



Advanced Ultra-Low Power Logic 74AUP2Gxx

Advanced Ultra Low Power CMOS Dual Gate Logic

- 0.8 V to 3.6 V
- 4 ma drive capability at 3.0 V
- 7 ns 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

loff Circuitry

- Prevents output backflow when Output > V_{CC}
- Power down isolation:
When device is unpowered, adjacent circuits are not loaded

Packages

- DFN0910
- DFN1010
- DFN1410



The Diodes Advantage

Low Voltage and Low Power

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

Noise Rejection Circuitry

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

Small packages.

The DFN0910 at 0.9 mm X 1.00 mm X 0.35 mm is one of the smallest six pin packages in the world. The DFN1010 and DFN1410 are slight larger but offer relaxed lead pitches which may be easier to position and solder.



AUP2Gxx Cross Reference

Diodes Device	Package	Description	TI	NXP
74AUP2G04FW3-7	X2-DFN0910-6	Dual Inverters		74AUP2G04GN,132
74AUP2G04FW4-7	X2-DFN1010-6	Dual Inverters	SN74AUP2G04DSF	74AUP2G04GF,132
74AUP2G04FZ4-7	X2-DFN01410-6	Dual Inverters	SN74AUP2G04DRY	74AUP2G04GM,132
74AUP2G06FW3-7	X2-DFN0910-6	Dual Inverters with Open Drain Outputs		74AUP2G06GN,132
74AUP2G06FW4-7	X2-DFN1010-6	Dual Inverters with Open Drain Outputs	SN74AUP2G06DSF	74AUP2G06GF,132
74AUP2G06FZ4-7	X2-DFN01410-6	Dual Inverters with Open Drain Outputs	SN74AUP2G06DRY	74AUP2G06GM,132
74AUP2G07FW3-7	X2-DFN0910-6	Dual Buffers with Open Drain Outputs		74AUP2G07GN,132
74AUP2G07FW4-7	X2-DFN1010-6	Dual Buffers with Open Drain Outputs	SN74AUP2G07DSF	74AUP2G07GF,132
74AUP2G07FZ4-7	X2-DFN01410-6	Dual Buffers with Open Drain Outputs	SN74AUP2G07DRY	74AUP2G07GM,132
74AUP2G14FW3-7	X2-DFN0910-6	Dual Schmitt Trigger Inverters		74AUP2G14GN,132
74AUP2G14FW4-7	X2-DFN1010-6	Dual Schmitt Trigger Inverters	SN74AUP2G14DSF	74AUP2G14GF,132
74AUP2G14FZ4-7	X2-DFN01410-6	Dual Schmitt Trigger Inverters	SN74AUP2G14DRY	74AUP2G14GM,132
74AUP2G17FW3-7	X2-DFN0910-6	Dual Schmitt Trigger Buffers		74AUP2G17GN,132
74AUP2G17FW4-7	X2-DFN1010-6	Dual Schmitt Trigger Buffers	SN74AUP2G17DSF	74AUP2G17GF,132
74AUP2G17FZ4-7	X2-DFN01410-6	Dual Schmitt Trigger Buffers	SN74AUP2G17DRY	74AUP2G17GM,132
74AUP2G3404FW3-7	X2-DFN0910-6	Dual - One Buffer & One Inverter		74AUP2G3404GN,132
74AUP2G3404FW4-7	X2-DFN1010-6	Dual - One Buffer & One Inverter		74AUP2G3404GF,132
74AUP2G3404FZ4-7	X2-DFN01410-6	Dual - One Buffer & One Inverter		74AUP2G3404GM,132
74AUP2G34FW3-7	X2-DFN0910-6	Dual Buffers		74AUP2G34GN,132
74AUP2G34FW4-7	X2-DFN1010-6	Dual Buffers	SN74AUP2G34DSF	74AUP2G34GF,132
74AUP2G34FZ4-7	X2-DFN01410-6	Dual Buffers	SN74AUP2G34DRY	74AUP2G34GM,132

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Package	Width (nominal)	Length (nominal)	Height (maximum)	Lead Pitch (nominal)
X2-DFN0910-6	0.9 mm	1.0 mm	0.35 mm	0.3 mm
X2-DFN1010-6	1.0 mm	1.0 mm	0.4 mm	0.35 mm
X2-DFN1410-6	1.0 mm	1.4 mm	0.4 mm	0.5 mm

- The low power and featured small packages make the 74AUP2G products an ideal product selection for smart phone and tablet applications.
- The 74AUP2Gxx complements the existing 74AUP1Gxx family which has 14 functions in a variety of packages
- 74AUP2Gxx datasheets are located at www.diodes.com/catalog/dual_gate_185/
- 74AUP1Gxx datasheets are located www.diodes.com/catalog/single_gate_148/