

# **MCP9808T-E/MS**

9 Din MCOD

Data Sheet

#### MCP9808 Series 3.6 V Memory Module Digital Temperature Sensor SMT - MSOP-8

Manufacturers	Microchip Technology, Inc	
Package/Case	MSOP-8	SCL 20V3 7 A0 Alert 3 6 A1
Product Type	Integrated Circuits (ICs)	GND 4 5 A2
RoHS		Images are for reference only
Lifecycle		
Please submit RFQ for MCP9808T-E/MS or Email to us: sales@ovaga.com We will contact you in 12 hours.		

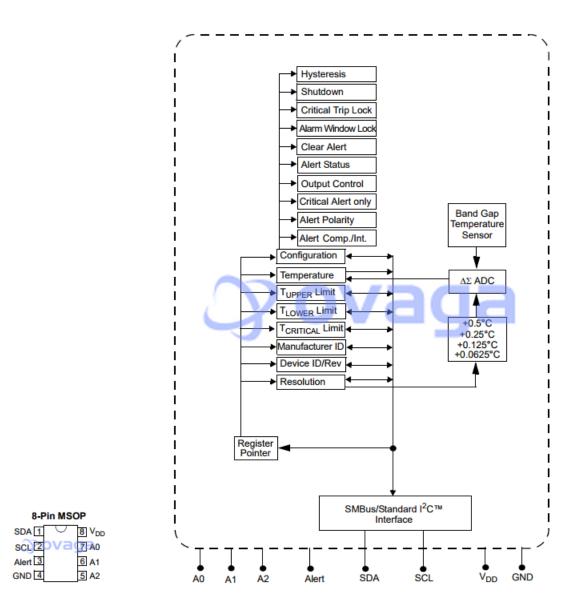
# **General Description**

The MCP9808 digital temperature sensor converts temperatures between  $-20^{\circ}$ C and  $+100^{\circ}$ C to a digital word with  $\pm 0.5^{\circ}$ C (max.) accuracy. The MCP9808 comes with user-programmable registers that provide flexibility for temperature sensing applications. The registers allow user-selectable settings such as Shutdown or low-power modes and the specification of temperature Event and Critical output boundaries. When the temperature changes beyond the specified boundary limits, the MCP9808 outputs an Event signal. The user has the option of setting the event output signal polarity as an active-low or active-high comparator output for thermostat operation, or as temperature event interrupt output for microprocessor-based systems. The event output can also be configured as a Critical temperature output. This sensor has an industry standard 2-wire, SMBus and Standard I2C<sup>TM</sup>Compatible compatible (100kHz/400kHz bus clock) serial interface, allowing up to eight sensors to be controlled in a single serial bus. These features make the MCP9808 ideal for sophisticated multi-zone temperature-monitoring applications.

# Features

#### Accuracy:

- User Selectable Measurement Resolution:
- 0.5°C, 0.25°C, 0.125°C, 0.0625°C
- User Programmable Temperature Limits:
- Temperature Window Limit
- Critical Temperature Limit
- User Programmable Temperature Alert Output
- Operating Voltage Range: 2.7V to 5.5V
- Operating Current: 200 µA (typical)
- Shutdown Current: 0.1 µA (typical)
- 2-wire Interface: I2C/SMBus Compatible
- Available Packages: 2x3 DFN-8, MSOP-8
- AEC-Q100 Qualified Grade 1



# **Related Products**



#### ATSAMC21G17A-MZTVAO

Microchip Technology, Inc VQFN



## MCP16362T-E/NMX

Microchip Technology, Inc VDFN



MCP2517FDT-H/SL Microchip Technology, Inc SOIC-14



MCP16502TAC-E/S8B

Microchip Technology, Inc VQFN

## BM64SPKS1MC1-00M2AA



Microchip Technology, Inc SMD

## MCP2517FD-H/SL

Microchip Technology, Inc SOIC-14



# MCP2517FD-H/JHA

Microchip Technology, Inc VDFN-14



Microchip Technology, Inc QFN-28

MCP25625-E/ML