

Module Documentation

SENSOR API

Data Structures

- struct **bme680_field_data**
Sensor field data structure.
- struct **bme680_calib_data**
Structure to hold the Calibration data.
- struct **bme680_tph_sett**
BME680 sensor settings structure which comprises of ODR, over-sampling and filter settings.
- struct **bme680_gas_sett**
BME680 gas sensor which comprises of gas settings and status parameters.
- struct **bme680_dev**
BME680 device structure.

Functions

- int8_t **bme680_init** (struct **bme680_dev** *dev)
This API is the entry point. It reads the chip-id and calibration data from the sensor.
- int8_t **bme680_set_regs** (const uint8_t *reg_addr, const uint8_t *reg_data, uint8_t len, struct **bme680_dev** *dev)
This API writes the given data to the register address of the sensor.
- int8_t **bme680_get_regs** (uint8_t reg_addr, uint8_t *reg_data, uint16_t len, struct **bme680_dev** *dev)
This API reads the data from the given register address of the sensor.
- int8_t **bme680_soft_reset** (struct **bme680_dev** *dev)
This API performs the soft reset of the sensor.
- int8_t **bme680_set_sensor_mode** (struct **bme680_dev** *dev)
This API is used to set the power mode of the sensor.
- int8_t **bme680_get_sensor_mode** (struct **bme680_dev** *dev)
This API is used to get the power mode of the sensor.
- void **bme680_set_profile_dur** (uint16_t duration, struct **bme680_dev** *dev)
This API is used to set the profile duration of the sensor.
- void **bme680_get_profile_dur** (uint16_t *duration, const struct **bme680_dev** *dev)
This API is used to get the profile duration of the sensor.
- int8_t **bme680_get_sensor_data** (struct **bme680_field_data** *data, struct **bme680_dev** *dev)
This API reads the pressure, temperature and humidity and gas data from the sensor, compensates the data and store it in the bme680_data structure instance passed by the user.