





Description

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

The 74AUP2G125 is a dual 3-State Buffer. Each buffer has an individual output enable pin while asserted HIGH will place the output in a high impedance state. The device is designed for operation over a power supply range of 0.8 V to 3.6 V. The device is fully specified for partial power down applications using $I_{\rm OFF}$. The $I_{\rm OFF}$ circuitry disables the output preventing damaging current backflow when the device is powered down.

Pin Assignments

(Top View)



X2-DFN1210-8

Features

- Advanced Ultra Low Power (AUP) CMOS
- Supply Voltage Range from 0.8 V to 3.6 V
- ± 4 mA Output Drive at 3.0 V
- Low Static Power Consumption
- Icc < 0.9 uA
- Low Dynamic Power Consumption
- C_{PD} = 6 pF Typical at 3.6 V
- Schmitt trigger action at all inputs make the circuit tolerant for slower input rise and fall time. The hysteresis is typically 250 mV at Vcc = 3.0V
- I_{OFF} Supports Partial-Power-Down Mode Operation
- ESD Protection per JESD 22

Exceeds 200-V Machine Model (A115)

Exceeds 2000-V Human Body Model (A114)

Exceeds 1000-V Charged Device Model (C101)

- Latch-Up Exceeds 100mA per JESD 78, Class I
- Leadless Packages per JESD30E
- DFN1210 Denoted as X2-DFN1210-8
- Totally Lead-Free & Fully RoHS Compliant (Notes 1 & 2)
- Halogen and Antimony Free. "Green" Device (Note 3)

Applications

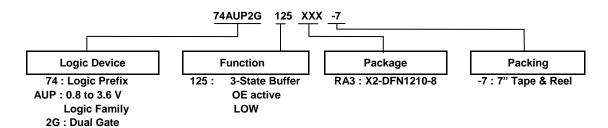
- Suited for Battery and Low Power Needs
- Wide array of products such as:
 - Tablets, E-readers
 - Cell Phones, Personal Navigation / GPS
 - MP3 Players, Cameras, Video Recorders
 - PCs, Ultrabooks, Notebooks, Netbooks
 - Computer Peripherals, Hard Drives, SSD, CD/DVD ROM
 - TV, DVD, DVR, Set-Top Box

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 and Reel			
Device	Code	(Notes 4 & 5)	Size	Quantity	Part Number Suffix		
74AUP2G125RA3-7	RA3	X2-DFN1210-8	1.2mm X 1.0 mm X 0.35mm 0.3 mm lead pitch	5,000/Tape & Reel	-7		

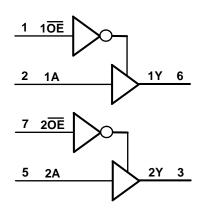
Notes: 4. Pad layout as shown on Diodes Inc. suggested pad layout document AP02001, which can be found on our website at http://www.diodes.com/datasheets/ap02001.pdf.

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

Pin Descriptions

Pin Name	Pin NO.	Description
1 OE	1	Output Enable active LOW
1A	2	Data Input
2Y	3	Data Output
GND	4	Ground
2A	5	Data Input
1Y	6	Data Output
2 OE	7	Output Enable active LOW
V _{CC}	8	Supply Voltage

Logic Diagram



Function Table

Inp	uts	Output
ŌĒ	Α	Y
L	Н	Н
L	L	L
Н	Х	Z



Absolute Maximum Ratings (Notes 6 & 7)

Symbol	Description	Rating	Unit
ESD HBM	Human Body Model ESD Protection	2	kV
ESD CDM	Charged Device Model ESD Protection	1	kV
Vcc	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
lıĸ	Input Clamp Current V _I < 0	50	mA
lok	Output Clamp Current (V _O < 0)	50	mA
Io	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:

Recommended Operating Conditions (Note 8)

Symbol	Param	eter	Min	Max	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
	I _{OH} High-Level Output Current	V _{CC} = 1.1V	_	-1.1	
		$V_{CC} = 1.4V$	_	-1.7	
ЮН		V _{CC} = 1.65V	_	-1.9	mA
		$V_{CC} = 2.3V$	_	-3.1	
		$V_{CC} = 3.0V$	_	-4	
		$V_{CC} = 0.8V$	_	20	μΑ
		V _{CC} = 1.1V	_	1.1	
	Lave Lavel Output Company	V _{CC} = 1.4V	_	1.7	
l _{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
TA	Operating Free-Air Temperature		-40	125	°C

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

^{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.



Electrical Characteristics

Cumala al	Donomenten	Took Complision -	V	T _A = +	+25°C	T _A = -40°C	I I mile		
Symbol	Parameter	Test Conditions	V _{CC}	Min	Max	Min	Max	Unit	
		_	0.8V to 1.65V	0.80 X V _{CC}	_	0.80 X V _{CC}	_		
\ /	High-Level Input	_	1.65V to 1.95V	0.65 X V _{CC}	_	0.65 X V _{CC}	_	.,	
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 _{CC}	_	0.30 X V _{CC}		
V	Low-Level Input	_	1.65V to 1.95V	_	0.35 X V _{CC}	_	0.35 X V _{CC}	V	
V_{IL}	Voltage	_	2.3V to 2.7V	_	0.7	_	0.7	7 °	
		_	3.0V to 3.6V	_	0.9	_	0.9		
		$I_{OH} = -20\mu A$ 0.8\		V _{CC} – 0.1	_	V _{CC} – 0.1	_		
		$I_{OH} = -1.1 \text{mA}$	1.1V	0.75 X V _{CC}	_	0.7 X 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	_	.,	
VoH	Voltage	I _{OH} = -2.3mA	0.01/	2.05	_	1.97	_	V	
		I _{OH} = -3.1mA	2.3V	1.9	_	1.85	_		
		I _{OH} = -2.7mA		2.72	_	2.67	_		
		I _{OH} = -4mA	3V	2.6	_	2.55	_		
		I _{OL} = 20μA	0.8V to 3.6V	_	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		_	0.31	_	0.33	V	
		I _{OL} = 3.1mA	2.3V	_	0.44	_	0.45		
		I _{OL} = 2.7mA		_	0.31	_	0.33	1	
		I _{OL} = 4mA	3V	_	0.44	_	0.45	1	
lį	Input Current	A or B Input V _I = GND to 3.6V	0 to 3.6V	_	± 0.1	_	± 0.5	μΑ	
l _{OZ}	Z-State Leakage Current	V_I or $V_O = 0V$ to 3.6V	0 to 3.6V	_	0.2	_	± 0.5	μΑ	
l _{OFF}	Power Down Leakage Current	V_1 or $V_0 =$ 0V to 3.6V	0 V		± 0.2		± 0.5	μA	
ΔI_{OFF}	Delta Power Down Leakage Current	V _I or V _O = 0V to 3.6V	0 V to 0.2V	_	0.2	_	0.6	μA	
I _{CC}	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O$ = 0	0.8 V to 3.6V	_	0.5	_	0.9	μΑ	
		Data Input at V _{CC} -0.6 V OE= GND I _O =0 A	3.3V	_	40	_	50	μA	
ΔI_{CC}	ΔI _{CC} Additional Supply	OE Input at VCC -0.6 V Data Input= GND or Vcc I _O =0 A	3.3V	_	110	_	120	μA	
		OE Input at VCC Data Input= GND to 3.6 V I _O =0 A	0.8V to 3.6V	_	1	_	1	μA	



Electrical Characteristics (cont.)

Cumala al	Dawawatan	Took Conditions	v	$T_A = -40$ °C to	+125°C	l lm it	
Symbol	Parameter	Test Conditions	V _{CC}	Min	Max	Unit	
		_	0.8V to 1.65V	0.80 X V _{CC}	_		
	High-Level Input	_	1.65V to 1.95V	0.70 X V _{CC}	_	V	
V_{IH}	Voltage	_	2.3V to 2.7V	1.6	_	7 V	
		_	3.0V to 3.6V	2.0	_		
		_	0.8V to 1.65V	_	0.25 X V _{CC}		
V_{IL}	Low-Level Input	_	1.65V to 1.95V	_	0.30 X V _{CC}	V	
۷IL	Voltage	_	2.3V to 2.7V	_	0.7	_ v	
		_	3.0V to 3.6V	_	0.9		
		$I_{OH} = -20\mu A$	0.8V to 3.6V	V _{CC} – 0.11	_		
		$I_{OH} = -1.1 \text{mA}$	1.1V	0.6 X V _{CC}	_		
	High-Level Output	$I_{OH} = -1.7 \text{mA}$	1.4V	0.93	_		
.,		$I_{OH} = -1.9 \text{mA}$	1.65V	1.17	_	V	
V _{OH}	Voltage	I _{OH} = -2.3mA	2.21/	1.77	_	\ \	
		I _{OH} = -3.1mA	2.3V	1.67	_		
		I _{OH} = -2.7mA	3V	2.40	_		
		I _{OH} = -4mA		2.30	_		
		I _{OL} = 20μA	0.8V to 3.6V	_	0.11		
		I _{OL} = 1.1mA	1.1V	_	0.33 X V _{CC}		
		$I_{OL} = 1.7 \text{mA}$	1.4V	_	0.41	1	
	Low-Level Output	I _{OL} = 1.9mA	1.65V	_	0.39	Ī	
V_{OL}	Voltage	I _{OL} = 2.3mA		_	0.36	V	
		I _{OL} = 3.1mA	2.3V	_	0.50		
		$I_{OL} = 2.7 \text{mA}$		_	0.36	1	
		I _{OL} = 4mA	3V	_	0.50		
I _I	Input Current	A or B Input, V _I = GND to 3.6V	0 to 3.6V	_	± 0.75	μA	
l _{OZ}	Z-State Leakage Current	V_1 or $V_0 = 0V$ to 3.6V	0 to 3.6V	_	± 1.5	μΑ	
I _{OFF}	Power Down Leakage Current	V_1 or $V_0 = 0V$ to 3.6V	0	_	± 3.5	μA	
ΔI_{OFF}	Delta Power Down Leakage Current	V_1 or $V_0 = 0V$ to 3.6V	0V to 0.2V	_	± 2.5	μA	
Icc	Supply Current	$V_I = GND \text{ or } V_{CC}, I_O = 0$	0.8V to 3.6V	_	3.0	μA	
		Data Input at V_{CC} =0.6 V OE= GND I _O =0 A	3.3V	_	75	μА	
Δl _{cc}	Additional Supply Current	OE Input at VCC -0.6 V Data Input= GND or Vcc I ₀ =0 A	3.3V	_	180	μА	
		OE Input at VCC Data Input= GND to 3.6 V I _o =0 A	0.8V to 3.6V	_	1	μА	



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

	Parameter	Test Condition	s	Vcc	Тур	Unit
				0.8V	6.5	
				1.2V ± 0.1V	6.3	
0	C _{pd} Power Dissipation Capacitance per gate	f = 1MHz Output Enab		1.5V ± 0.1V	6.3	,,
C_{pd}		No Load		1.8V ± 0.15V	6.2	pF
		140 2000		2.5V ± 0.2V	6.2	
				3.3V ± 0.3V	6.1	
Ci	Input Capacitance	$V_i = V_{CC}$ or G	SND	0V or 3.3V	1.5	pF
0	Output Canacitanas	Output Enabled \	√o=Gnd	0 V	2.9	pF
Co	Output Capacitance	Output Disabled VO=	Gnd or Vcc	0V or 3.6V	2.1	pF
θЈА	Thermal Resistance Junction-to-Ambient	X2-DFN1210-8 (Note 9)		_	395	°C/W
θ_{JC}	Thermal Resistance Junction-to-Case	X2-DFN1210-8	(Note 9)	_	236	°C/W

Note: 9. Test condition, X2-DFN1210-8 device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.



Switching Characteristics

 $C_L = 5pF$, See Figure 1

	_				T _A = +25°C		T _A = -40°C	C to +85°C	T _A = -40°C	to +125°C	
Parameter	From Input	To Output	V _{CC}	Min	Тур	Max	Min	Max	Min	Max	Unit
			0.8V	_	20.6	_	_	_	_	_	
			1.2V ± 0.1V	2.8	5.5	12.6	2.5	14.0	2.5	17	_ ns
	۸	Y	1.5V ± 0.1V	2.2	3.9	7.3	2.0	7.5	2.0	8.1	
t _{pd}	Α	ĭ	1.8V ± 0.15V	1.9	3.2	4.8	1.7	6.1	1.7	6.7	
			2.5V ± 0.2V	1.6	2.6	3.6	1.4	4.3	1.4	4.9	
			3.3V ± 0.3V	1.4	2.4	3.1	1.2	3.9	1.2	4.4	
		Ē Y	V8.0	_	69.9	_	_	_	_	_	ns
			1.2V ± 0.1V	3.1	6.1	14.2	2.9	20	2.9	22.2	
			1.5V ± 0.1V	2.5	4.2	7.9	2.3	9.2	2.3	10.0	
t _{en}	ŌĒ		1.8V ± 0.15V	2.1	3.4	6.1	2.0	7.4	2.0	8.2	
			2.5V ± 0.2V	1.8	2.6	4.4	1.7	5.4	1.7	6.0	
			3.3V ± 0.3V	1.7	2.4	4.0	1.7	4.6	1.7	5.1	
			V8.0	_	14.3	_	_	_	_	_	
			1.2V ± 0.1V	2.7	4.3	9.4	2.7	10.6	2.7	11.8	
		Y	1.5V ± 0.1V	2.1	3.2	6.4	2.1	7.3	2.1	8.2	
t _{dis}	ŌĒ	ľ	1.8V ± 0.15V	2.0	3.0	5.5	2.0	6.3	2.0	7.1	ns _
		_	2.5V ± 0.2V	1.4	2.2	3.7	1.4	4.2	1.4	5.1	
			3.3V ± 0.3V	1.7	2.5	4.4	1.7	4.6	1.7	5.4	

C_L = 10pF, See Figure 1

Parameter	From	То	V		T _A = +25°C	;	T _A = -40°C	C to +85°C	T _A = -40°C	to +125°C	Unit
Farameter	Input	Output	V _{CC}	Min	Тур	Max	Min	Max	Min	Max	Oiii
			V8.0	_	24.0	_	_	_	_	-	
			1.2V ± 0.1V	3.2	6.4	14.8	3.0	16.6	3.0	18.2	
, ,	Y	1.5V ± 0.1V	2.1	4.5	8.8	1.9	9.1	1.9	9.4		
l pd	t _{pd} A	ı	1.8V ± 0.15V	1.9	3.8	5.5	1.7	6.8	1.7	7.6	ns
			2.5V ± 0.2V	2.1	3.2	4.2	1.6	5.3	1.6	5.9	
			$3.3V \pm 0.3V$	1.8	3.0	3.8	1.6	4.6	1.6	5.2	•
		V8.0	_	73.7	_	_	_	_	l		
		Y	1.2V ± 0.1V	3.6	6.9	16.2	3.4	22.8	3.4	25.2	ns
	ŌĒ		1.5V ± 0.1V	2.3	4.8	9.2	2.2	10.3	2.2	11.3	
t _{en}	OE		1.8V ± 0.15V	2.0	3.9	7.0	1.9	8.2	1.9	8.9	
			2.5V ± 0.2V	1.8	3.2	5.2	1.7	6.4	1.7	7.1	
			3.3V ± 0.3V	1.7	3.0	5.1	1.7	5.6	1.7	6.2	
			V8.0	_	32.7	_	_	_	_	_	
			1.2V ± 0.1V	3.4	5.4	11.4	3.4	12.7	3.4	14.3	
	ŌĒ	Y	1.5V ± 0.1V	2.2	4.1	7.9	2.2	8.9	2.2	10.2	
t _{dis}	UE	r	1.8V ± 0.15V	2.2	4.2	7.0	1.9	8.0	1.9	8.9	ns
		<u> </u>	2.5V ± 0.2V	1.7	3.0	4.8	1.7	5.7	1.7	6.4	1
			$3.3V \pm 0.3V$	2.1	3.8	6.5	1.7	6.8	1.7	7.7	



Switching Characteristics (cont.)

 $C_L = 15pF$, See Figure 1

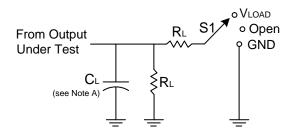
Parameter	From	То	V		T _A = +25°C	;	T _A = -40°C	C to +85°C	T _A = -40°C	to +125°C	Unit
rarameter	Input	Output	Vcc	Min	Тур	Max	Min	Max	Min	Max	Ollit
			V8.0	_	27.4	_	_	_	_	_	
			1.2V ± 0.1V	3.6	7.2	15.8	3.3	22.4	3.3	22.5	
t _{pd} A	Y	1.5V ± 0.1V	3.0	5.1	8.8	2.5	9.8	2.5	10.9	ns	
	'	1.8V ± 0.15V	2.2	4.3	6.3	2.0	7.9	2.0	8.8		
			2.5V ± 0.2V	2.0	3.7	4.9	1.8	6.0	1.8	6.7	
			$3.3V \pm 0.3V$	2.0	3.5	4.4	1.8	5.4	1.8	6.1	1
		Y	0.8V	_	77.5	_	_	_	_	_	
			1.2V ± 0.1V	4.0	7.7	18.2	3.7	21.8	3.7	23.5	ns
	ŌĒ		1.5V ± 0.1V	3.0	5.3	10.1	2.5	11.8	2.5	12.8	
t _{en}	OE	ı	1.8V ± 0.15V	2.3	4.4	7.8	2.1	9.2	2.1	10.2	
			2.5V ± 0.2V	2.1	3.6	6.0	2.0	7.3	2.0	8.2	
			$3.3V \pm 0.3V$	2.0	3.5	5.7	1.9	6.4	1.9	7.2	
			0.8V	_	60.8	_	_	_	_	_	
			1.2V ± 0.1V	4.3	6.5	13.9	3.7	15.5	3.7	15.7	
		Y	1.5V ± 0.1V	3.0	5.0	8.8	2.5	9.7	2.5	9.8	
t _{dis}	ŌĒ	ſ	1.8V ± 0.15V	3.0	5.3	8.8	2.1	10.3	2.1	10.5	ns
		<u> </u>	2.5V ± 0.2V	2.1	3.8	8.2	2.0	8.4	2.0	8.6	1
			$3.3V \pm 0.3V$	2.9	5.0	8.6	1.9	9.2	1.9	9.4	

 $C_L = 30pF$, See Figure 1

Parameter	From	То	V		T _A = +25°C	;	T _A = -40°0	C to +85°C	T _A = -40°C	to +125°C	Unit
Faranietei	Input	Output	V _{CC}	Min	Тур	Max	Min	Max	Min	Max	Ullit
			V8.0	_	37.4	_	_	_	_	_	
			1.2V ± 0.1V	4.8	9.5	21	4.4	24.9	4.4	25	
t _{pd} A	Y	1.5V ± 0.1V	4.0	6.7	10.8	3.0	13.0	3.0	14.5] [
	ĭ	1.8V ± 0.15V	2.9	5.6	8.4	2.6	10.3	2.6	11.5	ns	
			2.5V ± 0.2V	2.7	4.8	6.3	2.5	7.8	2.5	8.7	
			3.3V ± 0.3V	2.7	4.6	6	2.5	7.5	2.5	8.3	1
		Y	V8.0	_	88.9	_	_	_	_	_	ns
			1.2V ± 0.1V	5.2	9.9	23.8	4.8	27.4	4.8	30.4	
			1.5V ± 0.1V	4.0	6.8	13.0	3.1	15.1	3.1	16.9	
t _{en}	ŌĒ		1.8V ± 0.15V	3.0	5.6	10.2	2.8	12.2	2.8	13.6	
			2.5V ± 0.2V	2.7	4.8	7.8	2.6	9.4	2.6	10.6	
			3.3V ± 0.3V	2.7	4.6	7.8	2.6	9.0	2.6	10.0	
			V8.0	_	49.9	_	_	_	_	_	
			1.2V ± 0.1V	6.0	9.9	16.0	4.8	17.8	4.8	19.8	
	<u> </u>	Y	1.5V ± 0.1V	4.4	7.7	11.5	3.1	13.0	3.1	14.5	
t _{dis}	ŌĒ	r	1.8V ± 0.15V	5.1	8.7	13.3	2.8	14.9	2.8	16.6	ns
		_	2.5V ± 0.2V	3.6	6.2	9.1	2.6	10.3	2.6	11.5	1
			3.3V ± 0.3V	5.2	8.7	13.7	2.6	14.0	2.6	17.0	

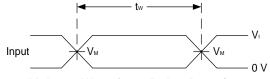


Parameter Measurement Information

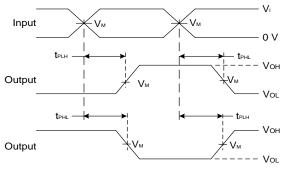


TEST	S 1	R_{L}
t _{PLH} /t _{PHL}	Open	1ΜΩ
t _{PLZ} /t _{PZL}	Vload	5ΚΩ
t _{PHZ} /t _{PZH}	GND	5ΚΩ

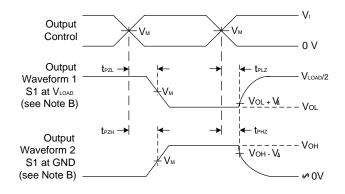
Voc	In	puts		V _{LOAD}		V Δ
Vcc	VI	t _r /t _f	V _M		C _L	
0.8V	Vcc	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.1 V
1.2V±0.1V	Vcc	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.1 V
1.5V±0.1V	V _{CC}	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.1 V
1.8V ±0.15V	V _{CC}	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.15 V
2.5V±0.2V	Vcc	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.15 V
3.3V±0.3V	Vcc	≤3ns	V _{CC} /2	2 X V _{CC}	5, 10, 15, 30pF	0.3V



Voltage Waveform Pulse Duration



Voltage Waveform Propagation Delay Times Inverting and Non Inverting Outputs



Voltage Waveform Enable and Disable Times
Low and High Level Enabling

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 ≤ 10 MHz.
- C. Inputs are measured separately one transition per measurement.
- D. t_{PLZ} and t_{PHZ} are the same as $t_{dis.}$
- E. t_{PZL} and t_{PZH} are the same as t_{EN} .
- F. t_{PLH} and t_{PHL} are the same as t_{PD}.



Marking Information

X2-DFN1210-8

(Top View)

XX: Identification Code

Y : Year : 0~9

 \underline{W} : week: A~Z: 1~26 week

a~z: 27-52 week

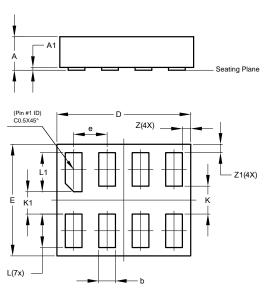
z represents 52 and 53 week

 \underline{X} : week: A~Z: Internal code

Part Number	Package	Identification Code	
74AUP2G125RA3-7	X2-DFN1210-8	JT	

X2-DFN1210-8 Package Outline Dimensions and Suggested Pad Layout

Please see AP02002 at http://www.diodes.com/datasheets/ap02002.pdf for the latest version.



		-	x	1	-	
Y1	↓ ▼ G —					_
<u> </u>	Ĭ _					A
	_	_ c	_	_ —	_ x _	—

X2-DFN1210-8				
Dim	Min	Max	Тур	
Α	-	0.35	0.30	
A1	0	0.03	0.02	
b	0.10	0.20	0.15	
D	1.15	1.25	1.20	
E	0.95	1.05	1.00	
е	-	-	0.30	
K	-	-	0.25	
K1	-	-	0.20	
L	0.25	0.35	0.30	
L1	0.30	0.40	0.35	
Z	0.050	0.100	0.075	
Z 1	0.050	0.100	0.075	
All Dimensions in mm				

Dimensions	Value (in mm)
С	0.300
G	0.150
Х	0.150
X1	1.050
Υ	0.500
Y1	1.150

January 2015

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