



s-Sense by itbrainpower.net

What's the human mind without senses? Similar, what's the IoT without sensors support? **Gas scanner? Digital nose? Specific smell detection? Artificial intelligence sensors? Air quality sensor? Environmental sensor? CO2? tVoC? bVoC? temperature? humidity? pressure?**

This why we designed our sensor series gathered under *s-Sense* name, all sharing the very same form factor [13 x 27mm] and the same interfaces. We proudly present to you 7 environmental and air quality sensors (BME688, CCS811 + HDC2010, CCS811, BME680, HDC2010, BME280 and BMP 280) having I2C interface.

s-Sense sensor breakout v1.02 common features:

- compatible with Arduino [all 3.3V and 5V], xyz-mIoT shields, Raspberry PI [all versions] and other SBC / MCU Arduino [Beagle Bone, Teensy, ...]
- power in with voltages between 3.3-5V [default],
- I2C interface, 3.3-5V auto [default, the I2C reference voltage follows the power in voltage],
- I2C reference voltage option via solder jumper [Eg.: power at 5V and I2C at 3.3V; power and I2C at 2.2V],
- alternative sensor I2C addresses via solder jumpers,
- big soldering pads on 2.54 mm [0.1"] pitch for standard row header / connector,
- very light and slim - 13x27mm, around 2grams.

Arduino C, Raspberry PI [Python] software support.

Designed and manufactured in EU by R&D Software Solutions.

<https://itbrainpower.net/sensors/>

BME688* breakout

gas scanner, VOCs, VCSs, hum., press. and temp. air quality sensor with AI

PN: SS-BME688#I2C SKU: ITBP-6007

<https://itbrainpower.net/sensors/BME688>

CCS811* + HDC2010* breakout

carbon dioxide, total Volatile Organic Compounds, temperature and humidity - air quality sensor

PN: SS-HDC2010+CCS811#I2C SKU: ITBP-6006

<https://itbrainpower.net/sensors/HDC2010+CCS811>

BME680* breakout

gas, humidity, pressure and temperature air quality sensor

PN: SS-BME680#I2C SKU: ITBP-6003

<https://itbrainpower.net/sensors/BME680>

CCS811* breakout

carbon dioxide and total Volatile Organic Compounds - air quality sensor

PN: SS-CCS811#I2C SKU: ITBP-6004

<https://itbrainpower.net/sensors/CCS811>

BME280* breakout

temperature, humidity and pressure - environmental sensor

PN: SS-BME280#I2C SKU: ITBP-6002

<https://itbrainpower.net/sensors/BME280>

HDC2010* breakout

high accuracy temperature and humidity environmental sensor

PN: SS-HDC2010#I2C SKU: ITBP-6004

<https://itbrainpower.net/sensors/HDC2010>

BMP280* breakout

temperature and pressure environmental sensor

PN: SS-BMP280#I2C SKU: ITBP-6001

<https://itbrainpower.net/sensors/BMP280>

* digital sensors provided by AMS (CCS811), Bosch Sensortec (BME688, BME680, BME280 and BMP280) and Texas Instruments (HDC2010)