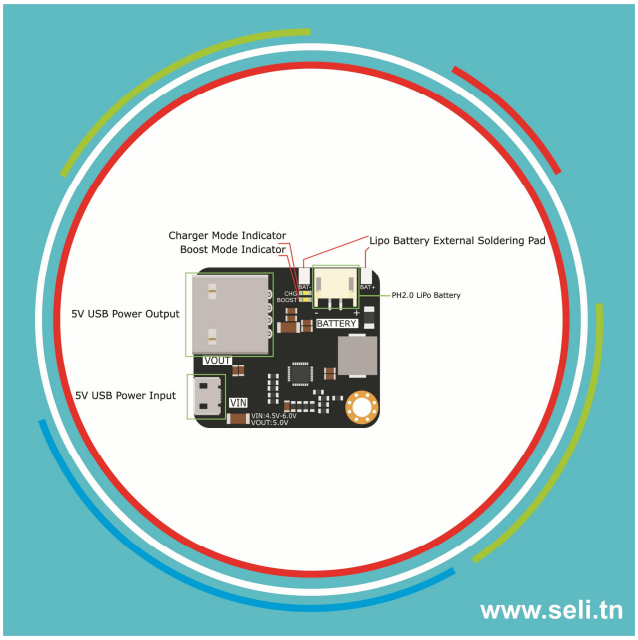
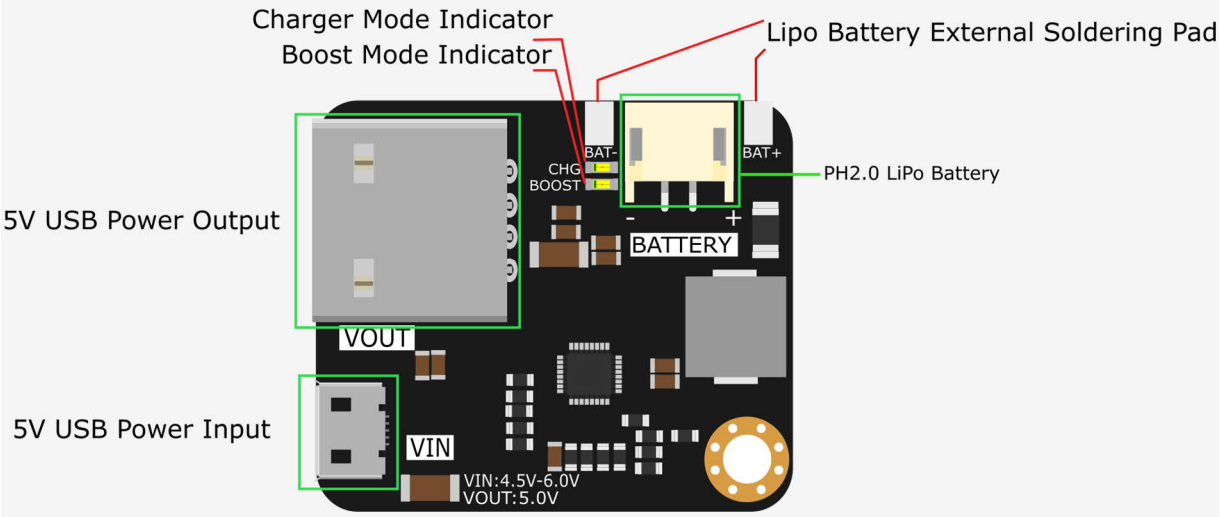
MOD1040

MP2636 MODULE D'ALIMENTATION ET CHARGEUR DFR0446



In many applications, we will use lithium batteries as our power solutions. In this kind of application, the most two important things are the power boost and battery charger. These two points are a prerequisite for the system. The traditional power boost and battery charge circuit are usually divided into two separate parts, the circuit will be relatively cumbersome to build.



The Monolithic Power Systems (MPS) MP2636 is highly-integrated, flexible switch-mode battery charger with system power path management, designed for single-cell Liion or Li-Polymer batteries used in a wide range of portable applications. It is really simple to use,

once you plug a lipo battery, it will work like a power bank. When there is an external power supply from VIN, it will charge the battery automatically, and the CHG led will light up; when there is no external power, only battery on battery port, the Boost will be ON.

SPECIFICATION

- Charge mode input voltage (VIN): 4.5-6.0V
- Boost mode output voltage (VOUT): 5V
- Suitable for battery voltage: 4.2V (3.7V lithium battery full of 4.2V)
- Charge mode Maximum charge current: 2.5A
- Boost mode Maximum output current: 2.5A
- Switching frequency: 600KHz
- Charging mode efficiency:> 90%
- Boost mode efficiency:> 90%
- Support battery overcharge protection
- Temperature protection: more than 150 ℃, automatic power failure
- Size: 35 * 30mm/ 1.38 * 1.18inches
- Weight: 12g

https://github.com/Arduinolibrary/DFR0446_MP2636_Power_Booster_Charger_Module/raw/master/MP2636%20Schematic.pdf

https://github.com/Arduinolibrary/DFR0446_MP2636_Power_Booster_Charger_Module/raw/master/MP2636%20Datasheet.pdf