



Charge Pump INV -1.5V to -5V 250mA 8-Pin WSON EP T/R

Manufacturer: <u>Texas Instruments, Inc</u>

Package/Case: WSON8

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The LM27 is a precision, single digital-output, low-power thermostat comprised of an internal reference, DAC, temperature sensor and comparator. Utilizing factory programming, it can be manufactured with different trip points as well as different digital output functionality. The trip point (TOS) can be preset at the factory to any temperature in the range of +120°C to +150°C in 1°C increments. The LM27 has one digital output (OS/OS/US/US), one digital input (HYST) and one analog output (VTEMP). The digital output stage can be preset as either open-drain or push-pull. In addition, it can be factory programmed to be active HIGH or LOW. The digital output can be factory programmed to indicate an over temperature shutdown event (OS or OS) or an under temperature shutdown event (US or US). When preset as an overtemperature shutdown (OS) it will go LOW to indicate that the die temperature is over the internally preset TOS and go HIGH when the temperature goes below (TOS-THYST). Similarly, when preprogrammed as an undertemperature shutdown (US) it will go HIGH to indicate that the temperature is below TUS and go LOW when the temperature is above (TUS+THYST). The typical hysteresis, THYST, can be set to 2°C or 10°C and is controlled by the state of the HYST pin. A VTEMP analog output provides a voltage that is proportional to temperature and has a 10.7mV/°C output slope.

Currently, there are several standard parts available, see . For other part options, contact a Texas Instruments Distributor or Sales Representative for information on minimum order qualification. The LM27 is currently available in a 5-lead SOT-23 package.

Key Features

Internal Comparator with Pin Selectable 2°C

or 10°C Hysteresis

No External Components Required

Open-drain or Push-pull Digital Output;

Supports CMOS Logic Levels

Internal Temperature Sensor with VTEMP Output Pin

VTEMP Output Allows After-assembly System Testing

Internal Voltage Reference and DAC for Trip-point Setting

Currently Available in 5-pin SOT-23 Plastic Package

Excellent Power Supply Noise Rejection

Key Specifications

Power Supply Voltage 2.7V to 5.5V

Power Supply Current $40\mu A$ (Max), $15\mu A$ (Typ)

Hysteresis Temperature 2°C or 10°C (Typ)

Temperature Trip Point Accuracy ±3°C (Max)



Recommended For You

LM2637M

Texas Instruments, Inc

SOP24

LM5116MH

Texas Instruments, Inc

TSSOP20

LM234Z-3

Texas Instruments, Inc

TO-92

LM74700QDBVRQ1

Texas Instruments, Inc

SOT23-6

LM2991S

Texas Instruments, Inc

TO-263

LM74800QDRRRQ1

Texas Instruments, Inc

WSON-12

LMR14030SDDAR

Texas Instruments, Inc

SOP8

LM2940CT-12

Texas Instruments, Inc

TO-220

LM536035QPWPTQ1

Texas Instruments, Inc

HTSSOP-16

LM5575MH

Texas Instruments, Inc

TSSOP16

LM536013QDSXTQ1

Texas Instruments, Inc

WSON-10

LM5160QPWPRQ1

Texas Instruments, Inc

HTSSOP14

LM5576MH

Texas Instruments, Inc

TSSOP20

LMQ61460AFSQRJRRQ1

Texas Instruments, Inc

VQFN-14

LM5071MIX-80

Texas Instruments, Inc

TSSOP16