximum may result in immediate failure or reduced reliability. These are stress values and device operation should be within recommend values.

7. Forcing the maximum allowed voltage could cause a condition exceeding the maximum current or conversely forcing the maximum current could cause a condition exceeding the maximum voltage. The ratings of both current and voltage must be maintained within the controlled range.

Recommended Operating Conditions (Note 8) (@T_A = +25 °C, unless otherwise specified.)

Symbol	Pa	rameter	Min	Мах	Unit	
V _{CC}	Operating Voltage		0.8	3.6	V	
VI	Input Voltage		0	3.6	V	
Vo	Output Voltage		0	Vcc	V	
		$V_{CC} = 0.8V$	_	-20	μA	
		V _{CC} = 1.1V	—	-1.1		
		$V_{CC} = 1.4V$	—	-1.7		
I _{OH}	High-Level Output Current	V _{CC} = 1.65V	—	-1.9	mA	
		V _{CC} = 2.3V	—	-3.1		
		V _{CC} = 3.0V	_	-4		
		V _{CC} = 0.8V	—	20	μA	
	High-Level Output Current	V _{CC} = 1.1V	_	1.1		
		$V_{CC} = 1.4V$	—	1.7		
I _{OL}	Low-Level Output Current	V _{CC} = 1.65V	—	1.9	mA	
		V _{CC} = 2.3V	—	3.1		
		V _{CC} = 3.0V	— 4			
Δt/ΔV	Input Transition Rise or Fall Rate	V _{CC} = 0.8V to 3.6V	_	200	ns/V	
T _A	Operating Free-Air Temperature	·	-40	+125	°C	

Note: 8. Unused inputs should be held at V_{CC} or Ground.



Electrical Characteristics (@T_A = +25 °C, unless otherwise specified.)

Symbol	Parameter	Test Conditions	Var	T _A = -	+25℃	T _A = -40 °C	C to +85℃	Unit
Symbol	Farameter	Test Conditions	Vcc	Min	Max	Min	Max	Unit
		—	0.8V to 1.65V	$0.80 \times V_{CC}$	—	$0.80 \times V_{CC}$	—	
VIH	High-Level Input	—	1.65V to 1.95V	0.65 x V _{CC}	—	0.65 x V _{CC}	—	v
VIH	Voltage	—	2.3V to 2.7V	1.6	—	1.6	—	v
		_	3.0V to 3.6V	2.0		2.0		
		—	0.8V to 1.65 V	—	$0.30 \times V_{CC}$	—	$0.30 \times V_{CC}$	
VIL	Low-Level Input	—	1.65V to 1.95V	—	$0.35 \times V_{CC}$	—	$0.35 \times V_{CC}$	v
۷IL	Voltage	—	2.3V to 2.7V	—	0.7	_	0.7	v
		—	3.0V to 3.6V	—	0.9	_	0.9	
		I _{OH} = -20μA	0.8V to 3.6V	V _{CC} - 0.1	—	V _{CC} - 0.1	—	
		I _{OH} = -1.1mA	1.1V	$0.75 \times V_{CC}$	—	$0.7 \times V_{CC}$	—	
		I _{OH} = -1.7mA	1.4V	1.11	—	1.03		
	High-Level Output	I _{OH} = -1.9mA	1.65V	1.32	_	1.3	_	v
V _{OH} Voltage	I _{OH} = -2.3mA	2.3V	2.05	—	1.97	—	v	
		I _{OH} = -3.1mA	2.3 V	1.9	—	1.85	—	
		I _{OH} = -2.7mA	3V	2.72	—	2.67	_	
		I _{OH} = -4mA	3V	2.6	—	2.55	_	
		I _{OL} = 20μΑ	0.8V to 3.6 V	—	0.1	—	0.1	
		I _{OL} = 1.1mA	1.1V	—	0.3 x V _{CC}	—	0.3 x V _{CC}	
		I _{OL} = 1.7mA	1.4V	—	0.31	—	0.37	
	Low-Level Output	I _{OL} = 1.9mA	1.65V	—	0.31	—	0.35	
V _{OL}	Voltage	I _{OL} = 2.3mA	0.01/	—	0.31	—	0.33	V
		I _{OL} = 3.1mA	2.3V	_	0.44	—	0.45	
		I _{OL} = 2.7mA		—	0.31	_	0.33	
		I _{OL} = 4mA	3V	_	0.44	_	0.45	
I	Input Current	A or B Input V _I = GND to 3.6V	0V to 3.6V	-	± 0.1	_	± 0.5	μA
I _{OFF}	Power Down Leakage Current	V_1 or $V_0 = 0V$ to 3.6V	0	-	0.2	_	0.6	μA
Δl _{OFF}	Delta Power Down Leakage Current	$V_1 \text{ or } V_0 = 0V \text{ to } 3.6V$	0V to 0.2V	—	0.2	—	0.6	μA
I _{CC}	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	—	0.5	—	0.9	μA
Δlcc	Additional Supply Current	One input at V_{CC} -0.6V Other inputs at V_{CC} or GND	3.3V	_	40	_	50	μA



Electrical Characteristics (continued) (@T_A = +25 °C, unless otherwise specified.)

Querra ha a h	Bananatan	To at Oan dition a		T _A = -40 °C	c to +125℃	
Symbol	Parameter	Test Conditions	Vcc	Min	Max	Unit
		—	0.8V to 1.65V	0.80 x V _{CC}	—	
VIH	High-Level Input	—	1.65V to 1.95V	0.70 x V _{CC}	—	v
VIH	Voltage	—	2.3V to 2.7V	1.6	—	v
		—	3.0V to 3.6V	2.0	_	
		—	0.8V to 1.65 V		0.25 x V _{CC}	
VIL	Low-Level input	—	1.65V to 1.95V		$0.30 \times V_{CC}$	v
V IL	voltage	_	2.3V to 2.7V		0.7	
		—	3.0V to 3.6V	—	0.9	
		I _{OH} = -20 μA	0.8V to 3.6V	V _{CC} -0.11	—	
		I _{OH} = -1.1 mA	1.1V	0.6 x V _{CC}	—	
	V _{OH} High-Level Output Voltage	I _{OH} = -1.7 mA	1.4V	0.93	—	
V		I _{OH} = -1.9 mA	1.65V	1.17	_	v
∨он		I _{OH} = -2.3 mA	2.3V	1.77	_	v
		I _{OH} = -3.1 mA	2.3V	1.67	—	
		I _{OH} = -2.7 mA	3V	2.40	—	
		I _{OH} = -4 mA	30	2.30	—	
		I _{OL} = 20 μA	0.8 V to 3.6V	_	0.11	
		I _{OL} = 1.1 mA	1.1V	_	0.33 x V _{CC}	
		I _{OL} = 1.7 mA	1.4V	_	0.41	
	Low-Level Output	I _{OL} = 1.9 mA	1.65V	_	0.39	
V _{OL}	Voltage	I _{OL} = 2.3 mA	0.01/		0.36	V
		I _{OL} = 3.1 mA	2.3V	_	0.50	
		I _{OL} = 2.7 mA	0)/	_	0.36	
		$I_{OL} = 4 \text{ mA}$	3V	_	0.50	
lı	Input Current	A or B Input V _I = GND to 3.6V	0V to 3.6V	_	± 0.75	μΑ
IOFF	Power Down Leakage Current	$V_1 \text{ or } V_0 = 0V \text{ to } 3.6V$	0	_	± 3.5	μΑ
Δl _{OFF}	Delta Power Down Leakage Current	V_{I} or $V_{O} = 0V$ to 3.6V	0V to 0.2V	_	± 2.5	μΑ
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V		3.0	μA
ΔI _{CC}	Additional Supply Current	Input at V_{CC} -0.6V Other inputs at V_{CC} or GND	3.3V	_	75	μA



Switching Characteristics

Parameter	From	То	V	T _A = +25 ℃			T _A = -40 ℃ to +85 ℃		T _A = -40 ℃ to +125 ℃		Unit
Farameter	Input	Output	V _{cc}	Min	Тур	Max	Min	Max	Min	Max	Unit
		0.8V	—	17.0	—	—	_	_	_		
		Y	1.2V ± 0.1V	2.4	5.1	10.8	2.1	11.7	2.1	12.9	ns
	A or D		1.5V ± 0.1V	1.6	3.7	6.5	1.5	7.5	1.5	8.3	
t _{pd} A or B	AUD		1.8V ± 0.15V	1.3	3.0	5.2	1.3	6.1	1.3	6.7	
			2.5V ± 0.2V	1.1	2.4	4.0	1.0	4.8	1.0	5.3	
			3.3V ± 0.3V	1.0	2.2	3.5	0.9	4.3	0.9	4.8	

CL=10pF, See Figure 1

Parameter	From Input	To Output	Vcc	٦	T _A = +25 ℃			T _A = -40 ℃ to +85 ℃		T _A = -40 ℃ to +125 ℃	
			V CC	Min	Тур	Max	Min	Max	Min	Max	Unit
			0.8V	—	20.6	—	—	—	_	_	
			1.2V ± 0.1V	2.4	6.0	12.5	2.2	13.6	2.2	15.0	ns
	A or B	v	1.5V ± 0.1V	2.0	4.3	7.6	1.8	8.9	1.8	9.8	
t _{pd}	AUD	Y -	1.8V ± 0.15V	1.7	3.6	6.1	1.6	7.2	1.6	7.9	
			2.5V ± 0.2V	1.4	2.9	4.7	1.3	5.7	1.3	6.3	
			3.3V ± 0.3V	1.3	2.7	4.2	1.2	4.7	1.2	5.2	

C_L=15pF, See Figure 1

Parameter	From Input	To Output	V _{CC}	T _A = +25 ℃			T _A = -40 ℃ to +85 ℃		T _A = -40 ℃ to +125 ℃		Unit
			V CC	Min	Тур	Max	Min	Max	Min	Max	Onit
			0.8V	_	24.1	—	_	—	_	—	
	4 D	Y	1.2V ± 0.1V	3.4	6.8	14.2	3.1	15.7	3.1	17.3	ns
			1.5V ± 0.1V	2.3	4.9	8.6	2.1	10.1	2.1	11.2	
t _{pd}	A or B		1.8V ± 0.15V	1.9	4.0	6.9	1.8	8.2	1.8	9.0	
			2.5V ± 0.2V	1.7	3.4	5.5	1.6	6.5	1.6	7.2	
			3.3V ± 0.3V	1.5	3.1	4.8	1.5	5.9	1.5	6.5	

CL=30pF, See Figure 1

Parameter	From Input	To Output	N	T _A = +25 ℃			T _A = -40 ℃ to +85 ℃		T _A = -40 ℃ to +125 ℃		Unit
			Vcc	Min	TYP	Max	Min	Max	Min	Max	Onit
			0.8V	_	34.4	_	_	_	_	_	
	A or B	Y	1.2V ± 0.1V	4.0	9.1	19.4	4.0	21.8	4.0	24.0	ns
			1.5V ± 0.1V	3.2	6.4	11.5	2.9	13.6	2.9	15.0	
t _{pd}			1.8V ± 0.15V	2.6	5.3	9.1	2.4	10.9	2.4	12.1	
			2.5V ± 0.2V	2.3	4.5	7.2	2.2	8.6	2.2	9.5	
			3.3V ± 0.3V	2.1	4.2	6.2	2.1	7.5	2.1	8.3	



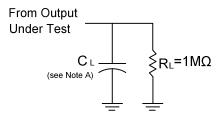
Operating and Package Characteristics (@T_A = +25 °C, unless otherwise specified.)

	Parameter	Test Conditio	ons	Vcc	Тур	Unit
				0.8V	6.7	
				1.2V ± 0.1V	6.6	
~	Power Dissipation	f = 1MH	lz	1.5V ± 0.1V	6.5	~_
C _{pd}	Capacitance	No Loa	d	1.8V ± 0.15V	6.5	pF
				2.5V ± 0.2V	6.4	
				3.3V ± 0.3V	6.3	
Ci	Input Capacitance	V _i = V _{CC} or	GND	0V or 3.3V	1.5	pF
		SOT353		_	371	
		X2-DFN0808-4		_	430	
0	Thermal Resistance	X1-DFN1010-6		_	435	∘c/w
θ _{JA}	Junction-to-Ambient	X2-DFN1010-6	(Note 9)		445	-C/w
		X2-DFN1409-6		_	470	
		X2-DFN1410-6		_	460	
		SOT353		—	143	
		X2-DFN0808-4			240	
0	Thermal Resistance	X1-DFN1010-6			250	
θ _{JC}	Junction-to-Case	X2-DFN1010-6	(Note 9)	_	250	°C/W
		X2-DFN1409-6	1	_	275	1
		X2-DFN1410-6	1	_	265	1

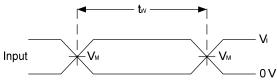
Note: 9. Test condition for each of the six package types: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



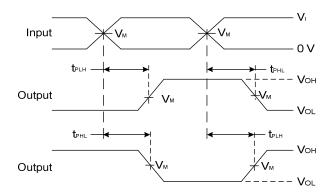
Parameter Measurement Information



Vcc	Inputs		N.	0
VCC	VI	t _r /t _f	V _M	CL
0.8V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF
1.2V±0.1V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF
1.5V±0.1V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF
1.8V ±0.15V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF
2.5V±0.2V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF
3.3V±0.3V	V _{CC}	≤3ns	V _{CC} /2	5, 10, 15, 30pF



Voltage Waveform Pulse Duration



Voltage Waveform Propagation Delay Times Inverting and Non Inverting Outputs

Figure 1 Load Circuit and Voltage Waveforms

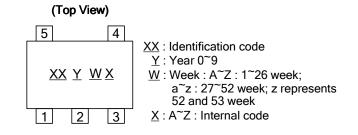
- Notes: A. Includes test lead and test apparatus capacitance. B. All pulses are supplied at pulse repetition rate ≤ 10MHz.

 - C. Inputs are measured separately one transition per measurement.
 - D. t_{PLH} and t_{PHL} are the same as $t_{PD.}$



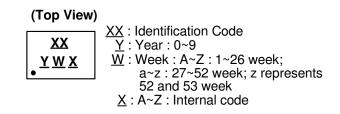
Marking Information

(1) SOT353



Part Number	Package	Identification Code	
74AUP1G08SE	SOT353	XP	

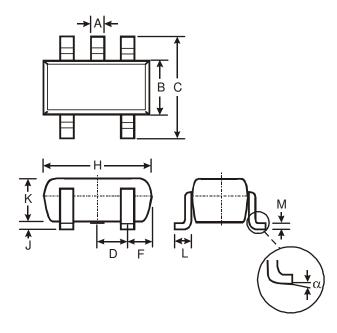
(2) X2-DFN0808-4, X1-DFN1010-6, X2-DFN1010-6, X2-DFN1409-6 and X2-DFN1410-6



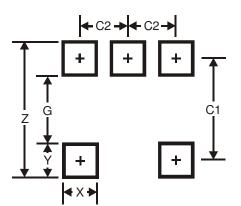
Part Number	Package	Identification Code
74AUP1G08FS3	X2-DFN0808-4	YR
74AUP1G08FW5	X1-DFN1010-6	Q7
74AUP1G08FW4	X2-DFN1010-6	XP
74AUP1G08FX4	X2-DFN1409-6	HF
74AUP1G08FZ4	X2-DFN1410-6	XP



SOT353 Package Outline Dimensions and Suggested Pad Layout



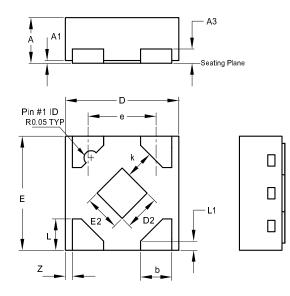
	SOT353					
Dim	Min	Max	Тур			
Α	0.10	0.30	0.25			
В	1.15	1.35	1.30			
С	2.00	2.20	2.10			
D		0.65 Typ)			
F	0.40	0.45	0.425			
н	1.80	2.20	2.15			
J	0	0.10	0.05			
К	0.90	1.00	1.00			
L	0.25	0.40	0.30			
М	0.10	0.22	0.11			
α	0°	8°	-			
A	All Dimensions in mm					



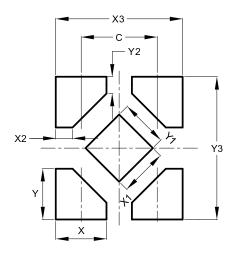
Dimensions	Value (in mm)	
Z	2.5	
G	1.3	
Х	0.42	
Y	0.6	
C1	1.9	
C2	0.65	



X2-DFN0808-4 Package Outline Dimensions and Suggested Pad Layout



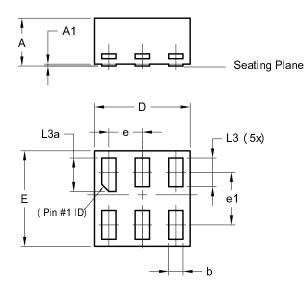
	X2-DFN0808-4				
Dim	Min	Max	Тур		
Α	0.25	0.35	0.30		
A1	0	0.04	0.02		
A3	-	-	0.13		
b	0.17	0.27	0.22		
D	0.75	0.85	0.80		
D2	0.15	0.35	0.25		
E	0.75	0.85	0.80		
E2	0.15	0.35	0.25		
е	-	-	0.48		
k	0.20	-	-		
L	0.17	0.27	0.22		
L1	0.02	0.12	0.07		
z	-	-	0.05		
A	All Dimensions in mm				



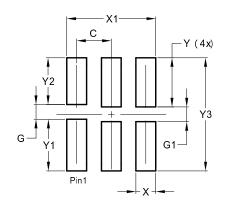
Dimensions	Value
С	0.480
Х	0.320
X1	0.300
X2	0.106
X3	0.800
Y	0.320
Y1	0.300
Y2	0.106
Y3	0.900



X1-DFN1010-6 (Type B) Package Outline Dimensions and Suggested Pad Layout



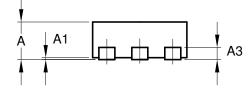
X1-DFN1010-6					
		pe B)			
Dim	Min	Max	Тур		
Α	-	0.50	0.39		
A1	-	0.04	-		
b	0.12	0.20	0.15		
D	0.95	1.050	1.00		
E	0.95	1.050	1.00		
е		0.35 B	SC		
e1		0.55 B	SC		
L3	0.27	0.30	0.30		
L3a	0.32	0.40	0.35		
All Dimensions in mm					

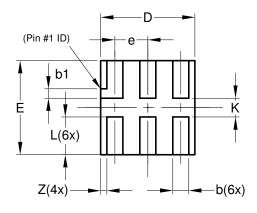


Dimensions	Value (in mm)	
С	0.350	
G	0.150	
G1	0.150	
Х	0.200	
X1	0.900	
Y	0.500	
Y1	0.525	
Y2	0.475	
Y3	1.150	

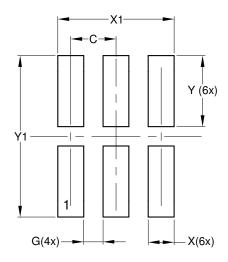


X2-DFN1010-6 Package Outline Dimensions and Suggested Pad Layout





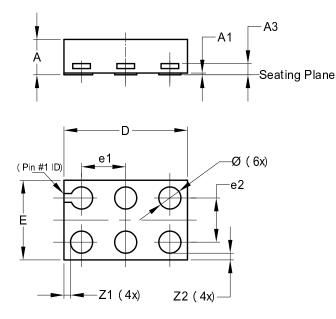
X2-DFN1010-6				
Dim	Min	Max	Тур	
Α	_	0.40	0.39	
A1	0.00	0.05	0.02	
A3	—	_	0.13	
b	0.14	0.20	0.17	
b1	0.05	0.15	0.10	
D	0.95	1.05	1.00	
E	0.95	1.05	1.00	
е		_	0.35	
L	0.35	0.45	0.40	
к	0.15	_	_	
Z	—	—	0.065	
All Dimensions in mm				



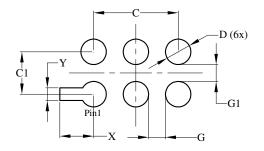
Dimensions	Value	
	(in mm)	
C	0.350	
G	0.150	
Х	0.200	
X1 0.900		
Y	0.550	
Y1	1.250	



X2-DFN1409-6 Package Outline Dimensions and Suggested Pad Layout



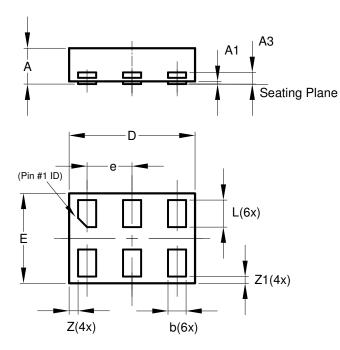
	X2-DFN1409-6				
Dim	Min	Max	Тур		
Α	-	0.40	0.39		
A1	0	0.05	0.02		
A3	-	-	0.13		
Ø	0.20	0.30	0.25		
D	1.35	1.45	1.40		
Е	0.85	0.95	0.90		
e1	-	-	0.50		
e2	-	-	0.50		
Z1	-	-	0.075		
Z2	-	-	0.075		
All [All Dimensions in mm				



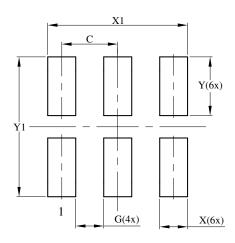
Dimensions	Value (in mm)
С	1.000
C1	0.500
D	0.300
G	0.200
G1	0.200
Х	0.400
Ŷ	0.150



X2-DFN1410-6 Package Outline Dimensions and Suggested Pad Layout



X2-DFN1410-6				
Dim	Min	Max	Тур	
Α		0.40	0.39	
A1	0.00	0.05	0.02	
A3			0.13	
b	0.15	0.25	0.20	
D	1.35	1.45	1.40	
E	0.95	1.05	1.00	
е	—		0.50	
L	0.25	0.35	0.30	
Z	_	_	0.10	
Z1	0.045	0.105	0.075	
All Dimensions in mm				



Dimensions	Value (in mm)
С	0.500
G	0.250
Х	0.250
X1	1.250
Y	0.525
¥1	1.250



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