

BME280 breakout (Pimoroni)

Pimoroni · MPN PIM472 · category: env-sensor

Canonical record: <https://partsgraph.ai/catalog/parts/pimoroni-bme280>

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ELECTRICAL

VDD supply (bare IC): **1.71–3.6 V** · datasheet p.2

Logic compatibility: **3.3V or 5V compatible** · vendor page

Reverse polarity protection: **Yes** · vendor page

Sleep current (sensor): **0.1 µA** · datasheet p.2

Current @ 1 Hz (H+P+T): **3.6 µA** · datasheet p.2

Sensor power modes: **sleep mode, forced mode and normal mode** · datasheet p.14

Start-up time, max (ms): **2** · datasheet p.8

PERFORMANCE

Humidity range: **0–100 %** · datasheet p.2

Humidity accuracy: **3 %** · datasheet p.2

Humidity response time ($\tau_{63\%}$): **1 s** · datasheet p.2

Humidity hysteresis ($\pm\%$ RH): **1 %** · datasheet p.2

Pressure RMS noise (filtered): **0.2 Pa** · datasheet p.2

Pressure offset temp coefficient ($\pm$ Pa/K): **1.5 Pa/K** · datasheet p.2

Temperature accuracy @25 °C (°C): **±0.5** · datasheet p.11

Pressure output resolution (Pa): **0.18** · datasheet p.11

Recommended burn-in time (min.): **20 minutes** · vendor page

INTERFACE

I2C address (selectable): **0x76 or 0x77** · vendor page

Qwiic/STEMMA QT connector: **Yes** · vendor page

I2C bus speed, sensor max: **3.4 MHz** · datasheet p.2

Chip ID: **0x60** · datasheet p.26

Default I2C address: **0x76** · vendor page

Raspberry Pi header pins used: **pins 1, 3, 5, 7, 9** · vendor page

Breakout Garden compatible: **Yes** · vendor page

MECHANICAL

Board dimensions: **19x19x4.7mm** · vendor page

Sensor package (bare IC): **2.5 mm x 2.5 mm x 0.93 mm** · datasheet p.2

Headers included (male + right-angle female): **Yes** · vendor page

COMPLIANCE

RoHS: **RoHS compliant** · datasheet p.2

Halogen-free: **Yes** · datasheet p.2

Moisture sensitivity: **MSL1** · datasheet p.2

Lead-free soldering: **Yes** · datasheet p.45

GENERAL

Pressure range: **300–1100 hPa** · datasheet p.2

Temperature range: **-40–85 °C** · datasheet p.2

INDICATIVE PRICES

Pimoroni: £13.80 GBP · as of 2026-08-22 · <https://shop.pimoroni.com/products/bme280-breakout>

Prices are indicative and dated, captured only from vendors' machine-stated markup. Availability is never claimed.

SOURCES — THE AUTHORITATIVE DOCUMENTS

Bosch BME280 datasheet: <https://www.bosch-sensortec.com/media/boschsensortec/downloads/datasheets/bst-bme280-ds002.pdf>

sha-256 a2ccdb449fec94380742fe8eec851a11d9bd4142252d332b34682b4deecd7d89

Pimoroni product page: <https://shop.pimoroni.com/products/bme280-breakout>

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