



#### **Description**

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

The 74AUP1G34 is a single buffer 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 loff. The loff circuitry disables the output preventing damaging current backflow when the device is powered down.

The gate performs the positive Boolean function:

Y = A

#### **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

 $I_{CC} < 0.9 \mu A$ 

Low Dynamic Power Consumption

C<sub>PD</sub> = 6.3pF (Typical at 3.6V)

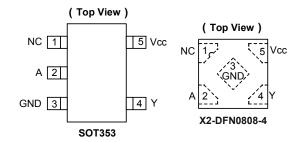
- Schmitt Trigger Action at all inputs makes the circuit tolerant for slower input rise and fall time. The hysteresis is typically 250mV at V<sub>CC</sub> = 3.0V.
- I<sub>OFF</sub> Supports Partial-Power-Down Mode Operation

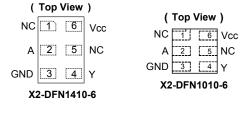
ESD Protection Exceeds JESD 22

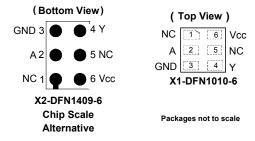
2000-V Human Body Model (A114)

- 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**

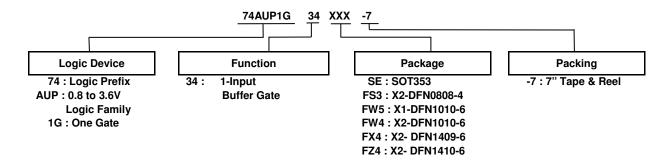
- Suited for Battery and Low Power Needs
- Wide Array of Products Such As:
  - Tablets, E-readers
  - Cell Phones, Personal Navigation / GPS
  - MP3 Players, Cameras, Video Recorders
  - PCs, Ultrabooks, Notebooks, Netbooks
  - Computer Peripherals, Hard Drives, SSDs, CD/DVD ROMs
  - TVs, DVDs, DVRs, Set-Top Boxes

Notes:

- 1. No purposely added lead. Fully EU Directive 2002/95/EC (RoHS) & 2011/65/EU (RoHS 2) compliant.
- 2. See http://www.diodes.com/quality/lead\_free.html for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
- 3. 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**



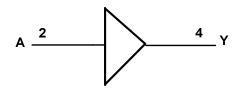
Device	Package	Package	Package	7" Tape a	and Reel
Device	Code	(Notes 4 & 5)	Size	Quantity	Part Number Suffix
74AUP1G34SE-7	SE	SOT353	2.0mm x 2.0mm x 1.1mm 0.65 mm lead pitch	3,000/Tape & Reel	-7
74AUP1G34FS3-7	FS3	X2-DFN0808-4	0.8mm x 0.8mm x 0.35mm 0.5 mm pad pitch (diamond)	5,000/Tape & Reel	-7
74AUP1G34FW5-7	FW5	X1-DFN1010-6	1.0mm x 1.0mm x 0.5mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74AUP1G34FW4-7	FW4	X2-DFN1010-6	1.0mm x 1.0mm x 0.4mm 0.35 mm pad pitch	5,000/Tape & Reel	-7
74AUP1G34FX4-7	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
74AUP1G34FZ4-7	FZ4	X2-DFN1410-6	1.4mm x 1.0mm x 0.4mm 0.5 mm pad pitch	5,000/Tape & Reel	-7

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

## **Pin Descriptions**

Pin Name	Function				
NC	No Connection				
Α	Data Input				
GND	Ground				
Υ	Data Output				
V <sub>CC</sub>	Supply Voltage				

## **Logic Diagram**



#### **Function Table**

Inputs	Output
Α	Υ
Н	Н
L	L

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



#### Absolute Maximum Ratings (Notes 6 & 7) (@T<sub>A</sub> = +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 <sub>CC</sub>	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 <sub>CC</sub> +0.5	V
I <sub>IK</sub>	Input Clamp Current (V <sub>I</sub> < 0)	50	mA
I <sub>OK</sub>	Output Clamp Current (V <sub>O</sub> < 0)	50	mA
lo	Continuous Output Current (V <sub>O</sub> = 0 to V <sub>CC</sub> )	±20	mA
Icc	Continuous Current Through V <sub>CC</sub>	50	mA
I <sub>GND</sub>	Continuous Current Through GND	-50	mA
TJ	Operating Junction Temperature	-40 to +150	∞
T <sub>STG</sub>	Storage Temperature	-65 to +150	∞

Notes:

### Recommended Operating Conditions (Note 8) (@T<sub>A</sub> = +25 ℃, unless otherwise specified.)

Symbol	P	arameter	Min	Max	Unit
V <sub>CC</sub>	Operating Voltage		0.8	3.6	V
VI	Input Voltage		0	3.6	V
Vo	Output Voltage		0	V <sub>CC</sub>	V
		V <sub>CC</sub> = 0.8V	_	-20	μΑ
		V <sub>CC</sub> = 1.1V	_	-1.1	
I <sub>OH</sub>	High Lovel Output ourrent	V <sub>CC</sub> = 1.4V	_	-1.7	
	High-Level Output current	V <sub>CC</sub> = 1.65V	_	-1.9	mA
		V <sub>CC</sub> = 2.3V	_	-3.1	
		V <sub>CC</sub> = 3.0V	_	-4	
		$V_{CC} = 0.8V$	_	20	μΑ
		V <sub>CC</sub> = 1.1V	_	1.1	
	Low Lovel Output Current	$V_{CC} = 1.4V$	_	1.7	
l <sub>OL</sub>	Low-Level Output Current	V <sub>CC</sub> = 1.65V	_	1.9	mA
		V <sub>CC</sub> = 2.3V	_	3.1	
		$V_{CC} = 3.0V$	_	4	
Δt/ΔV	Input Transition Rise or Fall Rate	V <sub>CC</sub> = 0.8V to 3.6V	_	200	ns/V
T <sub>A</sub>	Operating Free-Air Temperature	1	-40	+125	∞

Note:

8. Unused inputs should be held at  $V_{\text{CC}}$  or Ground.

<sup>6.</sup> 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.

<sup>7.</sup> 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.



### Electrical Characteristics (@T<sub>A</sub> = +25 °C, unless otherwise specified.)

Compleal	Dawamatan	Took Conditions	.,	T <sub>A</sub> = -	+25℃	T <sub>A</sub> = -40℃	C to +85℃	l lmit
Symbol	Parameter	Test Conditions	Vcc	Min	Max	Min	Max	Unit
		_	0.8V to 1.65V	0.80 x V <sub>CC</sub>	_	0.80 x V <sub>CC</sub>	_	
V	High-Level Input	_	1.65V to 1.95V	0.65 x V <sub>CC</sub>	_	0.65 x V <sub>CC</sub>	_	V
$V_{IH}$	Voltage	_	2.3V to 2.7V	1.6	_	1.6	_	v
		_	3.0V to 3.6V	2.0	_	2.0	_	
			0.8V to 1.65V		0.30 x V <sub>CC</sub>	_	0.30 x V <sub>CC</sub>	
VIL	Low-Level Input		1.65V to 1.95V	_	0.35 x V <sub>CC</sub>	_	0.35 x V <sub>CC</sub>	V
VIL	Voltage	_	2.3V to 2.7V	_	0.7	_	0.7	v
			3.0V to 3.6V	_	0.9	_	0.9	
		$I_{OH} = -20\mu A$	0.8V to 3.6V	$V_{CC} - 0.1$	_	V <sub>CC</sub> – 0.1	_	
		I <sub>OH</sub> = -1.1mA	1.1V	0.75 x V <sub>CC</sub>	_	0.7 x V <sub>CC</sub>	_	
		I <sub>OH</sub> = -1.7mA	1.4V	1.11	_	1.03	_	
	High-Level	I <sub>OH</sub> = -1.9mA	1.65V	1.32	_	1.3	_	M
VOH	V <sub>OH</sub> Output Voltage	I <sub>OH</sub> = -2.3mA	0.01/	2.05	_	1.97	_	V
		I <sub>OH</sub> = -3.1mA	2.3V	1.9	_	1.85	_	
		I <sub>OH</sub> = -2.7mA	0)/	2.72	_	2.67	_	
		I <sub>OH</sub> = -4mA	3V	2.6	_	2.55	_	
		I <sub>OL</sub> = 20μA	0.8V to 3.6V	_	0.1	_	0.1	
		I <sub>OL</sub> = 1.1mA	1.1V	_	0.3 x V <sub>CC</sub>	_	0.3 x V <sub>CC</sub>	
		I <sub>OL</sub> = 1.7mA	1.4V	_	0.31	_	0.37	
.,	Low-Level	I <sub>OL</sub> = 1.9mA	1.65V	_	0.31	_	0.35	.,
V <sub>OL</sub>	Output Voltage	I <sub>OL</sub> = 2.3mA	0.01/	_	0.31	_	0.33	V
		I <sub>OL</sub> = 3.1mA	2.3V	_	0.44	_	0.45	
		$I_{OL} = 2.7 \text{mA}$	2)/	_	0.31	_	0.33	
		I <sub>OL</sub> = 4mA	3V	_	0.44	_	0.45	
l <sub>l</sub>	Input Current	A or B Input V <sub>I</sub> = GND to 3.6V	0 to 3.6V	_	±0.1	_	±0.5	μA
loff	Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0	_	0.2	_	0.6	μΑ
Δl <sub>OFF</sub>	Delta Power Down Leakage Current	$V_I$ or $V_O = 0V$ to 3.6V	0 to 0.2V	_	0.2	_	0.6	μΑ
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	_	0.5	_	0.9	μΑ
Δlcc	Additional Supply Current	Input at V <sub>CC</sub> -0.6	3.3V	_	40	_	50	μΑ



## **Electrical Characteristics** (continued) (@T<sub>A</sub> = +25 °C, unless otherwise specified.)

Symbol	Parameter	Test Conditions	V	T <sub>A</sub> = -40 °C	c to +125°C	Unit
Symbol	Parameter	lest Conditions	Vcc	Min	Max	Unit
		_	0.8V to 1.65V	0.80 x V <sub>CC</sub>	_	
$V_{IH}$	High-Level Input	_	1.65V to 1.95V	0.70 x V <sub>CC</sub>	_	V
VIH	Voltage	_	2.3V to 2.7V	1.6	_	]
		<u> </u>	3.0V to 3.6V	2.0	_	
			0.8V to 1.65V		0.25 x V <sub>CC</sub>	_
V <sub>IL</sub>	Low-Level Input		1.65V to 1.95V	-	0.30 x V <sub>CC</sub>	l v
VIL.	Voltage		2.3V to 2.7V		0.7	] ,
			3.0V to 3.6V	_	0.9	
		$I_{OH} = -20\mu A$	0.8V to 3.6V	V <sub>CC</sub> – 0.11	_	_
		$I_{OH} = -1.1 \text{mA}$	1.1V	0.6 x V <sub>CC</sub>	_	
		$I_{OH} = -1.7 \text{mA}$	1.4V	0.93	_	
.,	High-Level	I <sub>OH</sub> = -1.9mA	1.65V	1.17	_	v
V <sub>OH</sub>	Output Voltage	I <sub>OH</sub> = -2.3mA	0.01/	1.77	_	7 v l
		I <sub>OH</sub> = -3.1mA	- 2.3V	1.67	_	1
		I <sub>OH</sub> = -2.7mA	01/	2.40	_	1
		I <sub>OH</sub> = -4mA	- 3V	2.30	_	1
		I <sub>OL</sub> = 20μA	0.8V to 3.6V	_	0.11	
		I <sub>OL</sub> = 1.1mA	1.1V	_	0.33 x V <sub>CC</sub>	1
		I <sub>OL</sub> = 1.7mA	1.4V	_	0.41	1
.,	Low-Level	I <sub>OL</sub> = 1.9mA	1.65V	_	0.39	] ,,
V <sub>OL</sub>	Output Voltage	I <sub>OL</sub> = 2.3mA	0.01/	_	0.36	V
		I <sub>OL</sub> = 3.1mA	2.3V	_	0.50	1
		$I_{OL} = 2.7 \text{mA}$	21/		0.36	1
		I <sub>OL</sub> = 4mA	- 3V		0.50	1
II	Input Current	A or B Input V <sub>I</sub> = GND to 3.6V	0 to 3.6V		±0.75	μΑ
loff	Power Down Leakage Current	$V_I$ or $V_O = 0$ to 3.6V	0	_	±3.5	μA
Δl <sub>OFF</sub>	Delta Power Down Leakage Current	V <sub>I</sub> or V <sub>O</sub> = 0 to 3.6V	0 to 0.2V	_	±2.5	μА
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	_	3.0	μΑ
Δl <sub>CC</sub>	Additional Supply Current	Input at V <sub>CC</sub> -0.6V Other Inputs at V <sub>CC</sub> or GND	3.3V	_	75	μA



# **Switching Characteristics**

C<sub>L</sub>=5pF, See Figure 1

Parameter	From Input	To Output	V	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40 °C to +85 °C		T <sub>A</sub> = -40 °C to +125 °C		Unit
i arameter			V <sub>CC</sub>	Min	Тур	Max	Min	Max	Min	Max	Ollit
			0.8V	_	15.0	_	_	_	_	_	
			1.2V ± 0.1V	2.6	4.7	9.2	2.0	10.0	2.0	11.0	ns
	A or B	Y	1.5V ± 0.1V	2.1	3.4	5.7	1.6	6.5	1.6	7.2	
t <sub>pd</sub>	AOIB		1.8V ± 0.15V	1.8	2.9	4.5	1.4	5.2	1.4	5.8	
			2.5V ± 0.2V	1.5	2.3	3.5	1.2	4.2	1.2	4.6	
			3.3V ± 0.3V	1.0	2.1	3.2	1.0	3.8	1.0	4.2	

C<sub>L</sub>=10pF, See Figure 1

Parameter	From Input	To Output	V	1	T <sub>A</sub> = +25°C			T <sub>A</sub> = -40 °C to +85 °C		T <sub>A</sub> = -40 °C to +125 °C	
i arameter			V <sub>CC</sub>	Min	Тур	Max	Min	Max	Min	Max	Unit
			V8.0		18.4	_	_	_	_	_	
	A or B	Υ	1.2V ± 0.1V	3.2	5.6	10.9	2.3	11.8	2.3	13.1	
			1.5V ± 0.1V	2.6	4.1	6.7	1.9	7.7	1.9	8.5	
t <sub>pd</sub>			1.8V ± 0.15V	2.3	3.4	5.3	1.7	6.2	1.7	6.9	ns
			2.5V ± 0.2V	2.0	2.9	4.2	1.5	5.0	1.5	5.5	
			3.3V ± 0.3V	1.4	2.6	3.8	1.4	4.6	1.4	5.1	

C<sub>L</sub>=15pF, See Figure 1

Parameter	From Input	To Output	V <sub>cc</sub>	7	Γ <sub>A</sub> = +25℃	;	T <sub>A</sub> = -40 °C to +85 °C		T <sub>A</sub> = -40 °C to +125 °C		Unit
rarameter				Min	Тур	Max	Min	Max	Min	Max	Ollit
			V8.0		21.9	_	_	_	_	_	
			1.2V ± 0.1V	3.6	6.4	12.6	2.6	13.8	2.6	15.2	
	A or B	V	1.5V ± 0.1V	3.0	4.6	7.6	2.2	8.9	2.2	9.8	
t <sub>pd</sub>	AUID	A OLB A	1.8V ± 0.15V	2.6	3.9	6.0	2.0	7.2	2.0	7.9	ns
			2.5V ± 0.2V	2.3	3.3	4.8	1.8	5.7	1.8	6.3	
			3.3V ± 0.3V	1.6	3.1	4.2	1.6	5.0	1.6	5.5	

C<sub>L</sub>=30pF, See Figure 1

Parameter	From	To Output	Vcc	7	Γ <sub>A</sub> = +25℃		T <sub>A</sub> = -40 °C to +85 °C		T <sub>A</sub> = -40 °C to +125 °C		Unit
Farameter	Input			Min	Тур	Min	Min	Max	Min	Max	Ollit
		V8.0	_	32.1	_	_	_	_	_		
			1.2V ± 0.1V	4.8	8.9	16.3	3.6	18.9	3.6	20.8	
	A or B	V	1.5V ± 0.1V	4	6.2	10.3	3.4	12.2	3.4	13.4	20
t <sub>pd</sub>	AOID	Y	1.8V ± 0.15V	3.6	5.2	8.1	3.2	9.8	3.2	10.8	ns
		_	2.5V ± 0.2V	3	4.4	6.4	2.7	7.7	2.7	8.5	
			3.3V ± 0.3V	1.9	4.2	5.6	1.9	6.5	1.9	7.2	



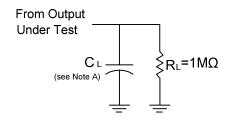
## Operating and Package Characteristics (@T<sub>A</sub> = +25 °C, unless otherwise specified.)

	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	,r
C <sub>PD</sub>	Capacitance	No Loa	d	1.8V ± 0.15V	6.5	pF
				2.5V ± 0.2V	6.4	
				3.3V ± 0.3V	6.3	
Cı	Input Capacitance	$V_I = V_{CC}$ or	GND	0V or 3.3V	1.5	pF
		SOT353		_	371	
	Thermal Resistance	X2-DFN0808-4	(Nata O)	_	430	
0		X1-DFN1010-6		<del></del>	435	°C/W
$\theta_{JA}$	Junction-to-Ambient	X2-DFN1010-6	(Note 9)	_	445	-U/VV
		X2-DFN1409-6	1	_	470	
		X2-DFN1410-6	1	_	460	
		SOT353		_	143	
		X2-DFN0808-4	1	_	240	
	Thermal Resistance	X1-DFN1010-6	(Nata 0)	_	250	00.00
$\theta_{JC}$	Junction-to-Case	X2-DFN1010-6	(Note 9)	_	250	°C/W
		X2-DFN1409-6	1	_	275	
		X2-DFN1410-6	]	_	265	

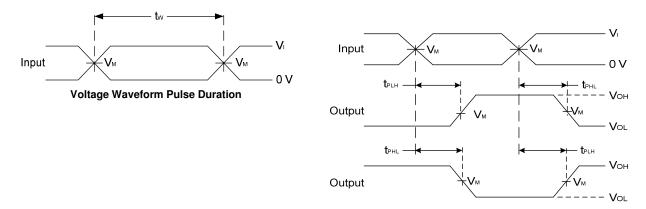
Note: 9. Test condition for each of the six package types: Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



#### **Parameter Measurement Information**



Vcc	Inputs		V	•
VCC	VI	t <sub>r</sub> /t <sub>f</sub>	V <sub>M</sub>	CL
0.8V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF
1.2V±0.1V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF
1.5V±0.1V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF
1.8V ±0.15V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF
2.5V±0.2V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF
3.3V±0.3V	V <sub>CC</sub>	≤3ns	V <sub>CC</sub> /2	5, 10, 15, 30pF



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<sub>PLH</sub> and t<sub>PHL</sub> are the same as t<sub>PD</sub>.



#### **Marking Information**

(1) SOT353

#### (Top View)

4 5 XX Y W X2 3

XX: Identification Code

<u>Y</u>: Year 0~9 <u>W</u>: Week: A~Z: 1~26 Week; a~z: 27~52 Week; z Represents 52 and 53 Week

 $\underline{X}$ : A~Z: Internal Code

Part Number	Package	Identification Code	
74AUP1G34SE-7	SOT353	XV	

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

(Top View)

XX  $\frac{XX}{Y}$ : Identification Code  $\underline{Y}$ : Year  $0 \sim 9$ 

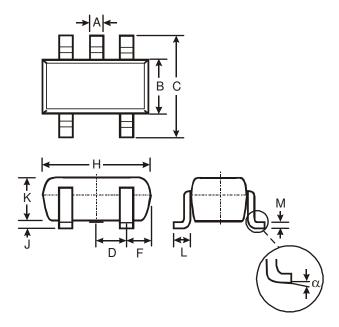
<u>W</u>: Week : A~Z : 1~26 Week; a~z : 27~52 Week; z Represents

52 and 53 Week  $\underline{X}$ : A~Z: Internal Code

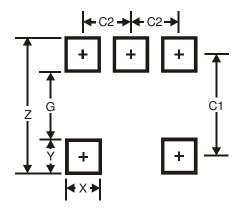
Part Number	Package	Identification Code
74AUP1G34FS3-7	X2-DFN0808-4	WK
74AUP1G34FW5-7	X1-DFN1010-6	QV
74AUP1G34FW4-7	X2-DFN1010-6	XV
74AUP1G34FX4-7	X2-DFN1409-6	НМ
74AUP1G34FZ4-7	X2-DFN1410-6	XV



### SOT353 Package Outline Dimensions and Suggested Pad Layout



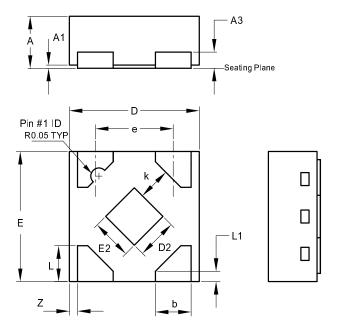
SOT353				
Dim	Min Max Typ			
Α	0.10	0.30	0.25	
В	1.15	1.35	1.30	
С	2.00	2.20	2.10	
D		0.65 Typ	כ	
F	0.40	0.45	0.425	
Η	1.80	2.20	2.15	
7	0	0.10	0.05	
K	0.90	1.00	1.00	
L	0.25	0.40	0.30	
M	0.10	0.22	0.11	
α	0°	8°	-	
All Dimensions in mm				



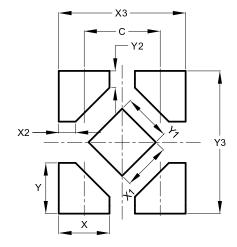
Dimensions	Value (in mm)	
Z	2.5	
G	1.3	
Х	0.42	
Υ	0.6	
C1	1.9	
C2	0.65	



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



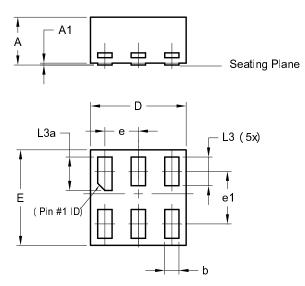
	X2-DFN0808-4				
Dim	Min	Max	Тур		
Α	0.25	0.35	0.30		
A1	0	0.04	0.02		
A3	-	-	0.13		
b	0.17	0.27	0.22		
D	0.75	0.85	0.80		
D2	0.15	0.35	0.25		
Е	0.75	0.85	0.80		
E2	0.15	0.35	0.25		
е	-	-	0.48		
K	0.20	-	-		
L	0.17	0.27	0.22		
L1	0.02	0.12	0.07		
Z	-	-	0.05		
All	All Dimensions in mm				



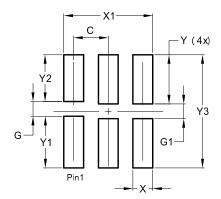
Dimensions	Value
С	0.480
Х	0.320
X1	0.300
X2	0.106
Х3	0.800
Υ	0.320
<b>Y</b> 1	0.300
Y2	0.106
Y3	0.900



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



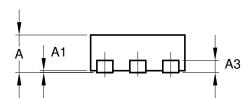
X1-DFN1010-6 (Type B)						
Dim	Min	Min Max Typ				
Α	-	0.50	0.39			
A1	-	0.04	-			
b	0.12	0.20	0.15			
D	0.95	1.050	1.00			
Е	0.95	1.050	1.00			
е	e 0.35 BSC					
e1	0.55 BSC					
L3	0.27 0.30 0.30					
L3a	0.32	0.40	0.35			
All Dimensions in mm						

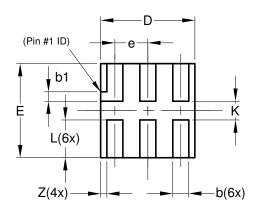


Dimensions	Value	
Dilliensions	(in mm)	
С	0.350	
G	0.150	
G1	0.150	
Х	0.200	
X1	0.900	
Υ	0.500	
Y1	0.525	
Y2	0.475	
Y3	1.150	

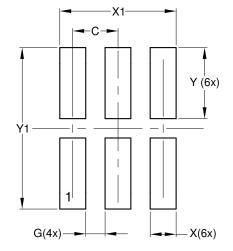


### X2-DFN1010-6 Package Outline Dimensions and Suggested Pad Layout





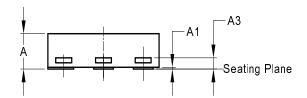
X2-DFN1010-6				
Dim	Min	Max	Тур	
Α	-	0.40	0.39	
A1	0.00	0.05	0.02	
A3	_	_	0.13	
b	0.14	0.20	0.17	
b1	0.05	0.15	0.10	
D	0.95	1.05	1.00	
E	0.95	1.05	1.00	
е	_	_	0.35	
L	0.35	0.45	0.40	
K	0.15	-	_	
Z	_	_	0.065	
All Dimensions in mm				

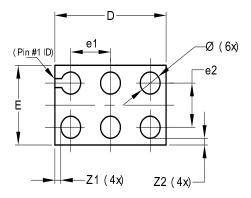


Dimensions	Value	
Dimensions	(in mm)	
С	0.350	
G	0.150	
X	0.200	
X1	0.900	
Y	0.550	
Y1	1.250	

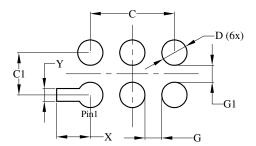


### X2-DFN1409-6 Package Outline Dimensions and Suggested Pad Layout





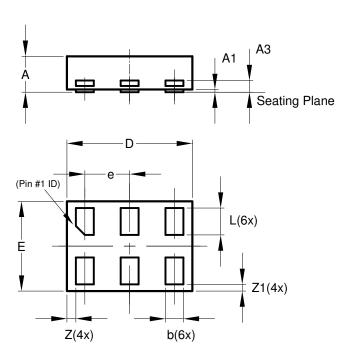
X2-DFN1409-6				
Dim	Min	Max	Тур	
Α	-	0.40	0.39	
<b>A</b> 1	0	0.05	0.02	
A3	1	-	0.13	
Ø	0.20	0.30	0.25	
D	1.35	1.45	1.40	
Е	0.85	0.95	0.90	
e1	-	-	0.50	
e2	-	-	0.50	
<b>Z</b> 1	-	-	0.075	
<b>Z</b> 2	-	-	0.075	
All Dimensions in mm				



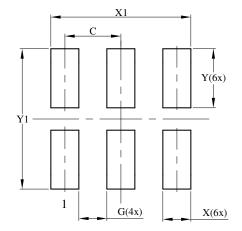
Dimensions	Value (in mm)
С	1.000
C1	0.500
D	0.300
G	0.200
G1	0.200
Х	0.400
Υ	0.150



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



X2-DFN1410-6			
Dim	Min	Max	Тур
Α	_	0.40	0.39
<b>A</b> 1	0.00	0.05	0.02
А3			0.13
b	0.15	0.25	0.20
D	1.35	1.45	1.40
Е	0.95	1.05	1.00
е	_	_	0.50
L	0.25	0.35	0.30
Z	_		0.10
<b>Z</b> 1	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
Υ	0.525
Y1	1.250



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