



MC44828

Product Preview

PLL Tuning Circuit with I²C Bus

The MC44828 is a tuning circuit for TV and VCR tuner applications. This device contains on one chip all the functions required for PLL control of a VCO. This integrated circuit also contains a high frequency prescaler and thus can handle frequencies up to 1.3 GHz.

The MC44828 is controlled by an I²C bus. It has the same function as the MC44827 which is 3-wire bus controlled. The MC44827 and MC44828 can replace each other to allow conversion between 3-wire bus and I²C bus control.

The MC44828 is manufactured on a single silicon chip using Motorola's high density bipolar process, MOSAIC™ (Motorola Oxide Self Aligned Implanted Circuits).

The MC44828 has the same features as MC44818 with the following differences:

- Lower Power Consumption, 200 mW Typical
- Improved Prescaler with Higher Margins for Sensitivity and Temperature Range. (A typical device is functional in a temperature range greater than -40 to 100°C.)
- Lock Detector with Push-Pull Output
- TSSOP Package

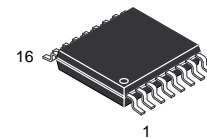
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ORDERING INFORMATION

Device	Operating Temperature Range	Package
MC44828DTB	T _J = -20 ° to +80°C	16 Pin TSSOP

PLL TUNING CIRCUIT WITH 1.3 GHz PRESCALER AND I²C BUS

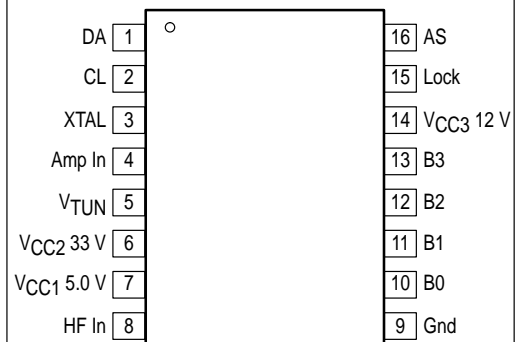
SEMICONDUCTOR TECHNICAL DATA



DTB SUFFIX
PLASTIC PACKAGE
CASE 948F
(TSSOP-16)

PIN CONNECTIONS

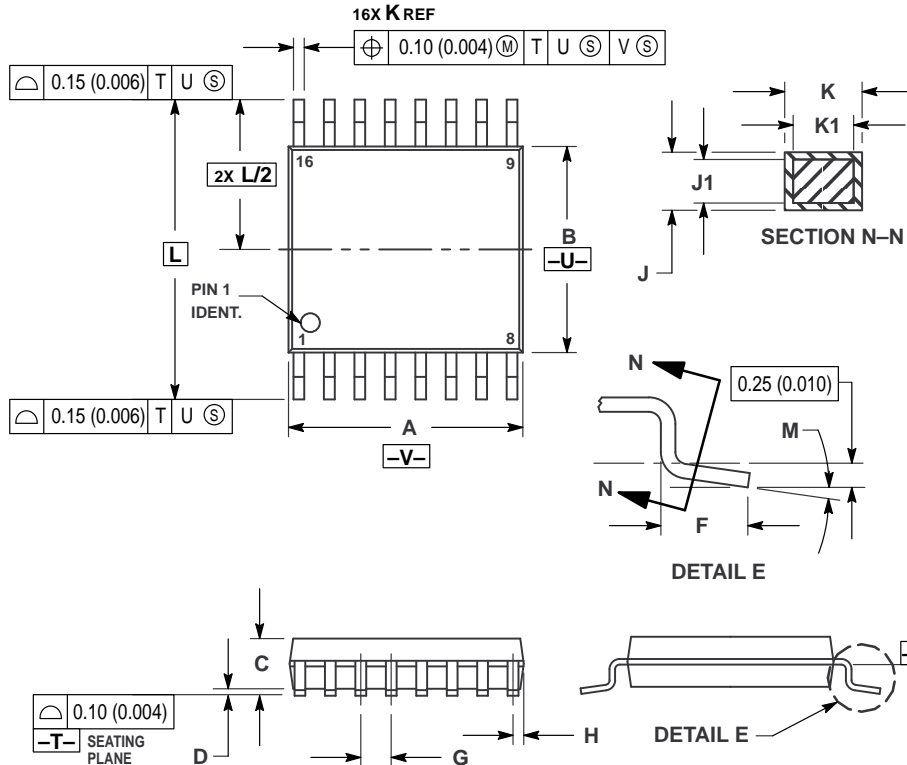
16 Pin TSSOP



(Top View)

OUTLINE DIMENSIONS


DTB SUFFIX
PLASTIC PACKAGE
CASE 948F-01
(TSSOP-16)
ISSUE O



NOTES:

- 1 DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
- 2 CONTROLLING DIMENSION: MILLIMETER.
- 3 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.
- 4 DIMENSION B DOES NOT INCLUDE INTERLEAD FLASH OR PROTRUSION. INTERLEAD FLASH OR PROTRUSION SHALL NOT EXCEED 0.25 (0.010) PER SIDE.
- 5 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.
- 6 TERMINAL NUMBERS ARE SHOWN FOR REFERENCE ONLY.
- 7 DIMENSION A AND B ARE TO BE DETERMINED AT DATUM PLANE -W-.

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	4.90	5.10	0.193	0.200
B	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	
H	0.18	0.28	0.007	0.011
J	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	
M	0°	8°	0°	8°

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