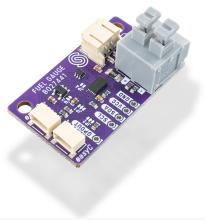
PRODUCT DATASHEET



Fuel Gauge BQ27441 Breakout

333065

The Fuel Gauge BQ27441 accurately measures voltage, state of charge, and remaining capacity for 1S lithium batteries via I2C.

Full product documentation, files and tutorials: **solde.red/333065**

CORE ATTRIBUTES

SKU **333065**

WEIGHT **8 g**

BARCODE **732388670901**

DESCRIPTION

Fuel gauge is a special type of accessory for lithium batteries that very precisely measures the state of the battery. This includes **current voltage [mV]**, **state of charge [%]** and probably most interestingly: r**emaining capacity in the battery [mAh]**. It is used with 1S batteries, and provides all this information via the I2C interface.

On our board you can find qwiic connectors which allow I2C communication with microcontroller. Also, there is a JST input for any pouch battery you can find in our offer, as well as quick connect terminal connector for input if your source doesn't have JST connector.

TECHNICAL DETAILS

- **For 1S batteries (4.2V)**
- **Communication:** I2C
- **Measures:** voltage, state of charge, capacity
- **Dimensions:** 38 × 22 mm / 1.5 × 0.9 inch

SPECIFICATIONS

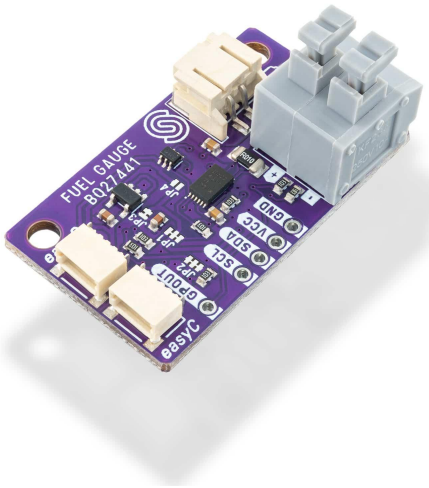
INTERFACE	I2C
QWIIC COMPATIBLE	Yes
I2C ADDRESS DEFAULT	0x55
I2C ADDRESS CHANGEABLE	No
BREADBOARD COMPATIBLE	Yes
MEASUREMENT TYPES	Voltage, Battery State

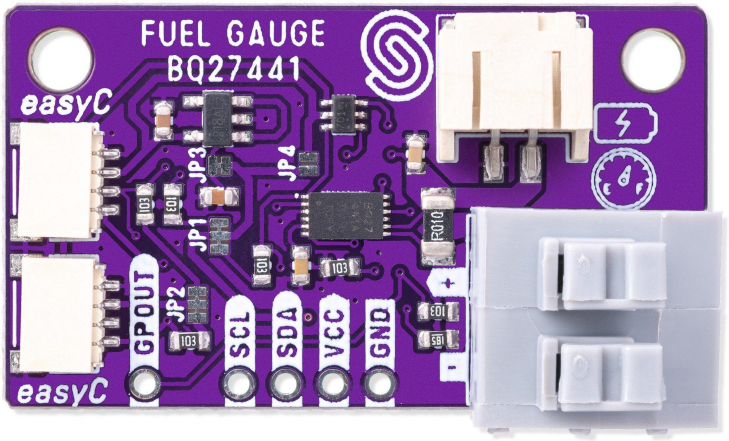
IC PART NUMBER	BQ27441
SUPPLY VOLTAGE MIN V	3.3
SUPPLY VOLTAGE MAX V	5
LOGIC LEVEL	3V3 Or 5V

LINKS

Arduino Library	https://github.com/SolderedElectronics/Soldered-BQ27441-Battery-Fuel-Gauge-Arduino-Library
Open Source Hardware Files	https://github.com/SolderedElectronics/Fuel-gauge-BQ27441-breakout-hardware-design
Full Documentation	https://docs.soldered.com/bq27441/overview/
Arduino: Get Started	https://docs.soldered.com/bq27441/arduino/geting-started/
Hardware Details	https://docs.soldered.com/bq27441/hardware/
Arduino Library Documentation	https://docs.soldered.com/bq27441/arduino/examples/
mim_package	https://checkmim.com/packages/solderedelectronics+Soldered-BQ27441-MicroPython-Library
MicroPython Module	https://github.com/SolderedElectronics/Soldered-BQ27441-MicroPython-Library
Pinout	https://cms.soldered.com/products/333065/media/333065_pinout-png_56875f.svg

GALLERY


FUEL GAUGE
BQ27441
easyC
GND
VCC
SDA
SCL
GPOUT


FUEL GAUGE
BQ27441
easyC
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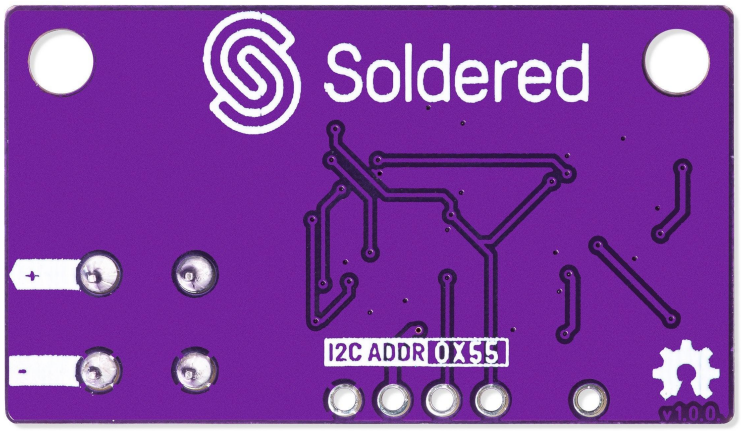
JP4
JP1
JP2
GPOUT
SCL
SDA
VCC
GND
easyC


Soldered
I2C ADDR 0X55
v1.0.0