

Quad 2-Channel Multiplexer

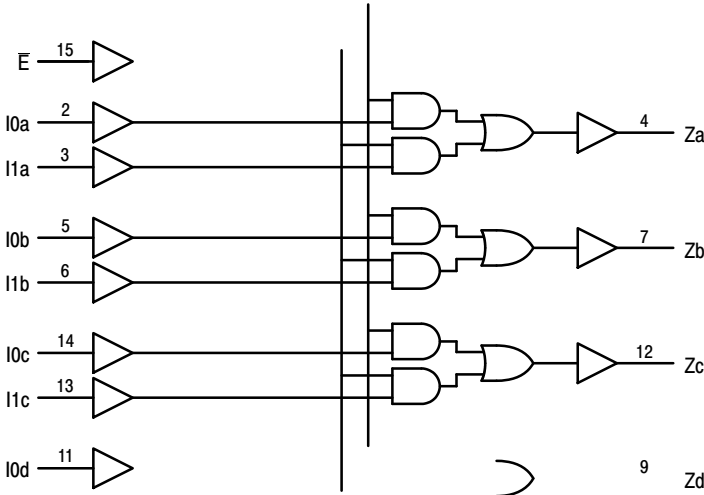
With 5 V-Tolerant Inputs

MC74LVX157

The MC74LVX157 is an advanced high speed CMOS quad 2 channel multiplexer. The inputs tolerate voltages up to 7.0 V, allowing the interface of 5.0 V systems to 3.0 V systems.

It consists of four 2 input digital multiplexers with common select

MC74LVX157



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DC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test Conditions	V _{CC} V	T _A = 25 C			T _A = -40 to 85 C		Unit
				Min	Typ	Max	Min	Max	
V _{IH}	High-Level Input Voltage		2.0	1.5	-	-	1.5	-	V
			3.0	2.0	-	-	2.0	-	
			3.6	2.4	-	-	2.4	-	
V _{IL}	Low-Level Input Voltage		2.0	-	-	0.5	-	0.5	V
			3.0	-	-	0.8	-	0.8	
			3.6	-	-	0.8	-	0.8	
V _{OH}	High-Level Output Voltage (V _{in} = V _{IH} or V _{IL})	I _{OH} = -50μA	2.0	1.9	2.0	-	1.9	-	V
		I _{OH} = -50μA	3.0	2.9	3.0	-	2.9	-	
		I _{OH} = -4mA	3.0	2.58	-	-	2.48	-	
V _{OL}	Low-Level Output Voltage (V _{in} = V _{IH} or V _{IL})	I _{OL} = 50μA	2.0	-	0.0	0.1	-	0.1	V
		I _{OL} = 50μA	3.0	-	0.0	0.1	-	0.1	
		I _{OL} = 4mA	3.0	-	-	0.36	-	0.44	
I _{in}	Input Leakage Current	V _{in} = 5.5V or GND	3.6	-	-	0.1	-	1.0	μA
I _{CC}	Quiescent Supply Current	V _{in} = V _{CC} or GND	3.6	-	-	4.0	-	40.0	μA

Product parametric performance is indicated in the Electrical Characteristics for the listed test conditions, unless otherwise noted. Product performance may not be indicated by the Electrical Characteristics if operated under different conditions.

AC ELECTRICAL CHARACTERISTICS (Input t_r = t_f = 3.0ns)

Symbol	Parameter	Test Conditions	T _A = 25 C			T _A = -40 to 85 C		Unit
			Min	Typ	Max	Min	Max	
t _{PLH} , t _{PHL}	Propagation Delay, Input to Output	V _{CC} = 2.7V C _L = 15pF	-	6.6	12.5	1.0	15.5	ns
		C _L = 50pF	-	9.1	16.0	1.0	19.0	
		V _{CC} = 3.3 0.3V C _L = 15pF	-	5.1	7.9	1.0	9.5	
		C _L = 50pF	-	7.6	11.4	1.0	13.0	
t _{PLH} , t _{PHL}	Propagation Delay, S to Zn	V _{CC} = 2.7V C _L = 15pF	-	8.9	16.9	1.0	20.5	ns
		C _L = 50pF	-	11.4	20.4	1.0	24.0	
		V _{CC} = 3.3 0.3V C _L = 15pF	-	7.0	11.0	1.0	13.0	
		C _L = 50pF	-	9.5	14.5	1.0	16.5	
t _{PLH} , t _{PHL}	Propagation Delay, \bar{E} to Zn	V _{CC} = 2.7V C _L = 15pF	-	9.1	17.6	1.0	20.5	ns
		C _L = 50pF	-	11.6	21.1	1.0	24.0	
		V _{CC} = 3.3 0.3V C _L = 15pF	-	7.2				
		C _L = 50pF	-	9.7				

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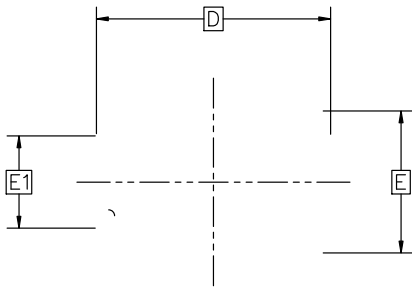


SOIC-16 9.90x3.90x1.37 1.27P
CASE 751B
ISSUE M

DATE 18 OCT 2024

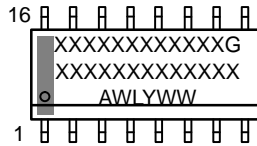
- 3. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD PROTRUSION.
- 4. MAXIMUM MOLD PROTRUSION 0.1^{mm}

b DIMENSION AT MAXIMUM MATE nm TOTAL IN EXCESS OF THE



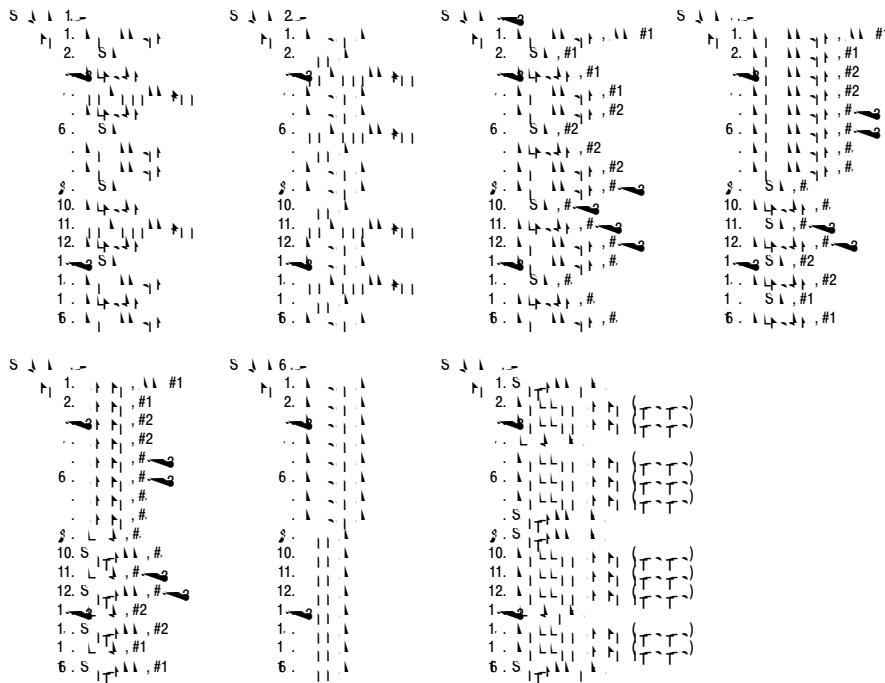
TOP VIEW

**GENERIC
MARKING DIAGRAM***



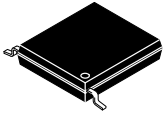
XXXXX = Specific Device Code
A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week
G = Pb Free Package

*This information is generic. Please refer to device data sheet for actual part marking. Pb Free indicator, "G" or microdot "•", may or may not be present. Some products may not follow the Generic Marking.



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SCALE 2:1

TSSOP-16 WB
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