

Product Overview

NVT210: $\pm 1^{\circ}\text{C}$ Digital Temperature Sensor with Series Resistance Cancellation for Automotive Applications

For complete documentation, see the data sheet.

The NVT210 is a dual channel digital thermometer and undertemperature/overtemperature alarm, intended for use in automotive applications. A feature of the NVT210 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 k Ω (typical) of resistance in series with remote diode to allow noise filtering

Applications

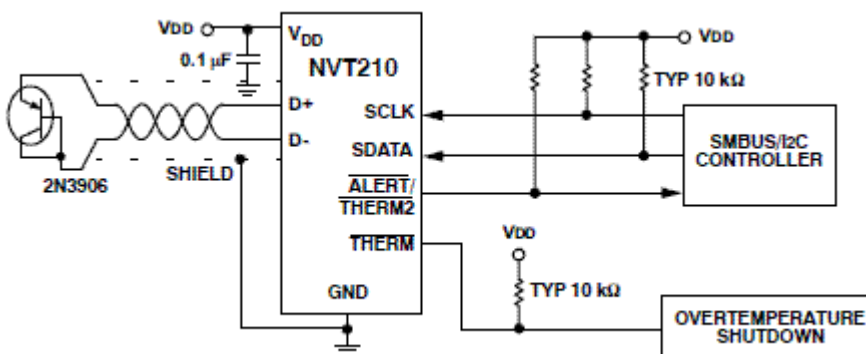
- Thermal Management

End Products

- Automobiles

Part Electrical Specifications												
Product	Pricing (\$/Unit)	Compliance	Status	Sensor Type	Data Transmission Standard	I _{CC} Max (mA)	V _{CC} Min (V)	V _{CC} Max (V)	T Min ($^{\circ}\text{C}$)	T Max ($^{\circ}\text{C}$)	Temperature Error ($^{\circ}\text{C}$)	Package Type
NVT210CDM3R2G	4.7999	AEC Qualified PPAP Capable Pb-free Halide free	Active	Local & Remote	I2C	0.35	2.8	3.6	-40	125	± 1	Micro8™
NVT210CMTR2G	5.2799	AEC Qualified PPAP Capable Pb-free Halide free	Active	Local & Remote	I2C	0.35	2.8	3.6	-40	125	± 1	WDFN-8

Application Diagram



For more information please contact your local sales support at www.onsemi.com.

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