


I-ANU TEMPERATURE MEASUREMENT WITH MCP9700

Required knowledge -

	<p><b>MCP9700 temperature sensor - LM35 temperature sensor</b></p> <p>Thermistor</p> <p>MCP9700 datasheet</p>
---	---

Components

MCP9700 temperature sensor	MCP9700 Farnell: 1332166
----------------------------	--------------------------

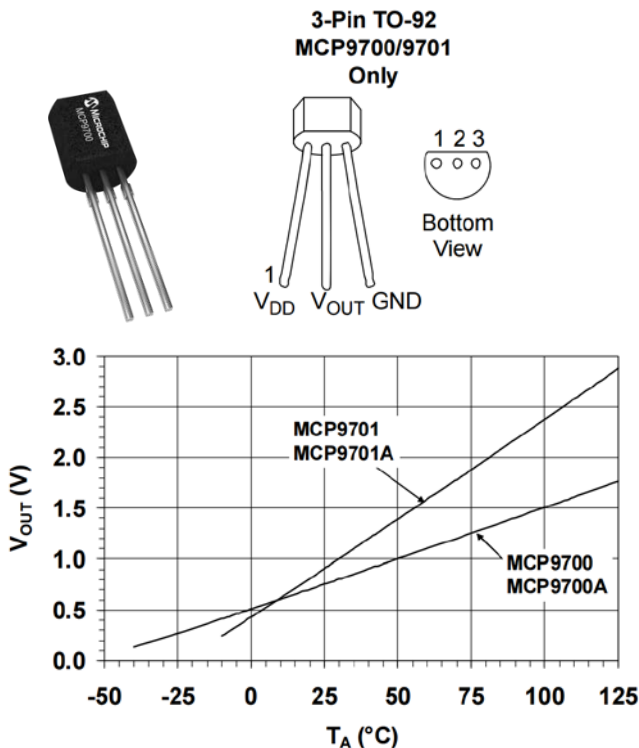
The MCP9700 is a cheap linear temperature sensor that can be connected to a microcontroller without any other components.

This sensor needs no calibration and is capable of measuring temperatures between 40°C and + 125°C.

**Consult the datasheet of the MCP9700 for more info.**

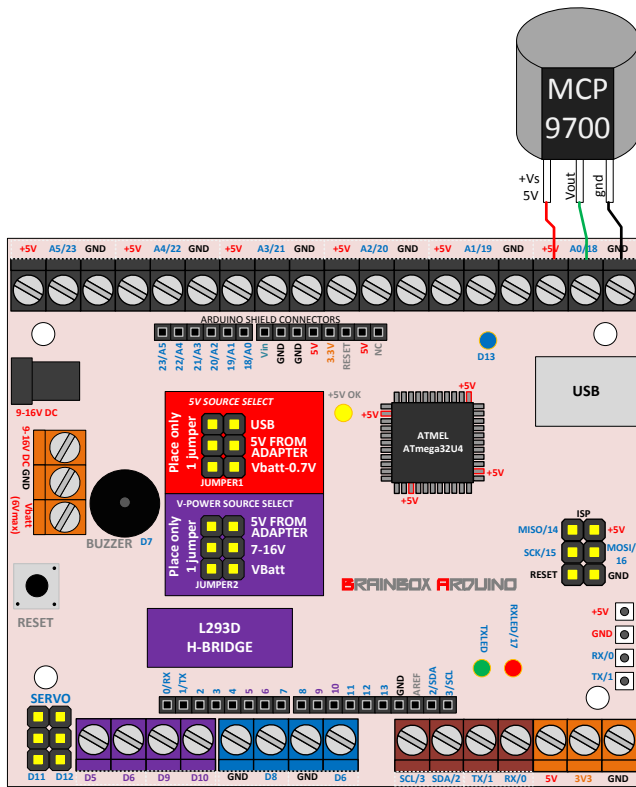
Comparison:

MCP9700	Cheaper, range from -40°C to +125°C, 10mV/°C, pinout ideal for Brainbox Only TO92 package
LM35	More expensive, range from +2°C tot +150°C, 10mV/°C, pinout crossed for Brainbox TO92 and TO220 package



De MCP9700 output voltage is 10mV/°C. At 0°C this is 0.5 Volt. At 100°C this is 1.5V.

Connect the MCP9700 to one of the 6 analog inputs (A0, A1, A2, A3, A4, A5)



CODE EXAMPLE: 'I-AN'