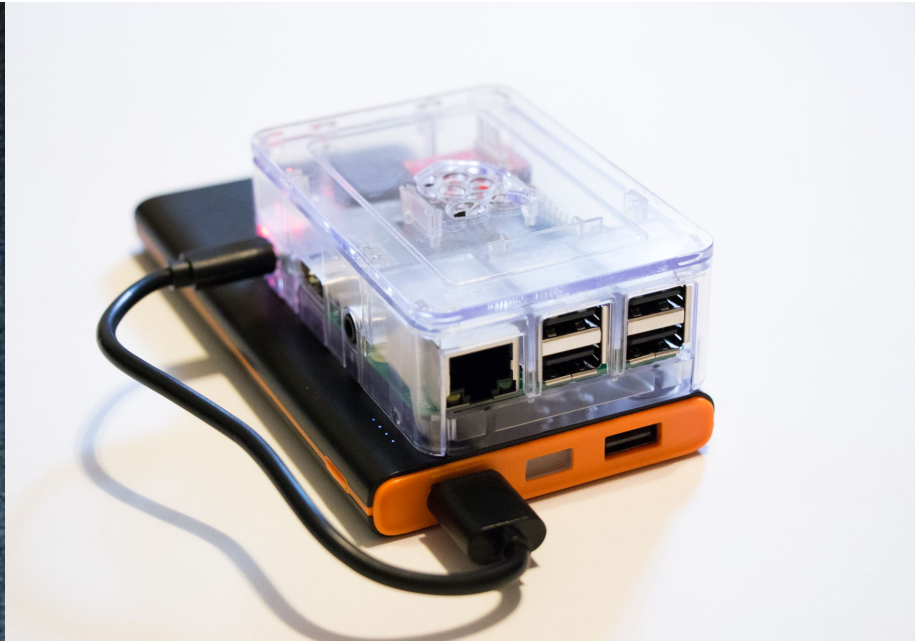# Adding Hardware-based shutdown button in IIAB device

By : Suyash Dwivedi (User:Suyash.dwivedi)

IIAB (Internet In A Box)

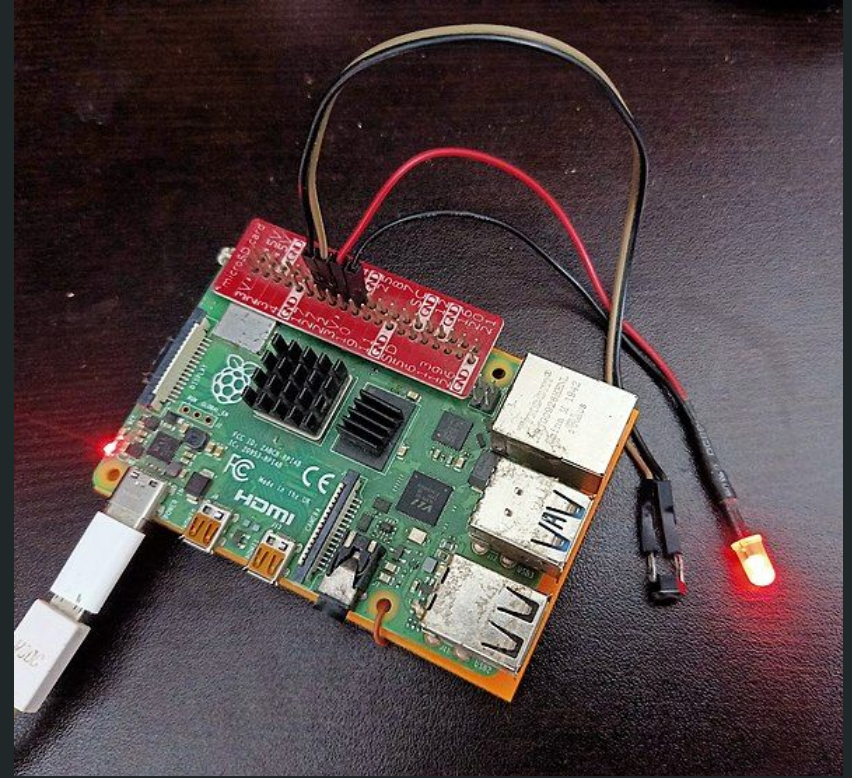Based on Raspberry Pi Zero W   and Raspberry Pi 4

Problem

Only Software Based Shutdown (main Webpage)

Someone can accidentally or intentionally (for fun) shutdown the IIAB device

Solution

Add a Hardware based safe shutdown button

Prototyping and Hardware testing during
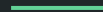
Wikimania Hackathon 2021

How to Do ?

A python script (iiab_shutdown.py) allow to safely shutdown A device through a momentary push-to-on button connected to GPIO pin. A LED (optional) helps to indicate proper startup of IIAB device and also indicate status of button press.

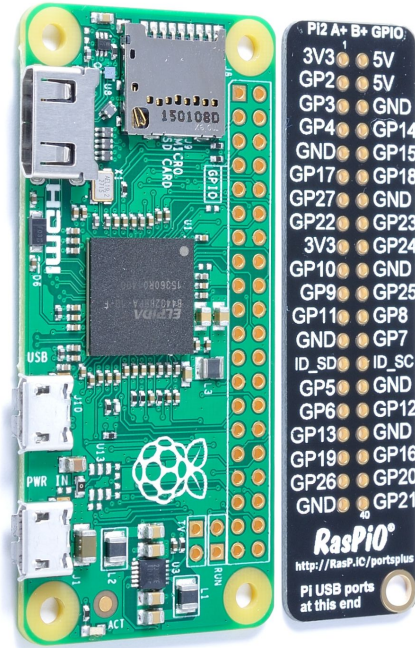It needs only three components and connecting wires **costing INR 30.00 ($0.40)** (1)Push to on button (2) LED (3) Resistance (1000 ohms) (4)connecting wires (5) PCB (optional)

How to use

- Set python script (iiab_shutdown.py) in Autorun Mode
- Holding down the button for about 5 seconds (You can change) LED fill flash and IIAB will be shutdown safely.
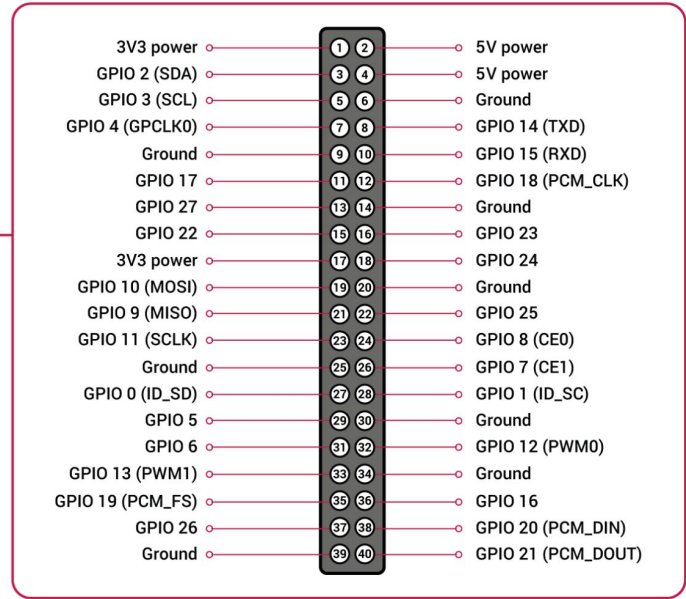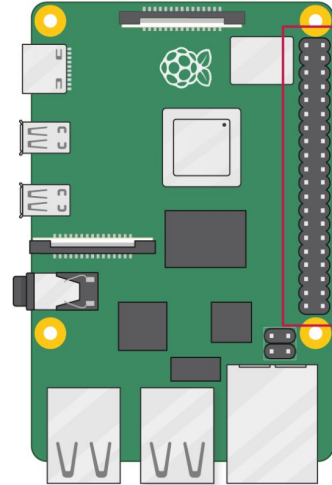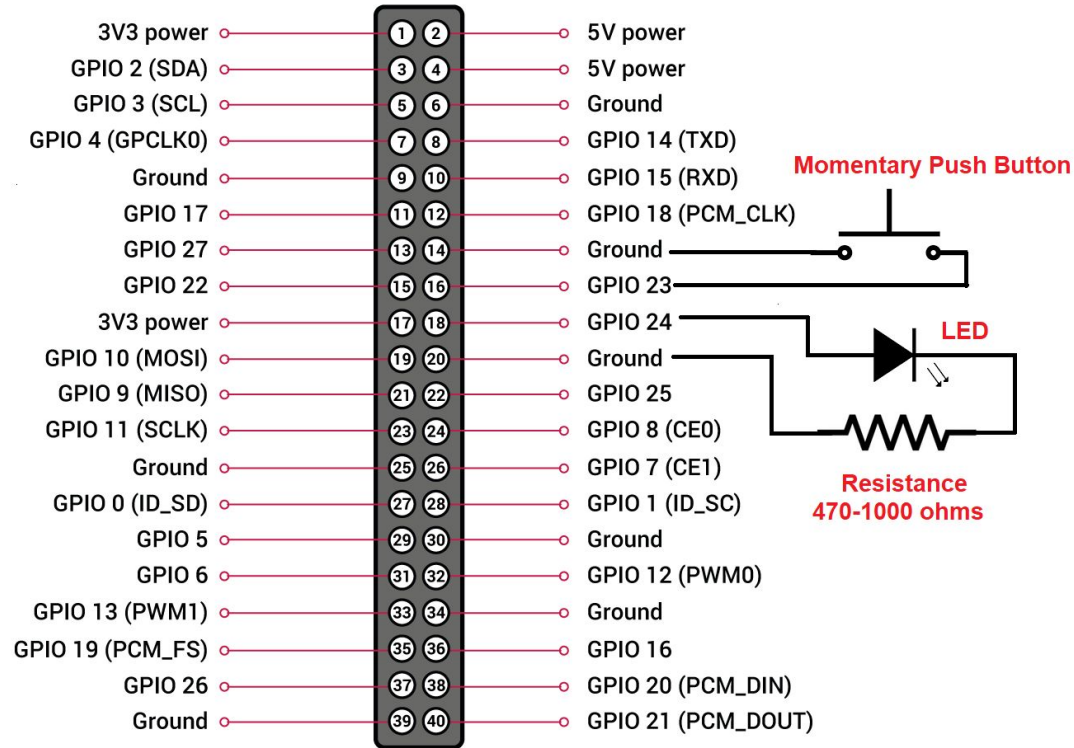
Circuit
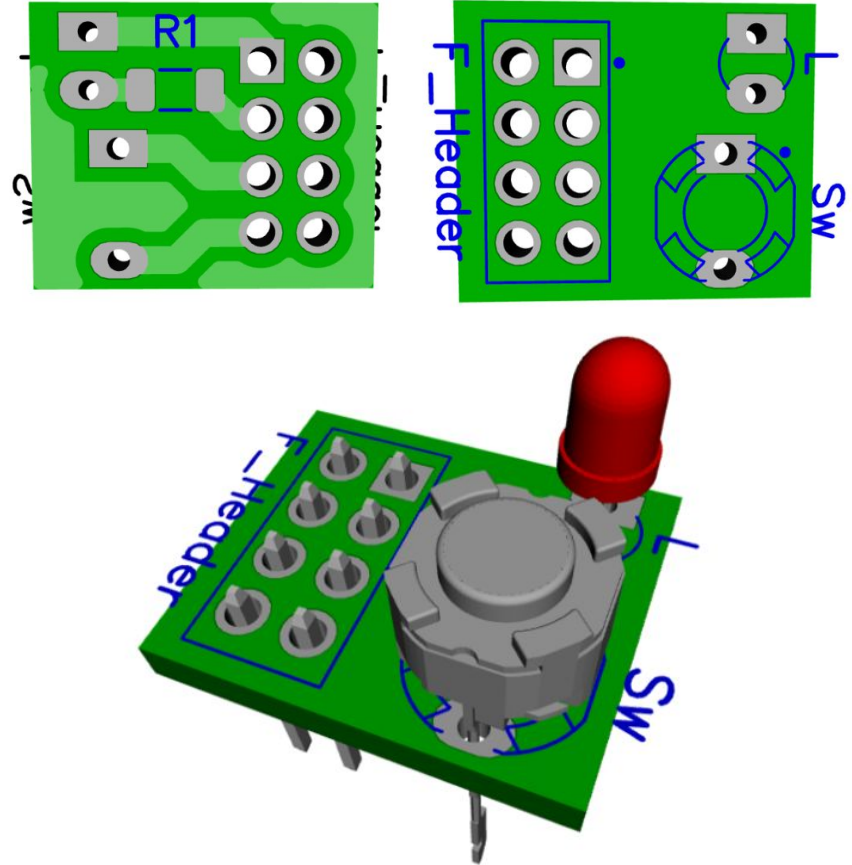

Image :CC by SA Raspberry Pi foundation

Circuit

Aha!
Add on PCB

This Small pcb consisting LED and Switch can help to use without any expertise of electronics

Links to Codes and PCB

- https://github.com/Suyashdwivedi/IIAB_hardware
- https://commons.wikimedia.org/wiki/Category:Wikimania_2021_Hackathon

Thank You

Suyash Dwivedi

User: Suyash.dwivedi

Email: Suyash.tps@gmail.com