


Temp Sensor Digital Serial (2-Wire, I2C, SMBus) Automotive 8-Pin VSSOP T/R

Manufacturer:	Texas Instruments, Inc
Package/Case:	MSOP8
Product Type:	Sensors, Transducers
RoHS:	RoHS Compliant/Lead free 
Lifecycle:	Active



Images are for reference only

[Inquiry](#)

General Description

The TMP411AQDGKRQ1 is a high-accuracy, digital temperature sensor and monitor designed for automotive and industrial applications. It provides accurate temperature measurements and includes several features to facilitate temperature monitoring and control in various systems.

Key Features

High accuracy: The TMP411AQDGKRQ1 offers temperature accuracy of $\pm 1^{\circ}\text{C}$ (maximum) in the range of -40°C to $+125^{\circ}\text{C}$.

Wide operating voltage range: It operates from 2.7V to 5.5V, making it suitable for a variety of applications.

I2C-compatible interface: The sensor communicates with the host microcontroller through an I2C serial interface, allowing for easy integration into existing systems.

Programmable temperature limits: The TMP411AQDGKRQ1 allows the user to set programmable temperature limits for overtemperature detection and system protection.

Alert functionality: It provides an alert pin that can be configured to indicate temperature limit violations or other conditions.

Low power consumption: The sensor has low power consumption, making it suitable for battery-powered applications.

Automotive-grade qualification: The TMP411AQDGKRQ1 is designed and qualified for automotive applications, meeting the requirements for AEC-Q100 Grade 0.

Application

Automotive climate control systems

Industrial control and automation

Power management and thermal management systems

Battery management systems

Test and measurement equipment

Consumer electronics



Recommended For You

TMP451AIDQFR

Texas Instruments, Inc
WSO8

TMP100AQDBVRQ1

Texas Instruments, Inc
SOT-23-6

TMP75AQDGKRQ1

Texas Instruments, Inc
VSSOP8

TMP112AQDRLRQ1

Texas Instruments, Inc
SOT-563

TMP101NAQDBVRQ1

Texas Instruments, Inc
SOT23-6

TMP102AQDRLRQ1

Texas Instruments, Inc
SOT-563

TMP422AQDCNRQ1

Texas Instruments, Inc
SOT23-8

TMP421AQDCNRQ1

Texas Instruments, Inc
SOT23-8

TMP451AQDQWRQ1

Texas Instruments, Inc
WSO8

TMP451HQDQFRQ1

Texas Instruments, Inc
WSO8

TMP411DQDGKRQ1

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MSOP8

TMP451AQDQFRQ1

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WSO8

TMP75BQDGKRQ1

Texas Instruments, Inc
MSOP8

TMP126EDBVRQ1

Texas Instruments, Inc
SOT23-6

TMP451AIDQFT

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