**BME280**

**I²C:**

* 7-bit address (either 0x76 or 0x77, depending on the SDO pin's status).
* SDO connected to ground -> 0x76 addr
* SDO connected to VDDIO -> 0x77 addr

Uma imagem com texto, diagrama, captura de ecrã, ecrã

Descrição gerada automaticamente

**Registers:**

* 8 bits
* **1º ctrl\_hum:** sets the humidity data acquisition: only effective after a write operation to “ctrl\_meas”.
  + Register 0xF2
* **2º ctr\_meas:** Set the pressure and temperature data accquisition. Needs to be written after chaning ctrl\_hum for the changes to become effective.
  + Register 0xF74
    - **Bit 1,0 -**> mode[1:0] (sleep mode 00, forced mode 01/10, normal mode 11)
    - **Bit 2,3,4,5,6,7** -> oversampling osrs\_t
* **Status:** 0xF3
* **Register 0xF7…0xF9** (\_msb,\_lsb, \_xlsb) -> contains the MSB of the raw pressure
* **Register 0xFA…0xFC ->** -> contains the MSB of the raw temperature
* **Register 0xFD..0xFE** -> contains MSB of the raw humidty

**Uma imagem com texto, captura de ecrã, file, diagrama

Descrição gerada automaticamenteI2C write**

**I2C Read**

**Uma imagem com texto, captura de ecrã, diagrama, file

Descrição gerada automaticamente**

**Register data** refers to actual information or values stored or to be written into the register specified by the register address. Is the actual content value you want to read or write. Could be like a configuration setting or data retrieved from sensor.

* Example: Write value 0x27 to register cntrl\_meas (0xF4) if we are configuring the sensor to measure temperature and pressure with specific oversampling settings and in normal mode.

**Register Address:** Identifier of a particular register. For exemple, the register that holds the MSB of the raw temperature 0xFA