SparkFun TMP102 Temperature Sensor

We use the SparkFun TMP102 Temperature Sensor.

SparkFun provides a Hookup Guide for the SparkFun TMP102 Temperature Sensor.

Arduino IDE

We use the SparkFun TMP102 Breakout Library.

Open Arduino IDE
$: sudo arduino
> Select Sketch>Include Library>Manage Libraries…
> Select **SparkFun TMP102 Breakout**
> Click **1.1.0** Install
$: sudo chmod -R +666 /opt/SparkFun_RedBoard_Turbo

An already downloaded copy of the SparkFun TMP102 library (used by installation script and Dockerfile) can be found here:
sw/SparkFun_RedBoard_Turbo/SparkFun_TMP102_Temperature_Sensor/
SparkFun_TMP102_Arduino_Library-master.zip

The library is installed under
/opt/SparkFun_RedBoard_Turbo/Arduino/libraries/**SparkFun_TMP102_Breakout**.

Read Temperature

We communicate with the SparkFun TMP102 Temperature Sensor over **I2C** using **address 0x48**.

Read Temperature

$: sudo cp -r
sw/SparkFun_RedBoard_Turbo/SparkFun_TMP102_Temperature_Sensor/**read_temperature**
/opt/SparkFun_RedBoard_Turbo/Arduino
$: sudo chmod -R +666 /opt/SparkFun_RedBoard_Turbo

Arduino IDE
$: arduino
> File>Sketchbook>**read_temperature**
> Click Serial Monitor icon
> Select 115200 baud
> Click Upload icon (until flash is successful)

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Temperature [C]: 29.44

Script

Run as part of the Sensor Suite installation script
sw/NVIDIA_Jetson_Xavier_NX/Scripts$ bash **install-7-Sensor_Suite.sh**

Dockerfile

Part of the Sensor Suite Dockerfile
sw/NVIDIA_Jetson_Xavier_NX/Docker/**Dockerfile-7-Sensor_Suite**