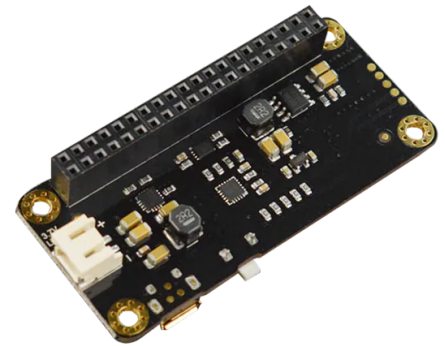# UPS HAT for Raspberry Pi Zero
DFR0528

Product Overview
07-18-2022
For the most up-to-date information, visit www.mouser.com or the supplier's website.
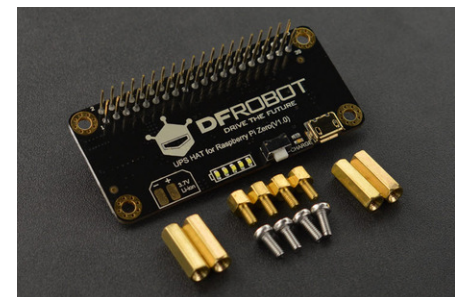
Description

DFRobot UPS Hat for Raspberry Pi Zero provides a continuous power supply to prevent system damage and assure a safe shutdown. This UPS shield provides 2A maximum output current to support more Raspberry Pi applications. The UPS HAT features an auto-switching charge/recharge path that works against the power-down. This UPS HAT also features 5 onboard LEDs on the shield that visually show the battery power status without programming.

The UPS HAT shield employs an onboard microcontroller (MCU) for data processing. This allows the Raspberry Pi board to get information on power capacity and battery voltage via I^{2}C communication. A MAX17043 fuel gauge is adopted in this product for accurate power detection. The UPS HAT shield supplies power for applications such as Raspberry Pi cameras, tablet PC, and field data collection systems.

Features

- Continuous power supply even at power off
- Micro-USB power supply interface
- PH2.0-2P or solderable contact battery port
- I^{2}C communication interface
- Anti-backflow mainboard power source
- On-board maxim fuel gauge IC
- 5 onboard LEDs for showing the status of the batteries
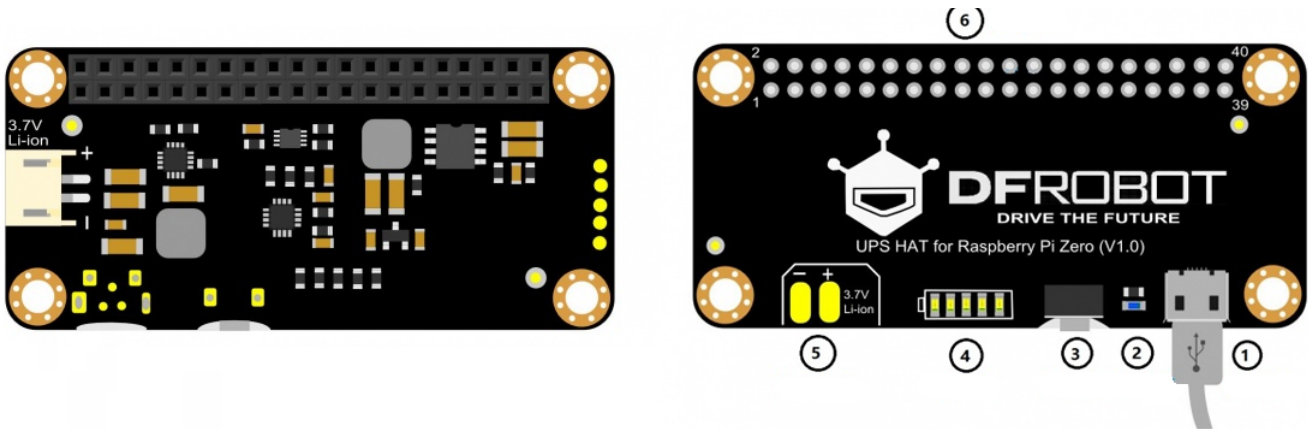
Specifications

- 4.5V to 5.5V supply voltage range
- 1.6A maximum charge current
- 5V output voltage
- 2A maximum output current
- -40°C to 85°C operating temperature range
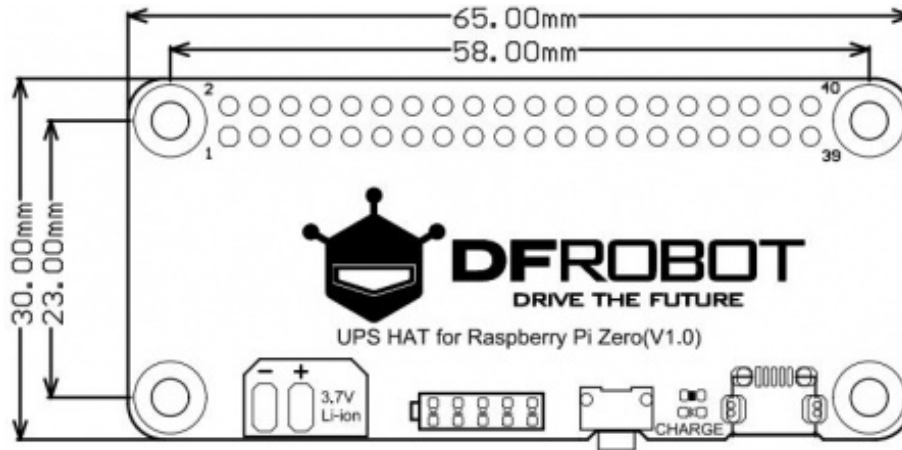- 65mm x 30mm dimensions

Applications

- Raspberry Pi camera
- Tablet PC
- Field data collection system

Pinout Diagram

Serial No.	Function Description	Status Description
1	USB charge interface	Charge by 5V DC
2	Charging Indicator	ON: in charging/ Blinking: battery is not detected/ OFF: uncharged
3	Function Key	Refer to Firmware version update and function description
4	Electric Quantity Indication	Indicating Present electric quantity
5	Li-ion Battery Solder Contact	Solder Li-on Battery
6	Raspberry Pi 40Pin Socket	Connect Raspberry Pi

Board Dimensions

Mouser Part Number

View Part

To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-dfr0528-ups-hat/