

# 74LVC Single and Dual Gate Logic

Diodes CMOS logic offering is currently focused on single and dual gate products. This is a natural extension of our expertise in manufacturing low pin count high volume products. Today's end products are requiring more functions and features packed into a much smaller space. The Diodes' DFN1010 allows for a logic function in as little as 1.0 square millimeters.

The 74LVC family with its wide voltage range is one of the most popular in the industry. Single and dual gate logic finds application niches in nearly one half of all electronic systems and is used for correcting minor design issues, voltage level shifting, isolating signals, and providing the ability for power down isolation of sub-systems. The single gate and dual gate LVC offering from Diodes now covers a majority of applications.



**Diodes Single And Dual Gate LVC Family Available in Small DFN1010 and DFN 1410 Packages in Addition to Standard SOT Packages.**

## 74LVC Single and dual gate Logic Families

Family	Description	I/O Drive	Operation Voltage
•LVC	Low Voltage CMOS Widely used industry standard	32mA	1.65V to 5.5V

## Logic Packaging / Target Applications

- DFN1010- Small and thin 1.0mm X 1.0 mm X 0.4mm 0.35mm pitch  
Package for the smallest of systems: Advanced tablet computers, Smart phones, Cameras.
- DFN1410- Small and thin 1.4 mm X 1.0 mm X 0.4mm 0.5mm pitch  
Package for small systems with relaxed lead pitch: Tablet computers, Netbook.
- SOT353/363 – Small leaded package 2.2 mm X 2.2 mm x 1.1 mm 0.65mm pitch  
Practical and cost effective for many small systems: Desktop, Notebook, Compact set top box.
- SOT25 /26– Industry Standard 3.0 mm X 3.0 mm X 1.3 mm 0.95mm pitch  
Lead pitch may be better suited to mate with other components: Consumer electronics, TV, DVR.

## Diodes LVC Single and Dual Gate Cross Reference

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Diodes Device	Package	Description	Toshiba	TI	NXP	ON	Fairchild
74LVC1G00W5-7	SOT-25	NAND Gate	TC7SZ00F	SN74LVC1G00DBVR	74LVC1G00GV,125		NC7SZ00M5X
74LVC1G00SE-7	SOT-353	NAND Gate	TC7SZ00FU	SN74LVC1G00DCKR	74LVC1G00GW,125	NL17SZ00DF	NC7SZ00P5X
74LVC1G00FW4-7	DFN1010	NAND Gate		SN74LVC1G00DSFR	74LVC1G00GF,132		NC7SZ00FHX
74LVC1G00FZ4-7	DFN1410	NAND Gate		SN74LVC1G00DRYR	74LVC1G00GM,115		NC7SZ00L6X
74LVC1G02W5-7	SOT-25	NOR Gate	TC7SZ02F	SN74LVC1G02DBVR	74LVC1G02GV,125		NC7SZ02M5X
74LVC1G02SE-7	SOT-353	NOR Gate	TC7SZ02FU	SN74LVC1G02DCKR	74LVC1G02GW,125	NL17SZ02DF	NC7SZ02P5X
74LVC1G02FW4-7	DFN1010	NOR Gate		SN74LVC1G02DSFR	74LVC1G02GF,132		NC7SZ02FHX
74LVC1G02FZ4-7	DFN1410	NOR Gate		SN74LVC1G02DRYR	74LVC1G02GM,115		NC7SZ02L6X
74LVC1G04W5-7	SOT-25	Single Inverter	TC7SZ04F	SN74LVC1G04DBVR	74LVC1G04GV,125		NC7SZ04M5X
74LVC1G04SE-7	SOT-353	Single Inverter	TC7SZ04FU	SN74LVC1G04DCKR	74LVC1G04GW,125	NL17SZ04DF	NC7SZ04P5X
74LVC1G04FW4-7	DFN1010	Single Inverter		SN74LVC1G04DSFR	74LVC1G04GF,132		NC7SZ04FHX
74LVC1G04FZ4-7	DFN1410	Single Inverter		SN74LVC1G04DRYR	74LVC1G04GM,115		NC7SZ04L6X
74LVC1G06W5-7	SOT-25	Single Inverter open Drain	TC7SZ05F	SN74LVC1G06DBVR	74LVC1G06GV,125		NC7SZ05M5X
74LVC1G06SE-7	SOT-353	Single Inverter open Drain	TC7SZ05FU	SN74LVC1G06DCKR	74LVC1G06GW,125	NL17SZ06DF	NC7SZ05P5X
74LVC1G06FW4-7	DFN1010	Single Inverter open Drain		SN74LVC1G06DSFR	74LVC1G06GF,132		NC7SZ05FHX
74LVC1G06FZ4-7	DFN1410	Single Inverter open Drain		SN74LVC1G06DRYR	74LVC1G06GM,115		NC7SZ05L6X
74LVC1G07W5-7	SOT-25	Single Buffer open Drain	TC7SZ07F	SN74LVC1G07DBVR	74LVC1G07GV,125		NC7SZ07M5X
74LVC1G07SE-7	SOT-353	Single Buffer open Drain	TC7SZ07FU	SN74LVC1G07DCKR	74LVC1G07GW,125	NL17SZ07DF	NC7SZ07P5X
74LVC1G07FW4-7	DFN1010	Single Buffer open Drain		SN74LVC1G07DSFR	74LVC1G07GF,132		NC7SZ07FHX
74LVC1G07FZ4-7	DFN1410	Single Buffer open Drain		SN74LVC1G07DRYR	74LVC1G07GM,115		NC7SZ07L6X
74LVC1G08W5-7	SOT-25	AND Gate	TC7SZ08F	SN74LVC1G08DBVR	74LVC1G08GV,125		NC7SZ08M5X
74LVC1G08SE-7	SOT-353	AND Gate	TC7SZ08FU	SN74LVC1G08DCKR	74LVC1G08GW,125	NL17SZ08DF	NC7SZ08P5X
74LVC1G08FW4-7	DFN1010	AND Gate		SN74LVC1G08DSFR	74LVC1G08GF,132		NC7SZ08FHX
74LVC1G08FZ4-7	DFN1410	AND Gate		SN74LVC1G08DRYR	74LVC1G08GM,115		NC7SZ08L6X
74LVC1G10W6-7	SOT-26	3-input NAND Gate		SN74LVC1G10DBVR	74LVC1G10GV,125		
74LVC1G10DW-7	SOT-363	3-input NAND Gate		SN74LVC1G10DCKR	74LVC1G10GW,125		NC7SZ10P6X
74LVC1G10FW4-7	DFN1010	3-input NAND Gate			74LVC1G10GF,132		
74LVC1G10FZ4-7	DFN1410	3-input NAND Gate			74LVC1G10GM,115		NC7SZ10L6X
74LVC1G11W6-7	SOT-26	3-input AND Gate		SN74LVC1G11DBVR	74LVC1G11GV,125		
74LVC1G11DW-7	SOT-363	3-input AND Gate		SN74LVC1G11DCKR	74LVC1G11GW,125		NC7SZ11P6X
74LVC1G11FW4-7	DFN1010	3-input AND Gate			74LVC1G11GF,132		
74LVC1G11FZ4-7	DFN1410	3-input AND Gate			74LVC1G11GM,115		NC7SZ11L6
74LVC1G14W5-7	SOT-25	Schmitt-Trigger Inverter	TC7SZ14F	SN74LVC1G14DBVR	74LVC1G14GV,125		NC7SZ14M5X
74LVC1G14SE-7	SOT-353	Schmitt-Trigger Inverter	TC7SZ14FU	SN74LVC1G14DCKR	74LVC1G14GW,125	NL17SZ14DF	NC7SZ14P5X
74LVC1G14FW4-7	DFN1010	Schmitt-Trigger Inverter		SN74LVC1G14DSFR	74LVC1G14GF,132		NC7SZ14FHX
74LVC1G14FZ4-7	DFN1410	Schmitt-Trigger Inverter		SN74LVC1G14DRYR	74LVC1G14GM,115		NC7SZ14L6X
74LVC1G17W5-7	SOT-25	Schmitt-Trigger Buffer	TC7SZ17F	SN74LVC1G17DBVR	74LVC1G17GV,125		
74LVC1G17SE-7	SOT-353	Schmitt-Trigger Buffer	TC7SZ17FU	SN74LVC1G17DCKR	74LVC1G17GW,125	NL17SZ17DF	
74LVC1G17FW4-7	DFN1010	Schmitt-Trigger Buffer		SN74LVC1G17DSFR	74LVC1G17GF,132		
74LVC1G17FZ4-7	DFN1410	Schmitt-Trigger Buffer		SN74LVC1G17DRYR	74LVC1G17GM,115		
74LVC1G32W5-7	SOT-25	OR Gate	TC7SZ32F	SN74LVC1G32DBVR	74LVC1G32GV,125		NC7SZ32M5X
74LVC1G32SE-7	SOT-353	OR Gate	TC7SZ32FU	SN74LVC1G32DCKR	74LVC1G32GW,125	NL17SZ32DF	NC7SZ32P5X
74LVC1G32FW4-7	DFN1010	OR Gate		SN74LVC1G32DSFR	74LVC1G32GF,132		NC7SZ32FHX
74LVC1G32FZ4-7	DFN1410	OR Gate		SN74LVC1G32DRYR	74LVC1G32GM,115		NC7SZ32L6X
74LVC1G57W6-7	SOT-26	Configurable Multi-Function Gate		SN74LVC1G57DBVR	74LVC1G57GV,125		
74LVC1G57DW-7	SOT-363	Configurable Multi-Function Gate		SN74LVC1G57DCKR	74LVC1G57GW,125		NC7SZ57P6X
74LVC1G57FW4-7	DFN1010	Configurable Multi-Function Gate		SN74LVC1G57DSFR	74LVC1G57GF,132		NC7SZ57FHX
74LVC1G57FZ4-7	DFN1410	Configurable Multi-Function Gate		SN74LVC1G57DRYR	74LVC1G57GM,115		NC7SZ57L6X
74LVC1G58W6-7	SOT-26	Configurable Multi-Function Gate		SN74LVC1G58DBVR	74LVC1G58GV,125		
74LVC1G58DW-7	SOT-363	Configurable Multi-Function Gate		SN74LVC1G58DCKR	74LVC1G58GW,125		NC7SZ58P6X
74LVC1G58FW4-7	DFN1010	Configurable Multi-Function Gate		SN74LVC1G58DSFR	74LVC1G58GF,132		NC7SZ58FHX
74LVC1G58FZ4-7	DFN1410	Configurable Multi-Function Gate		SN74LVC1G58DRYR	74LVC1G58GM,115		NC7SZ58L6X
74LVC1G86W5-7	SOT-25	XOR Gate	TC7SZ86F	SN74LVC1G86DBVR	74LVC1G86GV,125		NC7SZ86M5X
74LVC1G86SE-7	SOT-353	XOR Gate	TC7SZ86FU	SN74LVC1G86DCKR	74LVC1G86GW,125	NL17SZ86DF	NC7SZ86P5X
74LVC1G86FW4-7	DFN1010	XOR Gate			74LVC1G86GF,132		NC7SZ86FHX
74LVC1G86FZ4-7	DFN1410	XOR Gate			74LVC1G86GM,115		NC7SZ86L6X
74LVC1G97W6-7	SOT-26	Configurable Multi-Function Gate		SN74LVC1G97DBVR	74LVC1G97GV,125		
74LVC1G97DW-7	SOT-363	Configurable Multi-Function Gate		SN74LVC1G97DCKR	74LVC1G97GW,125		
74LVC1G97FW4-7	DFN1010	Configurable Multi-Function Gate		SN74LVC1G97DSFR	74LVC1G97GF,132		
74LVC1G97FZ4-7	DFN1410	Configurable Multi-Function Gate		SN74LVC1G97DRYR	74LVC1G97GM,115		
74LVC1G98W6-7	SOT-26	Configurable Multi-Function Gate		SN74LVC1G98DBVR	74LVC1G98GV,125		
74LVC1G98DW-7	SOT-363	Configurable Multi-Function Gate		SN74LVC1G98DCKR	74LVC1G98GW,125		
74LVC1G98FW4-7	DFN1010	Configurable Multi-Function Gate		SN74LVC1G98DSFR	74LVC1G98GF,132		
74LVC1G98FZ4-7	DFN1410	Configurable Multi-Function Gate		SN74LVC1G98DRYR	74LVC1G98GM,115		
74LVC1G125W5-7	SOT-25	3 State Buffer OE LOW	TC7SZ125F	SN74LVC1G125DBVR	74LVC1G125GV,125	NL17SZ125DT	NC7SZ125M5X
74LVC1G125SE-7	SOT-353	3 State Buffer OE LOW	TC7SZ125FU	SN74LVC1G125DCKR	74LVC1G125GW,125	NL17SZ125DF	NC7SZ125P5X
74LVC1G125FW4-7	DFN1010	3 State Buffer OE LOW			74LVC1G125GF,132		
74LVC1G125FZ4-7	DFN1410	3 State Buffer OE LOW		SN74LVC1G125DRYR	74LVC1G125GM,115		NC7SZ125L6X
74LVC1G126W5-7	SOT-25	3 State Buffer OE HIGH	TC7SZ126F	SN74LVC1G126DBVR	74LVC1G126GV,125		NC7SZ126M5X
74LVC1G126SE-7	SOT-353	3 State Buffer OE HIGH	TC7SZ126FU	SN74LVC1G126DCKR	74LVC1G126GW,125	NL17SZ126DF	NC7SZ126P5X
74LVC1G126FW4-7	DFN1010	3 State Buffer OE HIGH			74LVC1G126GF,132		
74LVC1G126FZ4-7	DFN1410	3 State Buffer OE HIGH		SN74LVC1G126DRYR	74LVC1G126GM,115		NC7SZ126L6X
74LVC2G04DW-7	SOT363	Dual Inverter Gate		SN74LVC2G04DCKR	74LVC2G04GW	NL17WZ04DF	NC7WZ04P6X
74LVC2G04W6-7	SOT26	Dual Inverter Gate		SN74LVC2G04DBVR	74LVC2G04GV	NL17WZ04DT	
74LVC2G04FW4-7	DFN1010	Dual Inverter Gate			74LVC2G04GF		NC7WZ04FHX
74LVC2G04FZ4-7	DFN1410	Dual Inverter Gate			74LVC2G04GM		NC7WZ04L6X
74LVC2G06DW-7	SOT363	Dual Inverter Gate Open Drain		SN74LVC2G06DCKR	74LVC2G06GW	NL17WZ06DF	
74LVC2G06W6-7	SOT26	Dual Inverter Gate Open Drain		SN74LVC2G06DBVR	74LVC2G06GV	NL17WZ06DT	
74LVC2G06FW4-7	DFN1010	Dual Inverter Gate Open Drain			74LVC2G06GF		
74LVC2G06FZ4-7	DFN1410	Dual Inverter Gate Open Drain			74LVC2G06GM		
74LVC2G07DW-7	SOT363	Dual Buffer Gate Open Drain		SN74LVC2G07DCKR	74LVC2G07GW	NL17WZ07DF	NC7WZ07P6X
74LVC2G07W6-7	SOT26	Dual Buffer Gate Open Drain		SN74LVC2G07DBVR	74LVC2G07GV	NL17WZ07DT	
74LVC2G07FW4-7	DFN1010	Dual Buffer Gate Open Drain			74LVC2G07GF		NC7WZ07FHX
74LVC2G07FZ4-7	DFN1410	Dual Buffer Gate Open Drain			74LVC2G07GM		NC7WZ07L6X
74LVC2G14DW-7	SOT363	Dual Schmitt-Trigger Inverter		SN74LVC2G14DCKR	74LVC2G14GW	NL17WZ14DF	NC7WZ14P6X
74LVC2G14W6-7	SOT26	Dual Schmitt-Trigger Inverter		SN74LVC2G14DBVR	74LVC2G14GV	NL17WZ14DT	
74LVC2G14FW4-7	DFN1010	Dual Schmitt-Trigger Inverter			74LVC2G14GF		NC7WZ14FHX
74LVC2G14FZ4-7	DFN1410	Dual Schmitt-Trigger Inverter			74LVC2G14GM		NC7WZ14L6X
74LVC2G17DW-7	SOT363	Dual Schmitt-Trigger Buffer		SN74LVC2G17DCKR	74LVC2G17GW	NL17WZ17DF	
74LVC2G17W6-7	SOT26	Dual Schmitt-Trigger Buffer		SN74LVC2G17DBVR	74LVC2G17GV		
74LVC2G17FW4-7	DFN1010	Dual Schmitt-Trigger Buffer			74LVC2G17GF		NC7WZ17FHX
74LVC2G17FZ4-7	DFN1410	Dual Schmitt-Trigger Buffer			74LVC2G17GM		NC7WZ17L6X
74LVC2G34DW-7	SOT363	Dual Buffer Gate		SN74LVC2G34DCKR	74LVC2G34GW	NL17WZ216DF	
74LVC2G34W6-7	SOT26	Dual Buffer Gate		SN74LVC2G34DBVR	74LVC2G34GV	NL17WZ216DT	
74LVC2G34FW4-7	DFN1010	Dual Buffer Gate			74LVC2G34GF		NC7WZ34FHX
74LVC2G34FZ4-7	DFN1410	Dual Buffer Gate			74LVC2G34GM		NC7WZ34L6X