- int8\_t **bme680\_set\_sensor\_settings** (uint16\_t desired\_settings, struct **bme680\_dev** \*dev)

  This API is used to set the oversampling, filter and T,P,H, gas selection settings in the sensor.
- int8\_t bme680\_get\_sensor\_settings (uint16\_t desired\_settings, struct bme680\_dev \*dev)

  This API is used to get the oversampling, filter and T,P,H, gas selection settings in the sensor.

## **Common macros**

- #define **INT8\_C**(x)  $S8_C(x)$
- #define **UINT8\_C**(x)  $U8_C(x)$
- #define **INT16\_C**(x)  $S16_C(x)$
- #define **UINT16** C(x) U16 C(x)
- #define **INT32\_C**(x) S32\_C(x)
- #define **UINT32\_C**(x) U32\_C(x)
- #define **INT64 C**(x) S64 **C**(x)
- #define **UINT64\_C**(x)  $U64_C(x)$

## C standard macros

- enum bme680\_intf { BME680\_SPI\_INTF, BME680\_I2C\_INTF } Interface selection Enumerations.
- typedef int8\_t(\* bme680\_com\_fptr\_t) (uint8\_t dev\_id, uint8\_t reg\_addr, uint8\_t \*data, uint16\_t len)
- typedef void(\* bme680\_delay\_fptr\_t) (uint32\_t period)
- #define **NULL** ((void \*) 0)
- #define BME680\_POLL\_PERIOD\_MS UINT8\_C(10)
- #define BME680\_I2C\_ADDR\_PRIMARY UINT8\_C(0x76)
- #define BME680 I2C ADDR SECONDARY UINT8 C(0x77)
- #define **BME680\_CHIP\_ID UINT8\_C**(0x61)
- #define BME680\_COEFF\_SIZE UINT8\_C(41)
- #define BME680\_COEFF\_ADDR1\_LEN UINT8\_C(25)
- #define BME680\_COEFF\_ADDR2\_LEN UINT8\_C(16)
- #define **BME680\_FIELD\_LENGTH UINT8\_C**(15)
- #define BME680\_FIELD\_ADDR\_OFFSET UINT8 C(17)
- #define BME680\_SOFT\_RESET\_CMD UINT8\_C(0xb6)
- #define **BME680\_OK INT8\_C**(0)
- #define BME680\_E\_NULL\_PTR INT8\_C(-1)
- #define BME680\_E\_COM\_FAIL INT8\_C(-2)
- #define BME680\_E\_DEV\_NOT\_FOUND INT8\_C(-3)
- #define BME680\_E\_INVALID\_LENGTH INT8\_C(-4)
- #define BME680\_W\_DEFINE\_PWR\_MODE INT8\_C(1)
- #define BME680 W NO NEW DATA INT8 C(2)
- #define **BME680\_I\_MIN\_CORRECTION UINT8\_C**(1)
- #define **BME680\_I\_MAX\_CORRECTION UINT8\_C**(2)
- #define BME680 ADDR RES HEAT VAL ADDR UINT8 C(0x00)
- #define BME680\_ADDR\_RES\_HEAT\_RANGE\_ADDR\_UINT8\_C(0x02)
- #define BME680\_ADDR\_RANGE\_SW\_ERR\_ADDR UINT8\_C(0x04)
- #define BME680\_ADDR\_SENS\_CONF\_START UINT8\_C(0x5A)
- #define BME680\_ADDR\_GAS\_CONF\_START UINT8\_C(0x64)
- #define **BME680\_FIELD0\_ADDR UINT8\_C**(0x1d)
- #define BME680\_RES\_HEAT0\_ADDR UINT8\_C(0x5a)
- #define BME680\_GAS\_WAIT0\_ADDR UINT8\_C(0x64)
- #define BME680\_CONF\_HEAT\_CTRL\_ADDR\_UINT8\_C(0x70)