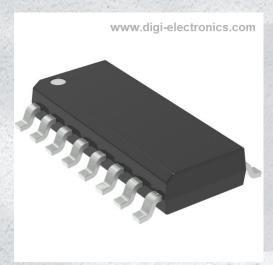


MC74HC251ADR2G Datasheet



https://www.DiGi-Electronics.com

DiGi Electronics Part Number MC74HC251ADR2G-DG

Manufacturer onsemi

Manufacturer Product Number MC74HC251ADR2G

Description IC MULTIPLEXER 1 X 8:1 16SOIC

Detailed Description Multiplexer 1 x 8:1 16-SOIC



Tel: +00 852-30501935

RFQ Email: Info@DiGi-Electronics.com

DiGi is a global authorized distributor of electronic components.



Purchase and inquiry

Manufacturer Product Number:	Manufacturer:
MC74HC251ADR2G	onsemi
Series:	Product Status:
74HC	Active
Туре:	Circuit:
Multiplexer	1 x 8:1
Independent Circuits:	Current - Output High, Low:
1	5.2mA, 5.2mA
Voltage Supply Source:	Voltage - Supply:
Single Supply	2V ~ 6V
Operating Temperature:	Mounting Type:
-55°C ~ 125°C	Surface Mount
Package / Case:	Supplier Device Package:
16-SOIC (0.154", 3.90mm Width)	16-SOIC
Base Product Number:	
74HC251	

Environmental & Export classification

8542.39.0001

RoHS Status:	Moisture Sensitivity Level (MSL):
ROHS3 Compliant	1 (Unlimited)
REACH Status:	ECCN:
REACH Unaffected	EAR99
HTSUS:	



8-Input Data Selector/ **Multiplexer with 3-State Outputs**

High-Performance Silicon-Gate

MC74HC251A

The MC74HC251 is identical in pinout to the LS251. The device inputs are compatible with standard CMOS outputs; with pullup resistors, they are compatible with LSTTL outputs.

This device selects one of the eight binary Data Inputs, as determined by the Address Inputs. The Output Enable pin must be a low level for the selected data to appear at the outputs. If Output Enable is high, both the Y and the \overline{Y} outputs are in the high-impedance state. This 3-state feature allows the HC251 to be used in bus-oriented systems.

The HC251 is similar in function to the HC251 which does not have 3-state outputs.

Features

- Output Drive Capability: 10 LSTTL Loads
- Outputs Directly Interface to CMOS, NMOS, and TTL
- Operating Voltage Range: 2 to 6 V
- Low Input Current: 1 μA
- High Noise Immunity Characteristic of CMOS Devices
- -Q Suffix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable
- These Devices are Pb-Free, Halogen Free/BFR Free and are RoHS Compliant



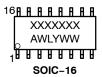


TSSOP-16 **DT SUFFIX** CASE 948F



MN SUFFIX CASE 485AW

MARKING DIAGRAMS







QFN16

XXXXXXX = Specific Device Code

= Assembly Location

= Wafer Lot WL.I = Year WW, W = Work Week G or ■ = Pb-Free Package

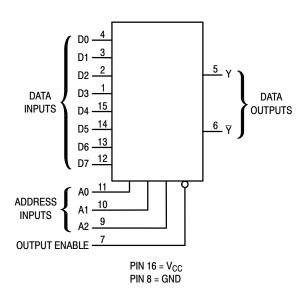
(Note: Microdot may be in either location)

PIN ASSIGNMENT

D3 [1 ●	16] V _{CC}
D2 [2	15] D4
D1 [3	14] D5
D0 [4	13] D6
Υ [5	12] D7
₹[6	11] A0
OUTPUT [ENABLE [7	10] A1
GND [9] A2
			l

ORDERING INFORMATION

See detailed ordering, marking and shipping information in the package dimensions section on page 6 of this data sheet.



FUNCTION TABLE

		Out	outs		
A2	A1	Α0	Output Enabled	Y	Y
X L L H H	X L H H L H	X L H L H L	H L L L L	Z D0 D1 D2 D3 D4 D5 D6 D7	Z D0 D1 D2 D3 D4 D5 D6 D7

Z = high impedance

D0, D1, ..., D7 = the level of the respective D input.

Figure 1. Logic Diagram

MAXIMUM RATINGS

Symbol	Parameter		Value	Unit
V _{CC}	DC Supply Voltage	DC Supply Voltage		
V _{IN}	DC Input Voltage		-0.5 to V _{CC} +0.5	٧
V _{OUT}	DC Output Voltage		-0.5 to V _{CC} +0.5	٧
I _{IN}	DC Input Diode Current, per Pin		±20	mA
I _{OUT}	DC Input Diode Current, Per Pin		±25	mA
I _{CC}	DC Supply Current, V _{CC} and GND Pins		±50	mA
I _{IK}	Input Clamp Current (V _{IN} < 0 or V _{IN} > V _{CC})	±20	mA	
I _{OK}	Output Clamp Current (V _{OUT} < 0 or V _{OUT} > V _{CC})	±20	mA	
T _{STG}	Storage Temperature Range		-65 to +150	°C
TL	Lead Temperature, 1 mm from Case for 10 secs		260	°C
TJ	Junction Temperature Under Bias		+150	°C
$\theta_{\sf JA}$	Thermal Resistance (Note 1)	SOIC-16 QFN16 TSSOP-16	126 118 159	°C/W
P _D	Power Dissipation in Still Air at 25°C	SOIC-16 QFN16 TSSOP-16	995 1062 787	mW
MSL	Moisture Sensitivity		Level 1	-
F _R	Flammability Rating	Oxygen Index: 28 to 34	UL 94 V-0 @ 0.125 in	-
V _{ESD}	ESD Withstand Voltage (Note 2)	Human Body Model Charged Device Model	2000 N/A	V

Stresses exceeding those listed in the Maximum Ratings table may damage the device. If any of these limits are exceeded, device functionality should not be assumed, damage may occur and reliability may be affected.

1. Measured with minimum pad spacing on an FR4 board, using 76mm-by-114mm, 2-ounce copper trace no air flow per JESD51-7.

2. HBM tested to EIA / JESD22-A114-A. CDM tested to JESD22-C101-A. JEDEC recommends that ESD qualification to EIA/JESD22-A115A.

⁽Machine Model) be discontinued.

RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter		Max	Unit
V _{CC}	DC Supply Voltage		6.0	V
V _{in} , V _{out}	DC Input Voltage, Output Voltage (Note 3)		V _{CC}	V
T _A	Operating Temperature, All Package Types	- 55	+125	°C
t _r , t _f	Input Rise and Fall Time $ V_{CC} = 2.0 \ V \\ V_{CC} = 4.5 \ V \\ V_{CC} = 6.0 \ V $	0 0 0	1000 500 400	ns

Functional operation above the stresses listed in the Recommended Operating Ranges is not implied. Extended exposure to stresses beyond the Recommended Operating Ranges limits may affect device reliability.

3. Unused inputs must always be tied to an appropriate logic voltage level (e.g., either GND or V_{CC}). Unused outputs must be left open.

DC ELECTRICAL CHARACTERISTICS

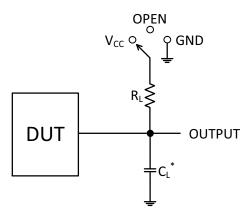
				Guaranteed Limit			
Symbol	Parameter	Test Conditions	V _{CC} V	– 55 to 25°C	≤ 85 °C	≤ 125°C	Unit
V _{IH}	Minimum High-Level Input Voltage	V_{out} = 0.1 V or V_{CC} – 0.1 V $ I_{out} \le 20 \mu A$	2.0 4.5 6.0	1.5 3.15 4.2	1.5 3.15 4.2	1.5 3.15 4.2	V
V _{IL}	Maximum Low-Level Input Voltage	V_{out} = 0.1 V or V_{CC} - 0.1 V $ I_{out} \le 20 \mu A$	2.0 4.5 6.0	0.3 0.9 1.2	0.3 0.9 1.2	0.3 0.9 1.2	V
V _{OH}	Minimum High-Level Output Voltage	$V_{in} = V_{IH} \text{ or } V_{IL}$ $ I_{out} \le 20 \mu\text{A}$	2.0 4.5 6.0	1.9 4.4 5.9	1.9 4.4 5.9	1.9 4.4 5.9	V
		$V_{in} = V_{IH} \text{ or } V_{IL} \qquad \begin{vmatrix} I_{out} \end{vmatrix} \le 4.0 \text{ mA} \\ I_{out} \le 5.2 \text{ mA} \end{vmatrix}$	4.5 6.0	3.98 5.48	3.84 5.34	3.70 5.20	
V _{OL}	Maximum Low-Level Output Voltage	$V_{in} = V_{IH} \text{ or } V_{IL}$ $ I_{out} \le 20 \mu\text{A}$	2.0 4.5 6.0	0.1 0.1 0.1	0.1 0.1 0.1	0.1 0.1 0.1	V
		$V_{in} = V_{IH} \text{ or } V_{IL} \qquad \begin{vmatrix} I_{out} \end{vmatrix} \le 4.0 \text{ mA} \\ I_{out} \le 5.2 \text{ mA} \end{vmatrix}$	4.5 6.0	0.26 0.26	0.33 0.33	0.40 0.40	
I _{in}	Maximum Input Leakage Current	V _{in} = V _{CC} or GND	6.0	± 0.1	± 1.0	± 1.0	μΑ
l _{OZ}	Maximum Three-State Leakage Current	Output in High-Impedance State $V_{in} = V_{IL} \text{ or } V_{IH}$ $V_{out} = V_{CC} \text{ or GND}$	6.0	± 0.5	± 5.0	± 10	μΑ
I _{CC}	Maximum Quiescent Supply Current (per Package)	$V_{in} = V_{CC}$ or GND $I_{out} = 0 \mu A$	6.0	8	80	160	μΑ

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

			Guaranteed Limit			İ
Symbol	Parameter	V _{CC}	– 55 to 25°C	≤ 85 °C	≤ 125°C	Unit
t _{PLH} , t _{PHL}	Maximum Propagation Delay, Input D to Output Y or ₹ (Figures 2, 3, 4)	2.0 4.5 6.0	185 37 31	230 46 39	280 56 48	ns
t _{PLH} , t _{PHL}	Maximum Propagation Delay, Input A to Output Y or ₹ (Figures 2, 5)	2.0 4.5 6.0	205 41 35	255 51 43	310 62 53	ns
t _{PLZ} , t _{PHZ}	Maximum Propagation Delay, Output Enable to Output Y (Figures 5, 7)	2.0 4.5 6.0	195 39 33	245 49 42	295 59 50	ns
t _{PZL} , t _{PZH}	Maximum Propagation Delay, Output Enable to Output Y (Figures 2, 6)	2.0 4.5 6.0	145 29 25	180 36 31	220 44 38	ns
t _{PLZ} , t _{PHZ}	Maximum Propagation Delay, Output Enable to Output ₹ (Figures 2, 6)	2.0 4.5 6.0	220 44 37	275 55 47	330 66 56	ns
t _{PZL} , t _{PZH}	Maximum Propagation Delay, Output Enable to Output ₹ (Figures 2, 6)	2.0 4.5 6.0	150 30 26	190 38 33	225 45 38	ns
t _{TLH} , t _{THL}	Maximum Output Transition Time, Any Output (Figures 2, 3, 4)	2.0 4.5 6.0	75 15 13	95 19 16	110 22 19	ns
C _{in}	Maximum Input Capacitance	-	10	10	10	pF
C _{out}	Maximum Three-State Output Capacitance (Output in High-Impedance State)	-	15	15	15	pF

		Typical @ 25°C, V _{CC} = 5.0 V	
C_{PD}	Power Dissipation Capacitance (Per Package)	36	pF



Test	Switch Position	CL	R_{L}
t _{PLH} / t _{PHL}	Open	50 pF	1 kΩ
t _{PLZ} / t _{PZL}	V _{CC}		
t _{PHZ} / t _{PZH}	GND		

*C_I Includes probe and jig capacitance

Figure 2. Test Circuit

SWITCHING WAVEFORMS

 $t_r = 6 \text{ ns}$

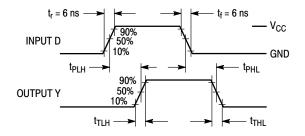
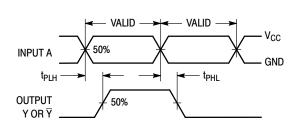


Figure 3.

Figure 4.



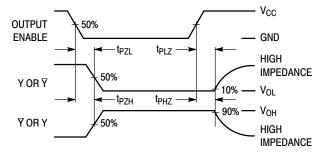


Figure 5.

Figure 6.

PIN DESCRIPTIONS

ADDRESS INPUTS A0, A1, A2 (Pins 1, 2, 3)

Address inputs. These inputs, when the chip is selected, determine which of the eight outputs is active-low.

CONTROL INPUTS CS1, CS2, CS3 (Pins 6, 4, 5)

Chip select inputs. For CS1 at a high level and CS2, CS3 at a low level, the chip is selected and the outputs follow the Address inputs. For any other combination of CS1, CS2, and CS3, the outputs are at a logic low.

OUTPUTS

Y0 - Y7 (Pins 15, 14, 13, 12, 11, 10, 9, 7)

Active-high Decoded outputs. These outputs assume a high level when addressed and the chip is selected. These outputs remain low when not addressed or the chip is not selected.

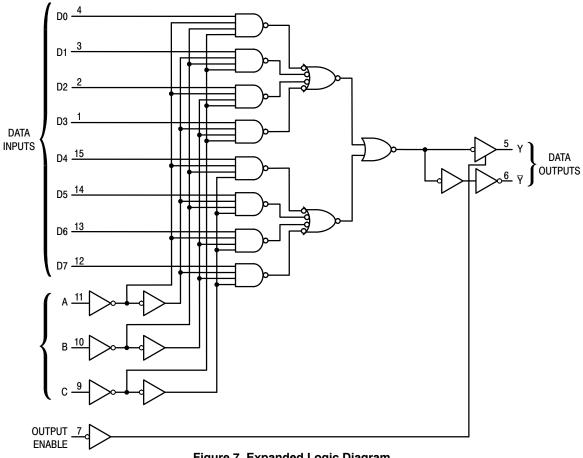


Figure 7. Expanded Logic Diagram

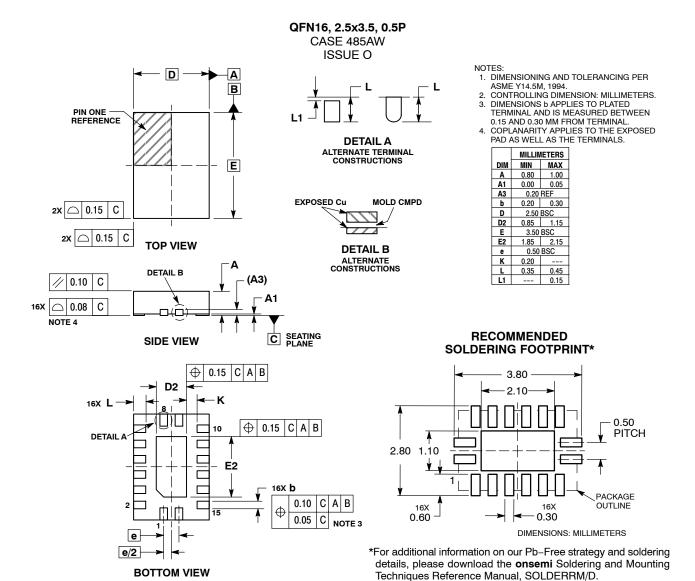
ORDERING INFORMATION

Device	Marking	Package	Shipping [†]		
MC74HC251ADG	HC251AG	SOIC-16	48 Units / Rail		
MC74HC251ADR2G	HC251AG	SOIC-16	2500 Units / Tape & Reel		
MC74HC251ADR2G-Q*	HC251AG	SOIC-16	2500 Units / Tape & Reel		
MC74HC251ADTG	HC 251A	TSSOP-16	96 Units / Rail		
MC74HC251ADTR2G	HC 251A	TSSOP-16	2500 Units / Tape & Reel		

[†]For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specifications Brochure, BRD8011/D.

^{*-}Q Suffix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements; AEC-Q100 Qualified and PPAP Capable.

PACKAGE DIMENSIONS





MECHANICAL CASE OUTLINE

PACKAGE DIMENSIONS

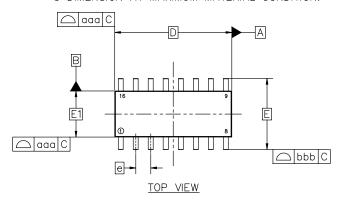


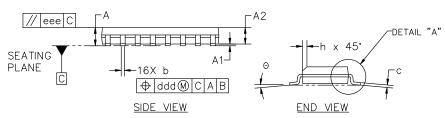
SOIC-16 9.90x3.90x1.37 1.27P CASE 751B ISSUE M

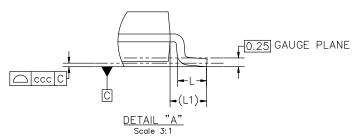
DATE 18 OCT 2024

NOTES:

- DIMENSIONING AND TOLERANCING PER ASME Y14.5M, 2018.
- DIMENSION IN MILLIMETERS. ANGLE IN DEGREES.
- DIMENSIONS D AND E1 DO NOT INCLUDE MOLD PROTRUSION.
- MAXIMUM MOLD PROTRUSION 0.15mm PER SIDE.
- DIMENSION b DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.127mm TOTAL IN EXCESS OF THE b DIMENSION AT MAXIMUM MATERIAL CONDITION.







MILLIMETERS				
DIM	MIN	MIN NOM MAX		
А	1.35	1.55	1.75	
A1	0.10	0.18	0.25	
A2	1.25	1.37	1.50	
b	0.35	0.42	0.49	
С	0.19	0.22	0.25	
D		9.90 BSC		
E	6.00 BSC			
E1	3.90 BSC			
е		1.27 BSC		
h	0.25		0.50	
L	0.40	0.83	1.25	
L1		1.05 REF		
Θ	0.		7.	
TOLERAN	CE OF FC	RM AND	POSITION	
aaa	0.10			
bbb	0.20			
ccc	0.10			
ddd	0.25			
eee	0.10			



RECOMMENDED MOUNTING FOOTPRINT

*FOR ADDITIONAL INFORMATION ON OUR PB-FREE STRATEGY AND SOLDERING DETAILS, PLEASE DOWNLOAD THE onsemi SOLDERING AND MOUNTING TECHNIQUES REFERENCE MANUAL, SOLDERRM/D

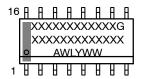
DOCUMENT NUMBER:	98ASB42566B	Electronic versions are uncontrolled except when accessed directly from the Document Repos Printed versions are uncontrolled except when stamped "CONTROLLED COPY" in red.		
DESCRIPTION:	SOIC-16 9.90X3.90X1.37 1.27P		PAGE 1 OF 2	

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

DATE 18 OCT 2024

GENERIC MARKING DIAGRAM*



XXXXX = Specific Device Code

A = Assembly Location
WL = Wafer Lot

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.

STYLE 1:		STYLE 2:		STYLE 3:	S	TYLE 4:	
	COLLECTOR	PIN 1.	CATHODE	PIN 1.	COLLECTOR, DYE #1	PIN 1.	COLLECTOR, DYE #1
	BASE	2.	ANODE	2.	BASE. #1	2.	
3.	EMITTER	3.	NO CONNECTION	3.	EMITTER. #1	3.	
4.	NO CONNECTION	4.	CATHODE	4.	COLLECTOR, #1	4.	COLLECTOR, #2
5.	EMITTER	5.	CATHODE	5.	COLLECTOR, #2	5.	COLLECTOR, #3
6.	BASE	6.	NO CONNECTION	6.	BASE, #2	6.	COLLECTOR, #3
7.	COLLECTOR	7.	ANODE	7.	EMITTER, #2	7.	COLLECTOR, #4
8.	COLLECTOR	8.	CATHODE	8.	COLLECTOR, #2	8.	COLLECTOR, #4
9.	BASE	9.	CATHODE	9.	COLLECTOR, #3	9.	BASE, #4
10.	EMITTER	10.	ANODE	10.	BASE, #3	10.	EMITTER, #4
11.	NO CONNECTION	11.	NO CONNECTION	11.	EMITTER, #3	11.	
	EMITTER	12.	CATHODE	12.		12.	
13.	BASE	13.		13.	COLLECTOR, #4	13.	BASE, #2
14.	COLLECTOR	14.	NO CONNECTION	14.	BASE, #4	14.	
15.	EMITTER	15.	ANODE	15.	EMITTER, #4	15.	
16.	COLLECTOR	16.	CATHODE	16.	COLLECTOR, #4	16.	EMITTER, #1
STYLE 5:		STYLE 6:		STYLE 7:			
PIN 1.	DRAIN, DYE #1	PIN 1.	CATHODE	PIN 1.	SOURCE N-CH		
2.	DRAIN, #1	2.	CATHODE	2.	COMMON DRAIN (OUTPUT)		
3.	DRAIN. #2				COMMON DOMINI (OLITOLIT)		
	שוויאווי, דב	3.	CATHODE	3.	COMMON DRAIN (OUTPUT)		
4.		3. 4.	CATHODE	3. 4.			
4. 5.	DRAIN, #2 DRAIN, #3		CATHODE CATHODE		GATE P-CH COMMON DRAIN (OUTPUT)		
5. 6.	DRAIN, #2 DRAIN, #3 DRAIN, #3	4. 5. 6.	CATHODE CATHODE CATHODE	4. 5. 6.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT)		
5.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4	4. 5. 6. 7.	CATHODE CATHODE CATHODE CATHODE	4. 5. 6. 7.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT)		
5. 6. 7. 8.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4	4. 5. 6. 7.	CATHODE CATHODE CATHODE CATHODE CATHODE	4. 5. 6. 7. 8.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH		
5. 6. 7. 8.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4	4. 5. 6. 7. 8.	CATHODE CATHODE CATHODE CATHODE CATHODE ANODE	4. 5. 6. 7. 8. 9.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH		
5. 6. 7. 8. 9.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4 SOURCE, #4	4. 5. 6. 7. 8. 9.	CATHODE CATHODE CATHODE CATHODE CATHODE ANODE ANODE	4. 5. 6. 7. 8. 9.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT)		
5. 6. 7. 8. 9. 10.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4 SOURCE, #4 GATE, #3	4. 5. 6. 7. 8. 9. 10.	CATHODE CATHODE CATHODE CATHODE CATHODE ANODE ANODE ANODE ANODE	4. 5. 6. 7. 8. 9. 10.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT)		
5. 6. 7. 8. 9. 10. 11.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4 SOURCE, #4 GATE, #3 SOURCE, #3	4. 5. 6. 7. 8. 9. 10. 11.	CATHODE CATHODE CATHODE CATHODE CATHODE ANODE ANODE ANODE ANODE ANODE ANODE	4. 5. 6. 7. 8. 9. 10. 11.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT)		
5. 6. 7. 8. 9. 10. 11. 12.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4 SOURCE, #4 GATE, #3 SOURCE, #3 GATE, #2	4. 5. 6. 7. 8. 9. 10. 11. 12.	CATHODE CATHODE CATHODE CATHODE CATHODE CATHODE ANODE ANODE ANODE ANODE ANODE ANODE ANODE ANODE	4. 5. 6. 7. 8. 9. 10. 11. 12.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) GATE N-CH		
5. 6. 7. 8. 9. 10. 11. 12. 13.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 GATE, #4 GATE, #4 GATE, #3 SOURCE, #3 GOURCE, #3 GOURCE, #2 SOURCE, #2	4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	CATHODE CATHODE CATHODE CATHODE CATHODE CATHODE ANODE	4. 5. 6. 7. 8. 9. 10. 11. 12. 13.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) CATE N-CH COMMON DRAIN (OUTPUT)		
5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	DRAIN, #2 DRAIN, #3 DRAIN, #3 DRAIN, #4 DRAIN, #4 SOURCE, #4 GATE, #3 SOURCE, #3 GATE, #2 SOURCE, #2 GATE, #1	4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	CATHODE CATHODE CATHODE CATHODE CATHODE ANODE	4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14.	GATE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) SOURCE P-CH SOURCE P-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) GATE N-CH COMMON DRAIN (OUTPUT) GATE N-CH COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT) COMMON DRAIN (OUTPUT)		
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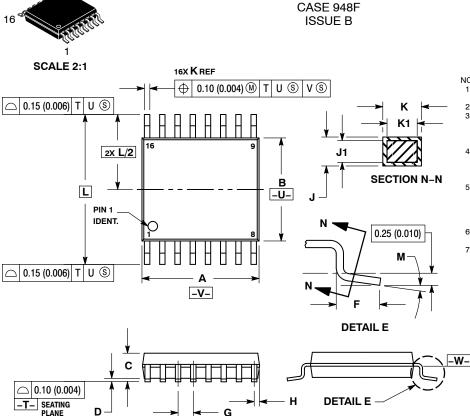
TSSOP-16 WB



MECHANICAL CASE OUTLINE

PACKAGE DIMENSIONS

DATE 19 OCT 2006

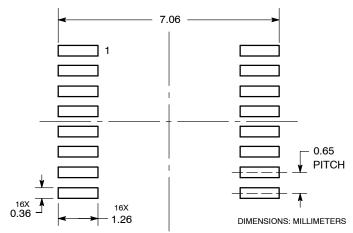


NOTES

- DIMENSIONING AND TOLERANCING PER
- ANSI Y14.5M, 1982. CONTROLLING DIMENSION: MILLIMETER.
- DIMENSION A DOES NOT INCLUDE MOLD FLASH. PROTRUSIONS OR GATE BURRS. MOLD FLASH OR GATE BURRS SHALL NOT
- EXCEED 0.15 (0.006) PER SIDE.
 DIMENSION B DOES NOT INCLUDE
 INTERLEAD FLASH OR PROTRUSION. INTERLEAD FLASH OR PROTRUSION SHALL
- IN TERLEAD FLASH OH PROTHOSION SHALL NOT EXCEED 0.25 (0.010) PER SIDE. DIMENSION K DOES NOT INCLUDE DAMBAR PROTRUSION. ALLOWABLE DAMBAR PROTRUSION SHALL BE 0.08 (0.003) TOTAL IN EXCESS OF THE K DIMENSION AT MAXIMUM MATERIAL CONDITION.
- TERMINAL NUMBERS ARE SHOWN FOR REFERENCE ONLY.
- DIMENSION A AND B ARE TO BE DETERMINED AT DATUM PLANE -W-.

	MILLIMETERS		INCHES		
DIM	MIN	MAX	MIN	MAX	
Α	4.90	5.10	0.193	0.200	
В	4.30	4.50	0.169	0.177	
C		1.20		0.047	
D	0.05	0.15	0.002	0.006	
F	0.50	0.75	0.020	0.030	
G	0.65 BSC		0.026 BSC		
Η	0.18	0.28	0.007	0.011	
7	0.09	0.20	0.004	0.008	
J1	0.09	0.16	0.004	0.006	
K	0.19	0.30	0.007	0.012	
K1	0.19	0.25	0.007	0.010	
L	6.40 BSC		0.252 BSC		
М	0 °	8 °	0 °	8 °	

RECOMMENDED SOLDERING FOOTPRINT*



^{*}For additional information on our Pb-Free strategy and soldering details, please download the onsemi Soldering and Mounting Techniques Reference Manual, SOLDERRM/D.

GENERIC MARKING DIAGRAM*



= Specific Device Code XXXX Α = Assembly Location

= Wafer Lot L = Year W = Work Week G or • = 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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