



Advanced Ultra-Low Power Logic 74AUP1Gxx Multi Function Devices

Advanced Ultra-Low Power CMOS Dual Gate Logic

- 0.8 V to 3.6 V
- 4ma drive capability at 3.0 V
- 7ns typical propagation time at 3V
- 7 popular dual gate functions

Features

Low Power

- Low Static-Power Consumption
 I_{CC} Less than 0.9 μ A
- Low Dynamic-Power Consumption
 $C_{PD} = 6$ pF (Typical at 3.3 V)

Schmitt Trigger on all inputs

- Rejects noisy signals
- Tolerant of Slow rise/fall times
- Hysteresis typically 250 mV

Ioff Circuitry

- Prevents output backflow when Output > Vcc
- Power-down isolation: When device is unpowered adjacent circuits are not loaded

Packages

- DFN1010
- DFN1410
- SOT26
- SOT363



The Diodes' Advantage

Low Voltage and Low Power

Parts are well suited for battery-driven, handheld applications such as cell phones, fitness monitors, tablets, E-readers, games, cameras, music players, netbooks, and notebooks. .

Noise Rejection Circuitry

All of the devices in this release include input hysteresis making less susceptible to problems from slow rising or falling signals.

Small Packages

The DFN1010 at 1.0mm x 1.00mm x 0.35mm is one of the smallest six-pin packages in the world. The DFN1410 is slightly larger but offer relaxed lead pitches which may be easier to position and solder.



New Product Announcement

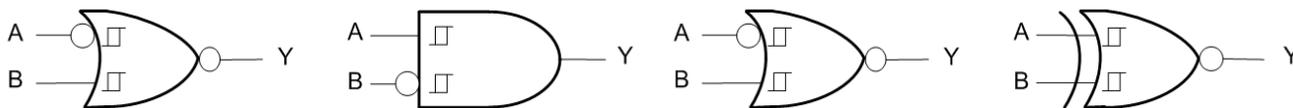
LOGIC

AUP1Gxx Multifunction Cross Reference

Diodes Device	Package	Description	TI	NXP	Fairchild
74AUP1G57DW-7	SOT-363	Single Configurable Multi-Function Gate	SN74AUP1G57DCKR	74AUP1G57GW,125	-
74AUP1G57FW4-7	X2-DFN1010-6	Single Configurable Multi-Function Gate	SN74AUP1G57DSFR	74AUP1G57GF,132	74AUP1G57FHX
74AUP1G57FZ4-7	X2-DFN1410-6	Single Configurable Multi-Function Gate	SN74AUP1G57DRYR	74AUP1G57GM,115	74AUP1G57L6X
74AUP1G57W6-7	SOT-26	Single Configurable Multi-Function Gate	SN74AUP1G57DBVR	-	-
74AUP1G58DW-7	SOT-363	Single Configurable Multi-Function Gate	SN74AUP1G58DCKR	74AUP1G58GW,125	-
74AUP1G58FW4-7	X2-DFN1010-6	Single Configurable Multi-Function Gate	SN74AUP1G58DSFR	74AUP1G58GF,132	74AUP1G58FHX
74AUP1G58FZ4-7	X2-DFN1410-6	Single Configurable Multi-Function Gate	SN74AUP1G58DRYR	74AUP1G58GM,115	74AUP1G58L6X
74AUP1G58W6-7	SOT-26	Single Configurable Multi-Function Gate	SN74AUP1G58DBVR	-	-
74AUP1G97DW-7	SOT-363	Single Configurable Multi-Function Gate	SN74AUP1G97DCKR	74AUP1G97GW,125	-
74AUP1G97FW4-7	X2-DFN1010-6	Single Configurable Multi-Function Gate	SN74AUP1G97DSFR	74AUP1G97GF,132	74AUP1G97FHX
74AUP1G97FZ4-7	X2-DFN1410-6	Single Configurable Multi-Function Gate	SN74AUP1G97DRYR	74AUP1G97GM,115	74AUP1G97L6X
74AUP1G97W6-7	SOT-26	Single Configurable Multi-Function Gate	SN74AUP1G97DBVR	-	-
74AUP1G98DW-7	SOT-363	Single Configurable Multi-Function Gate	SN74AUP1G98DCKR	74AUP1G98GW,125	-
74AUP1G98FW4-7	X2-DFN1010-6	Single Configurable Multi-Function Gate	SN74AUP1G98DSFR	74AUP1G98GF,132	74AUP1G98FHX
74AUP1G98FZ4-7	X2-DFN1410-6	Single Configurable Multi-Function Gate	SN74AUP1G98DRYR	74AUP1G98GM,115	74AUP1G98L6X

74AUP1Gxx Multifunction Applications

In addition to standard AND OR NAND NOR XOR Buffers and Inverters, these specialty functions can be fabricated



Packages

Package	Width	Length (nominal)	Height (maximum)	Lead Pitch (nominal)	Quantity per Reel	Reel Size	Tape Width
	(nominal)						
X2-DFN1010-6	1.0 mm	1.0 mm	0.4 mm	0.35 mm	5000	7"	8 mm
X2-DFN1410-6	1.0 mm	1.4 mm	0.4 mm	0.5 mm	5000	7"	8 mm
SOT26	3.0 mm	2.8 mm	1.2 mm	0.95 mm	3000	7"	8 mm
SOT363	2.0 mm	2.0 mm	1.1 mm	0.65 mm	3000	7"	8 mm

The very low-power and very small packages make the 74AUP1G products an ideal product selection for smart phone and tablet applications.

The 74AUP1Gxx multifunction complements the existing 74AUP1Gxx family which has now has 18 functions in a variety of packages.

74AUP1Gxx datasheets are located http://www.diodes.com/?q=catalog/Single_Gate_108.