

C Output Type:Digital, Sensing Accuracy Range: 0.25 C, Sensing Temperature Min:-20 C, Sensing Temperature Max:+100 C, Sensor Case

Manufacturers	Microchip Technology, Inc
Package/Case	DFN-8
Product Type	Temperature Sensors
RoHS	Rohs
Lifecycle	



Images are for reference only

Please submit RFQ for MCP9808T-E/MC or [Email to us: sales@ovaga.com](mailto:sales@ovaga.com) We will contact you in 12 hours.

[RFQ](#)

General Description

The MCP9808 digital temperature sensor converts temperatures between -20°C and +100°C to a digital word with $\pm 0.5^\circ\text{C}$ (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™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

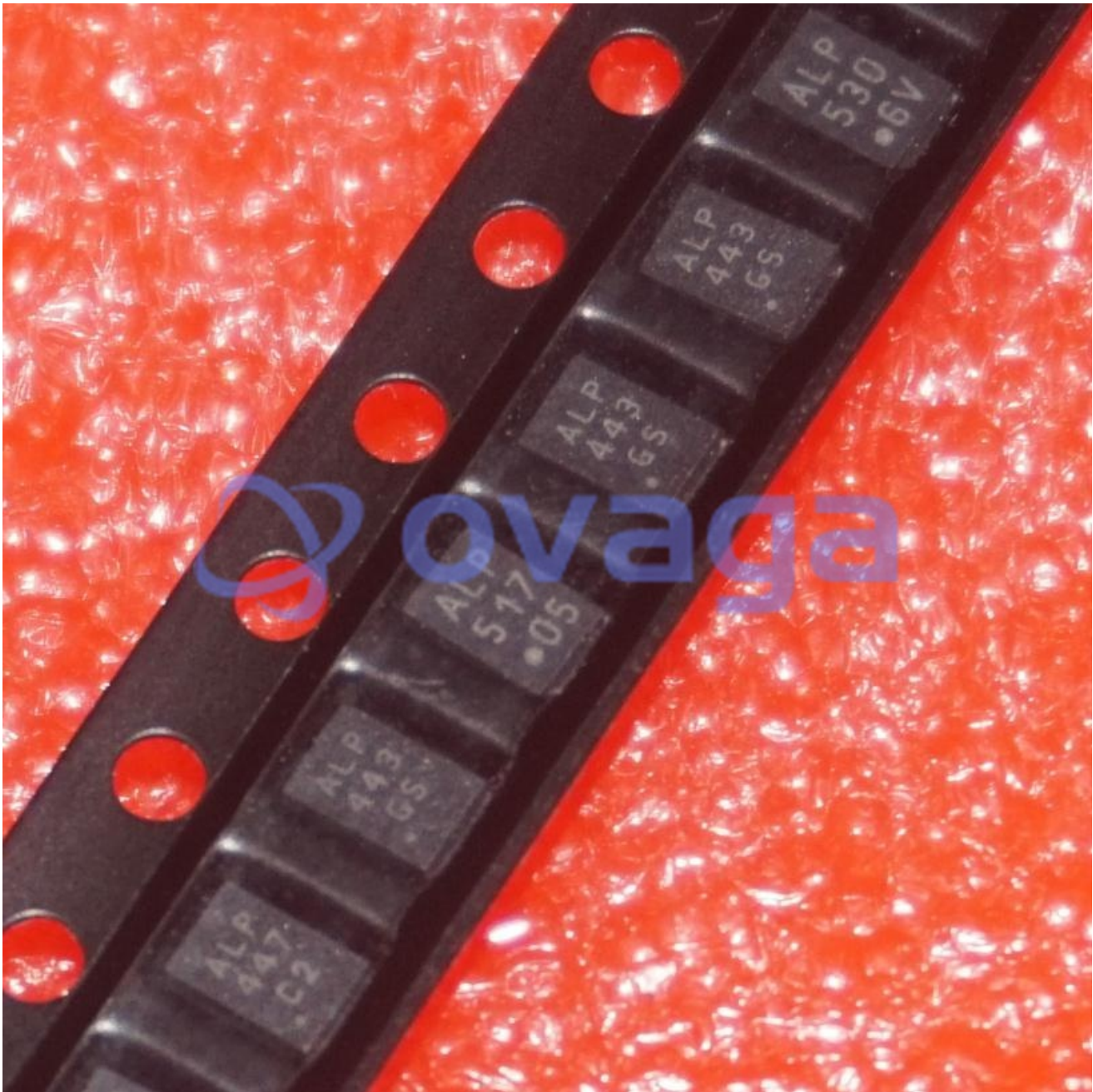
Operating Current: 200 μ A (typical)

Shutdown Current: 0.1 μ A (typical)

2-wire Interface: I2C/SMBus Compatible

Available Packages: 2x3 DFN-8, MSOP-8

AEC-Q100 Qualified Grade 1





Related Products



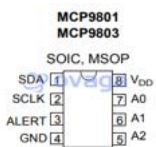
[MCP9701AT-ELT](#)

Microchip Technology, Inc
SC70-5



[EMC1412-2-ACZL-TR](#)

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[MCP9803-M/MS](#)

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