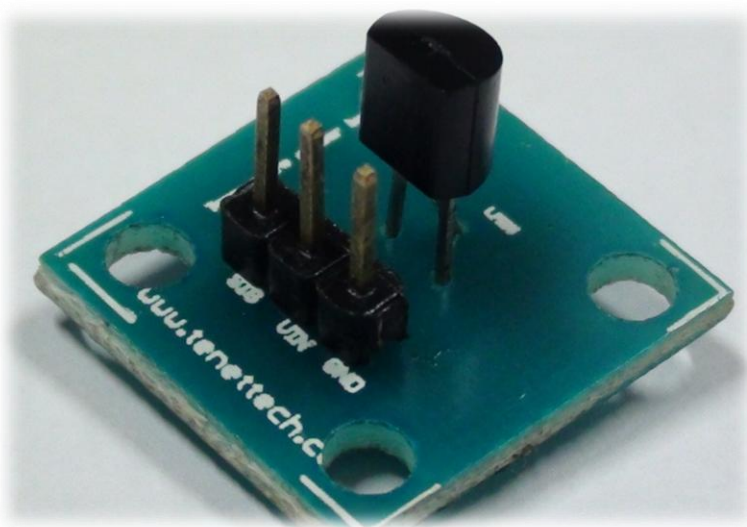


2016



Tenet's LM35 Temperature Sensor breakout



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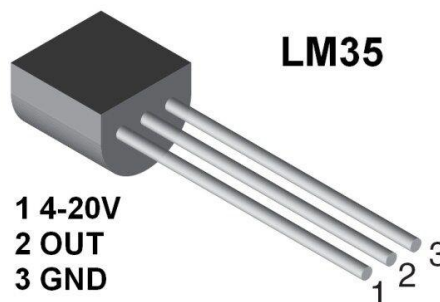
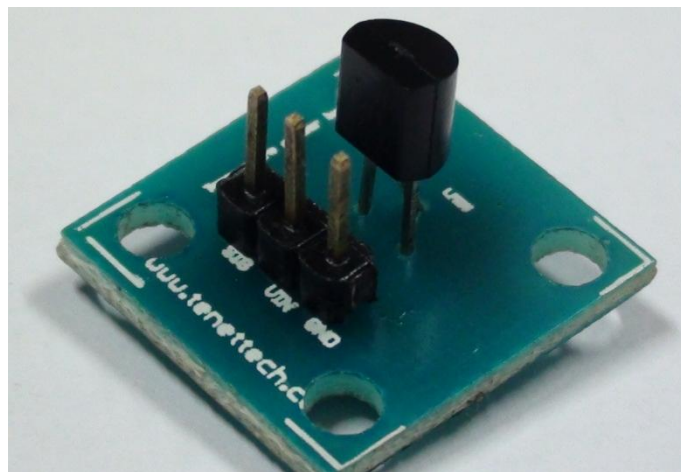
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Introduction

Tenet's LM35breakout is a precision IC temperature sensor with its output proportional to the temperature (in degree Celsius). The sensor circuitry is sealed and therefore it is not subjected to oxidation and other processes. With LM35, temperature can be measured more accurately than with a thermistor. It also possess low self-heating and does not cause more than 0.1 °C temperature rise in still air.

The operating temperature range is from -55°C to 150°C. The output voltage varies by 10mV in response to every °C rise/fall in ambient temperature, i.e., its scale factor is 0.01V/°C.



Features

- Calibrated directly in ° Celsius (Centigrade)
- Linear + 10.0 mV/°C scale factor
- 0.5°C accuracy guaranteed (at +25°C)



- Rated for full -55° to $+150^{\circ}\text{C}$ range
- Suitable for remote applications
- Low cost due to wafer-level trimming
- Operates from 4 to 30 volts
- Less than $60\text{ }\mu\text{A}$ current drain
- Low self-heating, 0.08°C in still air
- Nonlinearity only $\pm 1/4^{\circ}\text{C}$ typical
- Low impedance output, $0.1\text{ }\Omega$ for 1 mA load

Applications

- Temperature controlled Fan
- Home automation
- Contact temperature sensor
- Controlling Greenhouse environment

Specifications: Absolute maximum rating

Parameters	Specifications
Supply Voltage	+35V to -0.2V
Output Voltage	+6V to -1.0V
Output Current	10 mA
Storage Temp.	-60°C to $+150^{\circ}\text{C}$
Lead Temp. (Soldering, < 8 seconds)	300°C

