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Part Number: MCP9700DM-TH1

MCP9700 Thermistor Demo Board

Devices Supported: MCP9700, MCP6S92



Summary Description:

The MCP9700 Thermistor Demo Board contains the analog circuitry to measure temperature. It uses BC Components' 232264055103 NTC thermistor to convert temperature to resistance. The thermistor is placed in a voltage divider which converts resistance to voltage. This voltage is filtered and placed at the MCP6S22 Programmable Gain Amplifier's (PGA) CH0 input. The PGA gains and buffers the thermistor. In addition, the board includes the MCP9700 Linear Active Thermistor. The MCP9700 outputs voltage proportional to temperature. A PIC18F2550 is used to both measure the voltage output of the MCP9700 and the MCP6S22 using an integrated 10-bit Analog to Digital Converter and communicate to a PC via USB interface. Temperature can be datalogged using Microchip Thermal Management Software Graphical User Interface (GUI).

Features:

- MCP9700 Temperature Sensor
- Thermistor Solution with adjustable range
- PC interface via USB
- Thermal Management Graphical User Interface