The Thermistor datasheet example project (page 1 of 2)

Features

- Thermistor Calculator component configuration and usage example
- Example of measuring temperature using the NTC thermistor in range -20 to +80 Celsius degree with 1/100 ths of Celsius degree resolution

Project Description

This example project demonstrates the usage of the Thermistor Calculator component for measuring temperature using CY8CKIT-025 - PSoC Precision Analog Temperature Sensor Expansion Board Kit.

This project consists of the Thermistor Calculator, Character LCD, Opamp, Vref, AMux, and ADC_DelSig components. Opamp and Vref components are used for Thermistor interface circuit. AMux, and ADC_DelSig components are used for measuring voltage across thermistor and reference resistor. Thermistor Calculator component is used for temperature calculation. Character LCD component is used for displaying current temperature.

A CY8CKIT-001 with a processor module and CY8CKIT-025 are required for this project.

Procedure

1. Connect CY8CKIT-025 to Port A of CY8CKIT-001 PSoC DVK.
2. Insert jumper on CY8CKIT-025 at J5 2 and 3 for internal thermistor usage.
3. Build the project and program the hex file to the target device.
4. Power on CY8CKIT-001 PSoC DVK.
5. Observe temperature on LCD.

Expected Results

First line of LCD displays project identification information.
Second line displays current Temperature value.

The Thermistor datasheet example project (page 2 of 2)