

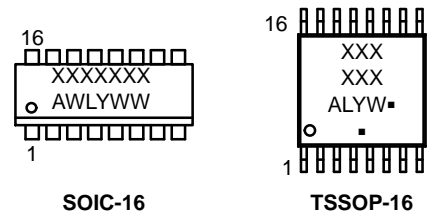
3 to 8 Line Decoder

With 5 V-Tolerant Inputs

MC74LVX138

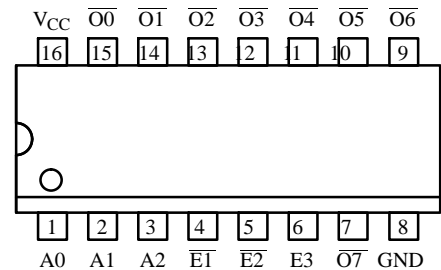
The MC74LVX138 is an advanced high speed CMOS 3-to-8 line decoder. The inputs tolerate voltages up to 5.5 V, allowing the interface

MARKING DIAGRAMS



- XXXXXX = Specific Device Code
- A = Assembly Location
- WL, L = Wafer Lot
- Y = Year
- WW, W = Work Week
- G or ■ = Pb-Free Package

(Note: Microdot may be in either location)



PIN NAMES

MC74LVX138

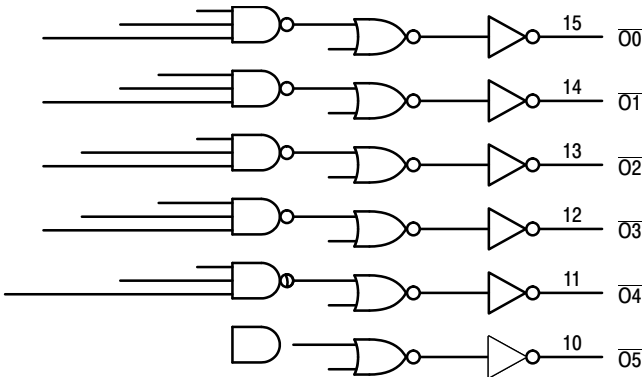


Figure 1. Logic Diagram

MC74LVX138

MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
V_{CC}	DC Supply Voltage	-0.5 to +6.5	V
V_{IN}	DC Input Voltage	-0.5 to +6.5	V
V_{OUT}	DC Output Voltage	-0.5 to $V_{CC} + 0.5$	V
I_{IN}	DC Input Current, per Pin	± 20	mA
I_{OUT}	DC Output Current, per Pin	± 25	mA
I_{CC}	DC Supply Current, V_{CC} and GND Pins	± 75	mA
I_{IK}	Input Clamp Current	-20	mA

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MC74LVX138

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		
			3.0	2.0	-	-	2.0		
			3.6	2.4	-	-	2.4		

MC74LVX138

NOISE CHARACTERISTICS (Input $t_r = t_f = 3.0$ ns, $C_L = 50$ pF, $V_{CC} = 3.3$ V)

Symbol	Characteristic	$T_A = 25^\circ\text{C}$		Unit
		Typ	Max	
V_{OLP}	Quiet Output Maximum Dynamic V_{OL}	-	0.5	V
V_{OLV}	Quiet Output Minimum Dynamic V_{OL}	-	-0.5	V

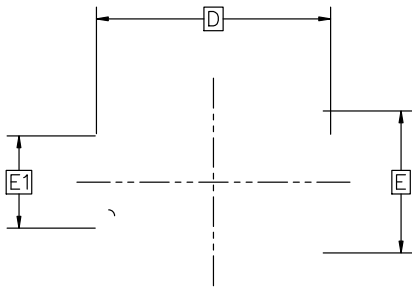


SOIC-16 9.90x3.90x1.37 1.27P
CASE 751B
ISSUE M

DATE 18 OCT 2024

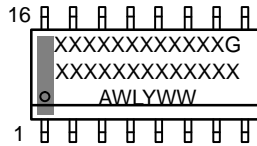
- 3. DIMENSIONS D AND E1 DO NOT INCLUDE MOLD PROTRUSION.
- 4. MAXIMUM MOLD PROTRUSION 0.1^{mm}

b DIMENSION AT MAXIMUM MATE nm TOTAL IN EXCESS OF THE



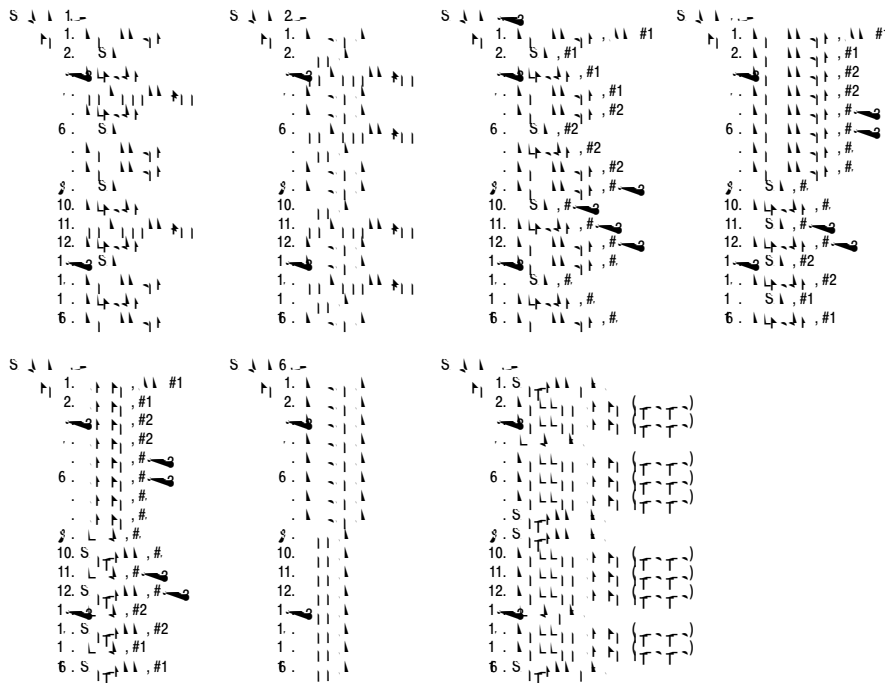
TOP VIEW

**GENERIC
MARKING DIAGRAM***



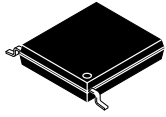
XXXXX = Specific Device Code
A = Assembly Location
WL = Wafer Lot
Y = Year
WW = Work Week
G = Pb Free Package

*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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