

## NVT211

# ±1°C Digital Temperature Sensor with Series Resistance Cancellation

## Product Overview

For complete documentation, see the data sheet.

The NVT211 is a dual channel digital thermometer and undertemperature/overtemperature alarm, intended for use in automotive applications. A feature of the NVT211 is series resistance cancellation, where up to 1.5 kOhms; (typical) of resistance in series with the temperature monitoring diode can be automatically cancelled from the temperature result, allowing noise filtering.

## Features

- On-chip and remote temperature sensor
- 0.25°C resolution/1°C accuracy on remote channel
- 1°C resolution/1°C accuracy on local channel
- Automatically cancels up to 1.5 kΩ (typical) of resistance in series with remote diode to allow noise filtering
- Remote and Local THERM limits of 108°C
- Available in two I2C addresses of 0x4C & 0x4D
- Automotive Qualification According to AEC-Q100, Grade 1

## Applications

- Thermal Management

## End Products

- Automotive

## Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Sensor Type	Data Transmission Standard	I <sub>CC</sub> Max (mA)	V <sub>CC</sub> Min (V)	V <sub>CC</sub> Max (V)	T Min (°C)	T Max (°C)	Temperature Error (°C)	Package Type
NVT211CMTR2G	5.2799		Active	Local & Remote	I2C	0.35	2.8	3.6	-40	125	±1	WDFN-8
NVT211DMTR2G	5.2799		Active	Local & Remote	I2C	0.35	2.8	3.6	-40	125	±1	WDFN-8