

7 Semi MAX17048 LiPoly - Lilon Fuel Gauge user manual



Why to use this device?

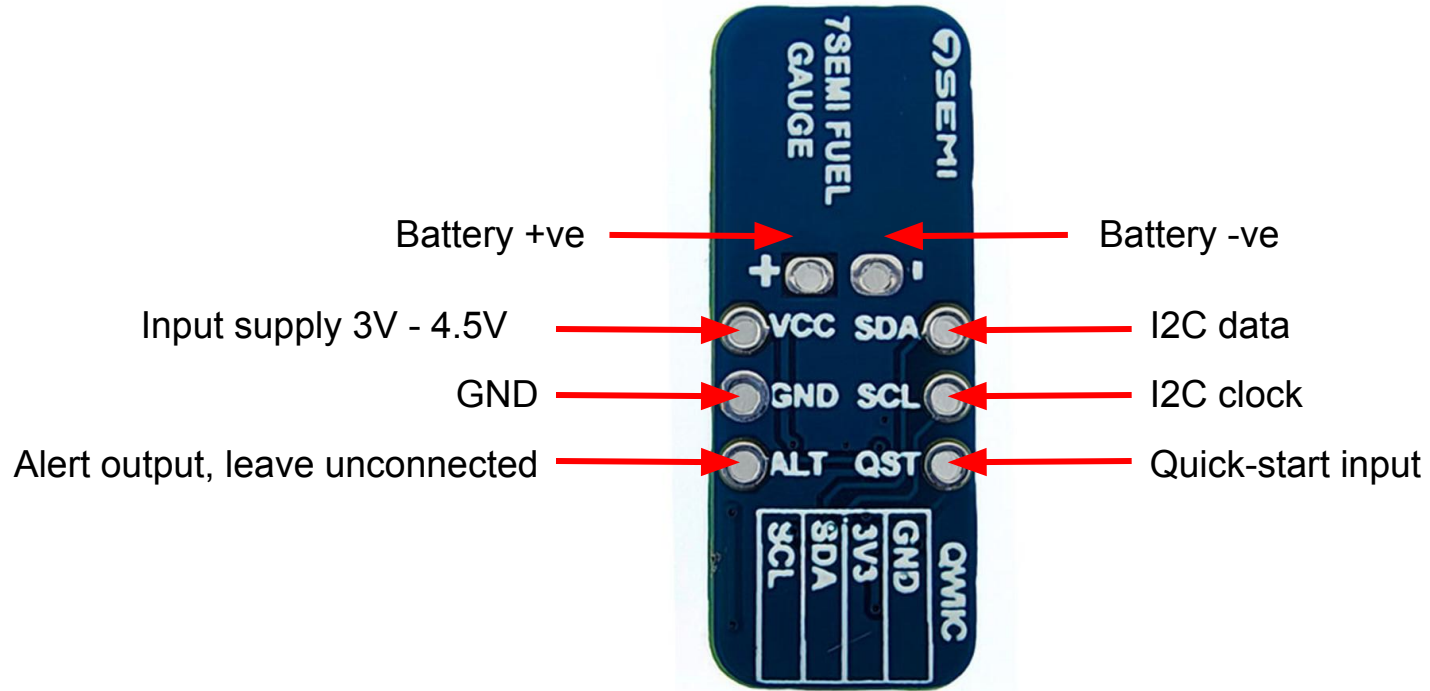
Do you want to constantly monitor your battery voltage precisely without using your multimeter or any kind of voltmeter?

Then this module suits your need and it will give you accurate readings all the time.

Just sit back & let this device do the rest of the monitoring work.

Not only that, you can ALERT your microcontroller by setting some threshold values whenever the battery goes below or above. By doing so you can protect your battery from over charging/ discharging because Li batteries are dangerous if you don't treat them well.

Pinouts

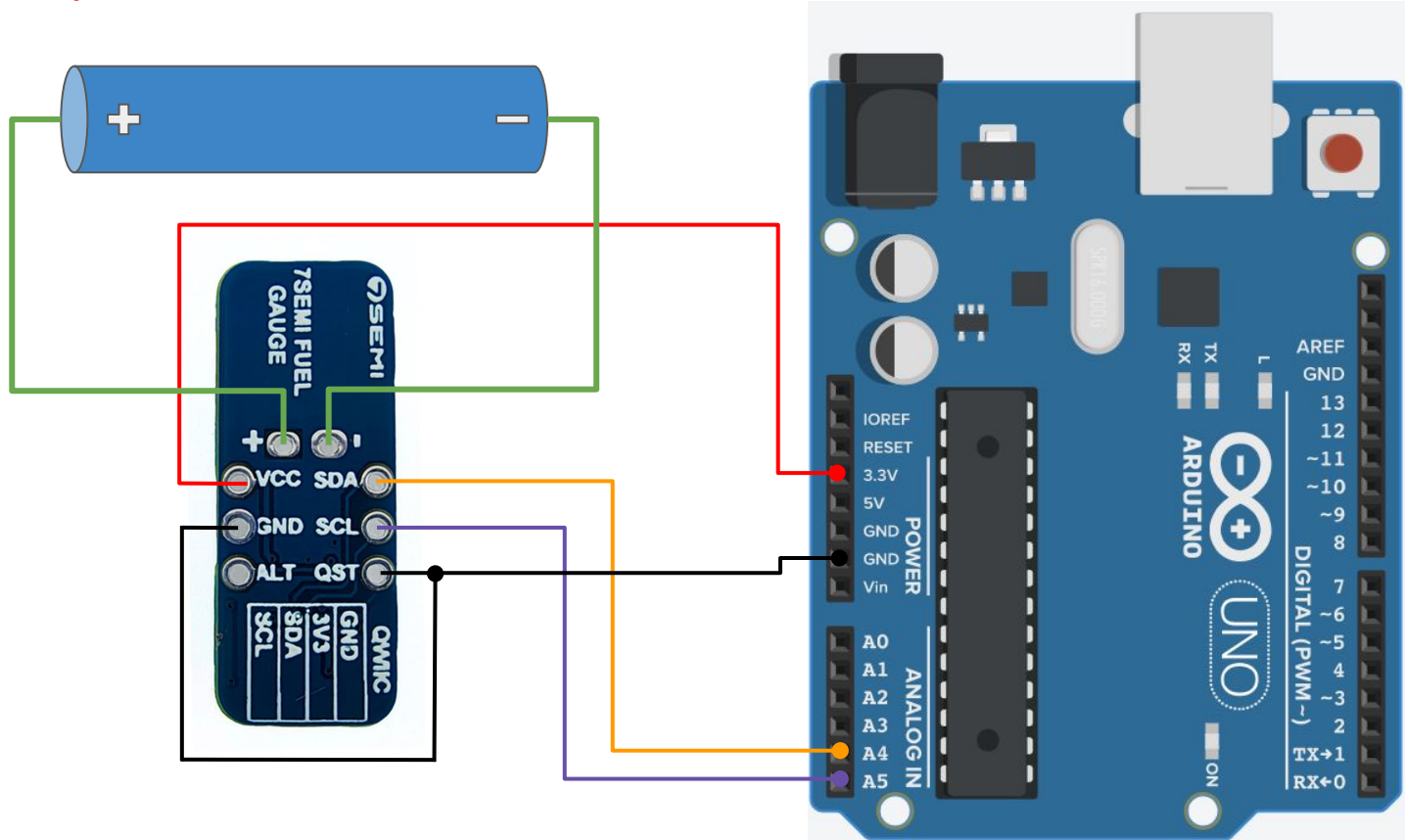


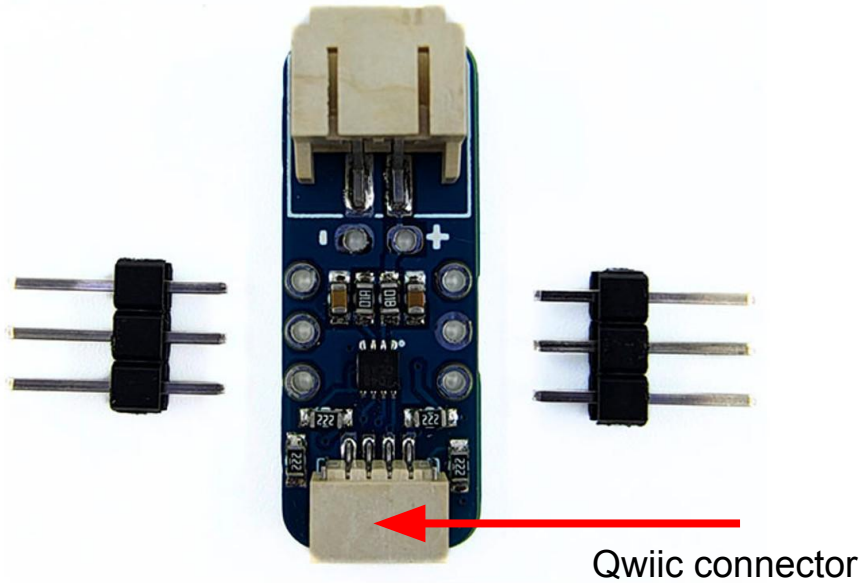
Connections of Li-poly/ Li-ion fuel gauge with Arduino Uno/ Nano

Fuel gauge module	Arduino Uno/ Nano
VCC	3.3V
GND	GND
SDA	A4
SCL	A5
QST	GND

MAX17048 IC will not respond to I2C scans or commands unless and until you connect a cell to it.

Check the polarity of the cell !





We have also included Sparkfun Qwiic compatible STEMMA QT connectors for the I2C bus, so for your initial testing if you wish to not solder the header pins then you can use that connector without any issue.

Qwiic cable reference link:- [Qwiic cable](#)

1. In order to get started with the Fuel gauge we have to know the I2C address of the device. We are just scanning the address & checking whether we are able to find the I2C address.
2. For doing so we have to upload a simple sketch to the Arduino Uno/ Nano.
3. Open the code link:- [I2C address scan code](#)
4. Copy the code provided in the above link and paste it in your Arduino IDE.
5. Select proper board & COM port settings before uploading the code.
Note:- You have to connect a **1S Li-ion/ Li-poly battery** to the battery terminals given on the module. If you don't do this then you will not be able to get the I2C address of the device.
6. After successfully uploading the code you should be able to see “**0x36**” as the default address of the device in the serial monitor of your Arduino IDE.
7. Now our next step is to get the battery parameters from the device.
8. Follow the connection table & make the connections.
9. Download the example code provided on the website under product description and test.
Code link:- [MAX17048-fuel-gauge](#)