# **SparkFun LPS25HB Pressure Sensor**

We use the **SparkFun LPS25HB Pressure Sensor**.

#### Arduino IDE

We use the **SparkFun LPS25HB Library**.

Open Arduino IDE

\$: sudo arduino

- > Select Sketch>Include Library>Manage Libraries...
- > Select SparkFun LPS25HB Pressure Sensor Library
- > Click **1.1.0** Install

\$: sudo chmod -R +666 /opt/SparkFun\_RedBoard\_Turbo

An already downloaded copy of the SparkFun LPS25HB library (used by installation script and Dockerfile) can be found here:

sw/SparkFun\_RedBoard\_Turbo/SparkFun\_LPS25HB\_Pressure\_Sensor/

SparkFun\_LPS25HB\_Arduino\_Library-master.zip

The library is installed under

/opt/SparkFun\_RedBoard\_Turbo/Arduino/libraries/**SparkFun\_LPS25HB\_Pressure\_Sensor\_Library**.

### Read Pressure (air)

We communicate with the SparkFun LPS25HB Pressure Sensor over **I2C** using **address 0x5D**.

#### **Read Pressure**

\$: sudo cp -r sw/SparkFun\_RedBoard\_Turbo/SparkFun\_LPS25HB\_Pressure\_Sensor/read\_pressure/opt/SparkFun\_RedBoard\_Turbo/Arduino

\$: sudo chmod -R +666 /opt/SparkFun\_RedBoard\_Turbo

Arduino IDE

\$: arduino

- > File>Sketchbook>read\_pressure
- > Click Serial Monitor icon
- > Select 115200 baud
- > Click Upload icon (until flash is successful)

SparkFun LPS25HB Pressure Sensor

Pressure [hPa]: 1010.65, Temperature [C]: 28.09

# **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