Product Overview

ADT7461: Temperature Sensor with Series Resistance Cancellation

For complete documentation, see the data sheet.

The ADT7461 is a dual-channel digital thermometer and under/over temperature alarm intended for use in PCs and thermal management systems. It is pin- and register-compatible with the ADM1032. The ADT7461 has three additional features: series resistance cancellation (where up to 3 kΩ (typical) of resistance in series with the temperature monitoring diode may be automatically cancelled from the temperature result, allowing noise filtering); configurable ~ALERT output; and an extended, switchable temperature measurement range.

Features

- On-chip and Remote Temperature Sensor
- 0.25°C Resolution/1°C Accuracy on Remote Channel
- 1°C Resolution/3°C Accuracy on Local Channel
- Automatically Cancels up to 3 kΩ (typical) of Resistance in Series with Remote Diode to Allow Noise Filtering
- 2-wire SMBus Serial Interface with SMBus Alert Support
- Programmable Over/Under Temperature Limits
- Up to Two Over Temperature Fail-safe THERM Outputs
- 170 µA Operating Current, 5.5 µA Standby Current

Applications

- Thermal Management

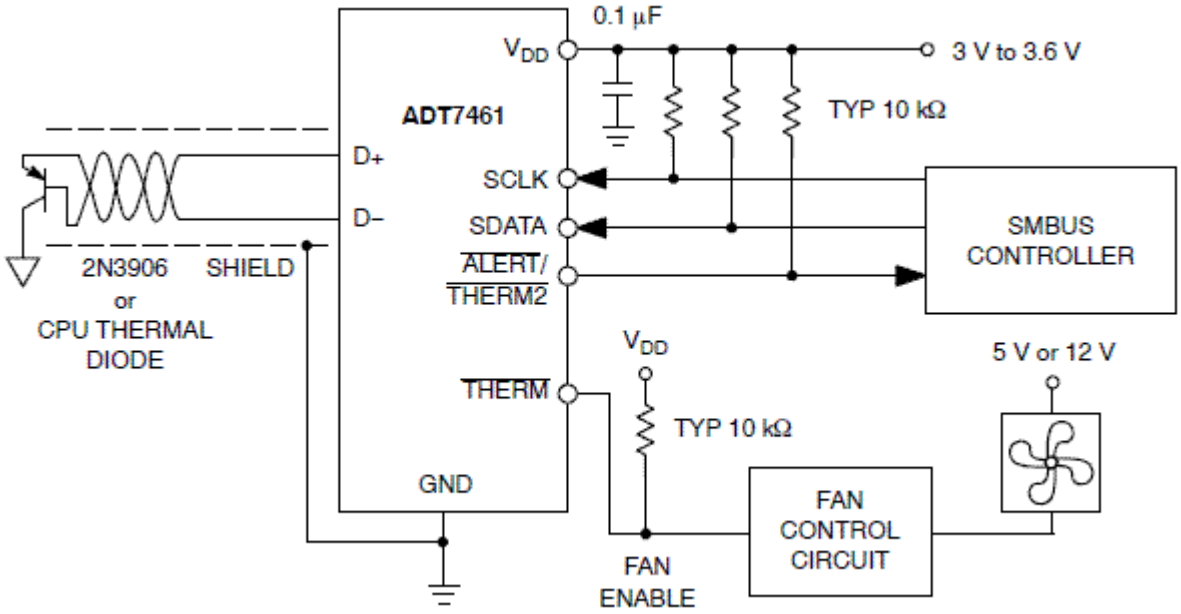
End Products

- Notebook and Desktop Computers
- Game Consoles
- RFID Readers
- DSL Line Cards

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 (°C)	T Max (°C)	Temperature Error (°C)	Package Type
ADT7461ARMZ-R7	2.0533	Pb-free Halide free non AEC-Q and PPAP	Active	Local & Remote	SMBus	0.215	3	5.5	-40	125	±1	Micro8™
ADT7461ARZ-REEL	2.0533	Pb-free non AEC-Q and PPAP	Active	Local & Remote	SMBus	0.215	3	5.5	-40	125	±1	SOIC-8

Application Diagram



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

Created on: 9/20/2020