

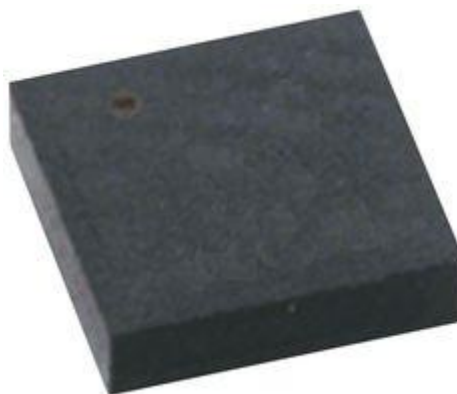


TS3V712E 7 Channels VGA SPDT Switch

General Description:

The TS3V712E is a high-bandwidth, 7-channel video multiplexer/de-multiplexer for switching between multiple VGA sources or end points. The device is designed for ensuring video signal integrity and minimizing the video signal attenuation by providing high bandwidth of 1.36 GHz.

The video signals are protected against high ESD with integrated diodes to V_{DD} and GND that will support up to 6-kV of ESD HBM and 4-kV contact protection. The TS3V712E is available in a 32-pin QFN package and is characterized for operation over the free-air temperature range of -40°C to 85°C.



Key Features:

- High Bandwidth (BW = 1.36 GHz)
- Designed for 7-Channel VGA Signals (R,G,B, H sync, Vsync, DDC Dat, and DDC CLK)
- Separate Control Logic for Data and Control Signals
- Operating Voltage: 3.3 V ±10%
- Low and Flat ON-State Resistance
 - r_{ON} = 3 Ω
 - r_{ON(flat)} = 500 mΩ

Low Crosstalk (XTALK = -49.76 dB Typ at 250 MHz)

Low Input/Output Capacitance

- C_{ON} = 7 pF, Typ

- ESD Performance Tested
 - 4-kV IEC61000-4-2, Contact Discharge on

Switch IOs

- 3-kV Human Body Model Per JESD22-A114E
- 6-kV Human Body Model (Switch Pins to GND)

- Suitable for Both RGB and Composite-Video

Switching

- 32-Pin Quad Flat Pack No-Lead QFN (RTG) Package

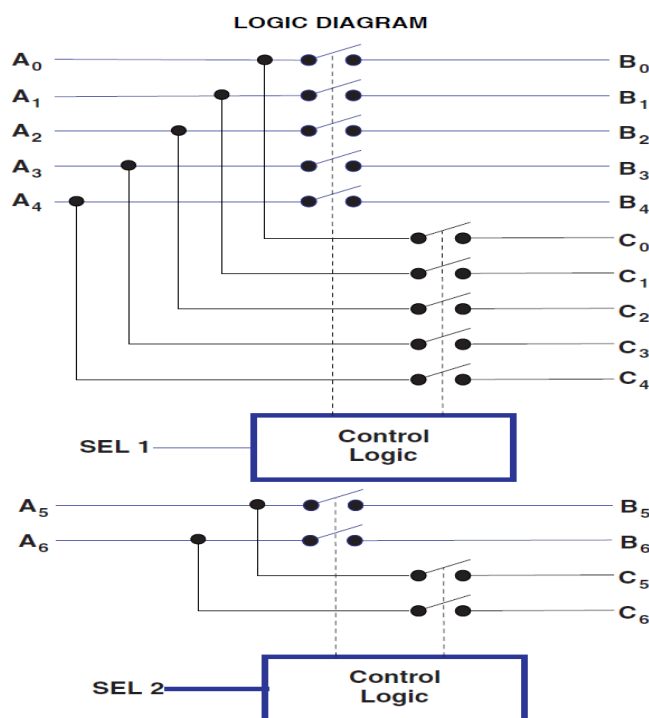


Table 1. FUNCTION TABLE

SEL1	SEL2	FUNCTION		
		A0-A4	A5, A6	Hi-Z
L	L	B0-B4	B5, B6	Cn
L	H	B0-B4	C5, C6	C0-C4, B5, B6
H	L	C0-C4	B5, B6	B0-B4, C5, C6
H	H	C0-C4	C5, C6	Bn

Applications:

- Analog VGA Peripheral Ports
- Notebook Computers

Related Products Information:

Mfr Part #	Farnell #	Newark #	Description
TS3V712ERTGR	1823864	64R4903	TS3V712E 7 Channels VGA SPDT Switch-- WQFN (RTG) 32