

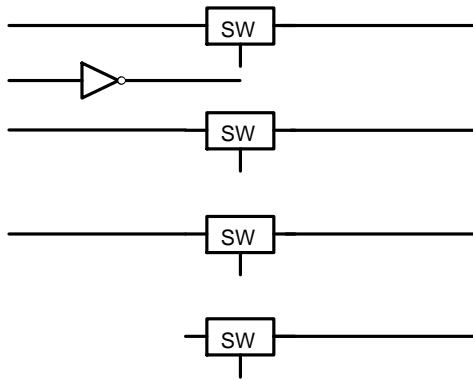


T30LMSW3B3257 / T30LMSW3B3253 / T30LMSW3B3125 / T30LMSW3B3126



T30LMSW3B3125 FUNCTION TABLE

$\overline{OE}$	Function
L	A = B
H	Disconnect



## MAXIMUM RATINGS

Symbol	Parameter	Condition	Value	Unit
$V_{CCA}, V_{CCB}$	Supply Voltage		-0.5 to +4.3	V
$V_I$	Input Voltage (Note 1)		-0.5 to +4.3	V
	Continuous Channel Current		128	mA
$I_{IK}$	Input Clamp Current	$V_{I/O} < \text{GND}$	-50	mA
$I_{CC}$	DC Supply Current Per Supply Pin		r100	mA
$I_{GND}$	DC Ground Current per Ground Pin		r100	mA
$T_J$	Junction Temperature		+150	°C
$T_{STG}$	Storage Temperature		-65 to +150	°C
$J_A$	Thermal Resistance (Note 2)	SOIC-16	126	°C/W
		SSOP-16	TBD	
		TSSOP16	159	
		SOIC-14	116	
		SSOP-14	TBD	
		TSSOP-14	150	
	UQFN16	TBD		
$P_D$	Power Dissipation in Still Air	SOIC-16	995	mW
		SSOP-16	TBD	
		TSSOP16	787	
		SOIC-14	1077	
		SSOP-14	TBD	
		TSSOP-14	833	
	UQFN16	TBD		
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 3)	Human Body Model	2	kV
		Charged Device Model	TBD	
$I_{LATCHUP}$	Latchup Performance Above $V_{CC}$ and Below GND at 25 °C (Note 4)		r100	mA

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. The input and output negative-voltage ratings may be exceeded if the input and output clamp-current ratings are observed.
2. Measured with minimum pad spacing on an FR4 board, using 76 mm-by-114 mm, 2 ounce copper trace no air flow per JESD51-7.
3. HBM tested to ANSI/ESDA/JEDEC JS-001-2017. CDM tested to EIA/JESD22-C101-F. JEDEC recommends that ESD qualification to EIA/JESD22-A115-A (Machine Model) be discontinued per JEDEC/JEP172A.
4. Tested to EIA/JESD78 Class II.

## RECOMMENDED OPERATING CONDITIONS

Symbol	Parameter	Min	Max	Unit
$V_{CCA}, V_{CCB}$	Positive DC Supply Voltage	1.65	3.6	V
$V_I$	Control Pin Input Voltage	GND	3.6	V
$V_{I/O}$	I/O Pin Voltage	GND	$V_{CCA}$	V
$T_A$	Operating Temperature Range	-40	+125	°C
$t/V$	Control Input Transition Rise or Fall Rate	0	200	ns/V

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.

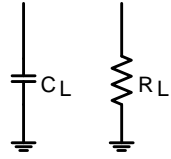
DC ELECTRICAL CHARACTERISTICS

Symbol	Parameter	Test Conditions	V <sub>CCA</sub> (V)	T <sub>A</sub> = -40 °C to +85 °C			T <sub>A</sub> = -40 °C to +125 °C		Unit
				Min	Typ (Note 5)	Max	Min	Max	
V <sub>IH</sub>	Input HIGH Voltage		1.65–1.95	0.7 * V <sub>CC</sub>	–	–	0.7 * V <sub>CC</sub>	–	V
			2.3–2.7	1.7	–	–	1.7	–	
			2.7–3.6	2.0	–	–	2.0	–	
V <sub>IL</sub>	Input LOW Voltage		1.65–1.95	–	–	0.3 * V <sub>CC</sub>	–	0.3 * V <sub>CC</sub>	V
			2.3–2.7	–	–	0.7	–	0.7	
			2.7–3.6	–	–	0.8	–	0.8	
V <sub>IK</sub>	Clamp Diode Voltage	I <sub>I</sub> = -18 mA	3.0	–	–	-1.2	–	-1.2	V
I <sub>I</sub>	Input Leakage	V <sub>I</sub> = V <sub>CC</sub> or GND	3.6	–	–	±0.5	–	±0.5	A

I

AC ELECTRICAL CHARACTERISTICS (T30LMSW3B3257/T30LMSW3B3253)

Symbol



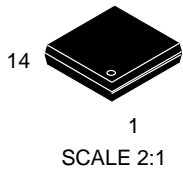


ORDERING INFORMATION

Device	Marking
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PACKAGE DIMENSIONS



TSSOP i14 WB  
CASE 948G  
ISSUE C

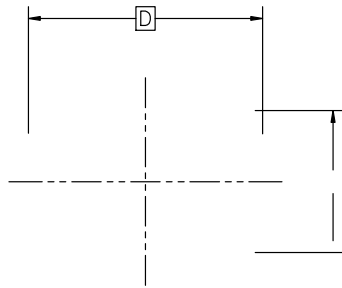
DATE 17 FEB 2016

PACKAGE DIMENSIONS



SOIC T16 9.90x3.90x1.37 1.27P  
CASE 751B  
ISSUE M

DATE 18 OCT 2024



TOP VIEW

T30LMSW3B3257 / T30LMSW3B3253 / T30LMSW3B3125 / T30LMSW3B3126

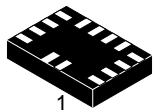
PACKAGE DIMENSIONS

TSSOP i16 WB  
CASE 948F  
ISSUE B

DATE 19 OCT 2006

SCALE 2:1

PACKAGE DIMENSIONS



SCALE 5:1

UQFN16 1.8x2.6, 0.4P  
CASE 488AU  
ISSUE A

DATE 01 AUG 2007

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