101.6mm

3.5mm

6.0mm

6.0mm

25.8mm

12V Out

12V IN

12V
5V

4-pin header

Power input jack
5.5*2.5mm

LED OFF   PWR ON

12V IN

X835 V1.0
SupTronics Technologies

1 2 3 4

PWR SW

External
power switch

Connect to X710, X735
power mgmt board

USB3

PWR Ctrl

+ -
5V Out

+ -
5V Out

USB2

21.0mm

162.8mm

5V Out

- +

5V output to power
other devices

5V output (not controlled)
for X735, X710
power mgmt board

32.976mm

Connect to RPi's USB port

UPPORT

21.0mm

HDD status LED

HDD

USB1

28.0mm

3.5mm

27.0mm

6.0mm

6.0mm

① Power Jack and Connectors

Power input	12Vdc +/- 5% , ≥3A
DC Power Plug Size	5.5*2.5mm
Power input/output connector	XH2.54mm 2pin

1. X835 powers the Raspberry Pi via the 40-pin header (Pin 2 & 4)
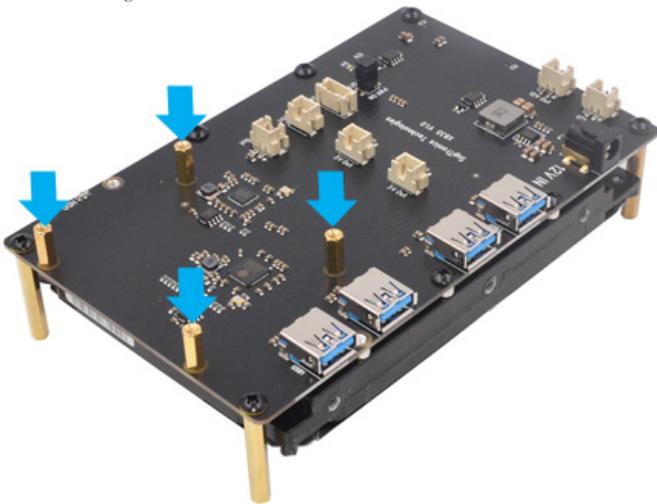2. Don't power the Raspberry Pi via the Pi's Type-C socket

② 4-Pin Header

Jumper Name	Usage
PWR ON	Short - Auto power-on when power applied
	Open - Using external latching switch or X710 / X735 power management board
LED OFF	Short - HDD status LED on
	Open - HDD status LED off

③ Using external latching Switch to control power on/off

Pin No.	Pin Description
1	Connects to "NC" pin
2	Connects to "COM" pin
3	Connects LED- (0V), for indicating power on/off
4	Connects LED+ (5V), for indicating power on/off

1. Please use latching switch only and not use momentary switch
2. Connector - Pitch 2.0mm 4pos
3. The jumper socket fitted for "PWR ON" is required to remove
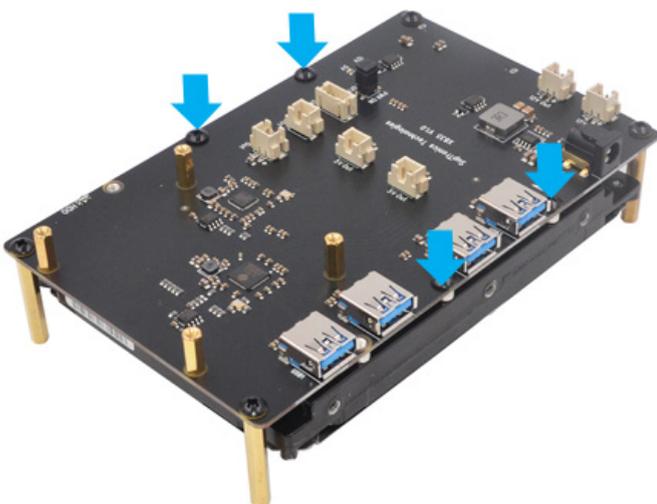   when using an external power switch

Board Assembly

① Push a screws (M2.5*5mm) up through the mounting hole on the underside of the X835 and screw the spacer (M2.5*12mm) down until it is hand tight.

② Insert your 3.5" hard disk into the SATA socket on the PCB bottom side.

③ Using four M3*8mm screws to secure the hard drive.

④ Push a screw (M3*8mm) up through the mounting hole on the topside of the X835 and screw the spacer (M3*32mm) down until it is hand tight.

⑤ a)Place your Raspberry Pi on top of X835 and screw down.
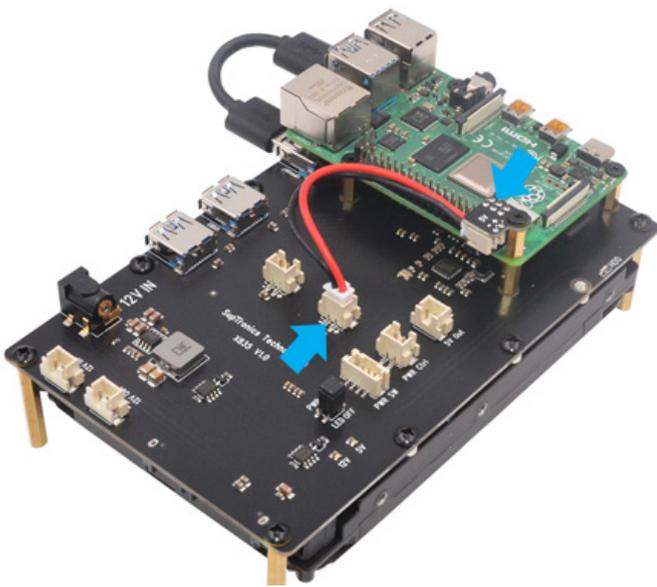b)Plugs the power daughter board straight into your

⑥ Plug in the USB male-to-male cable into the Rpi's USB3.0 port and the "UPPORT" on the X835.

Raspberry Pi B+'s GPIO header.
c)Plugs in the 2-pin power cable into the "5V' female sockets
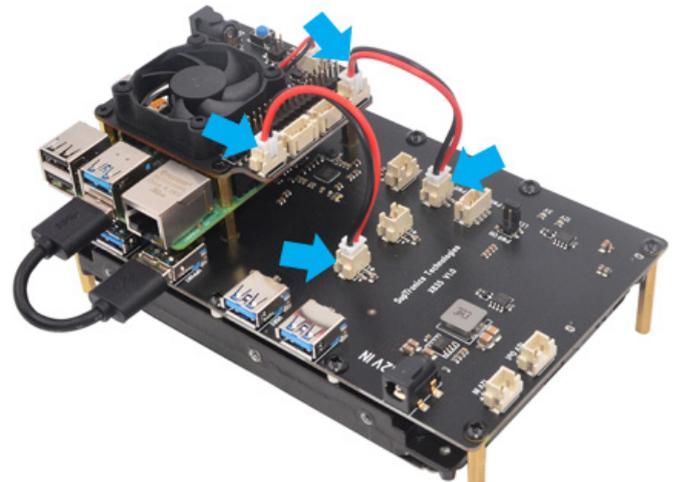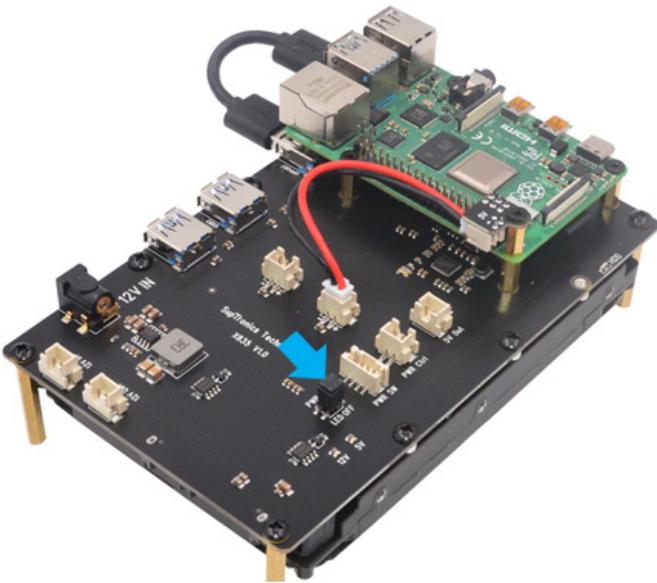 on the power daughter board and X835

7 Optional -To use with <u>X735</u> / <u>X710</u> power mgmt board

a)Unscrew 4 screws and spacer on the topside of Rpi
b)Screw the M2.5*12 M/F spacer down until it is hand tight
c)Remove the jumper socket fitted for "PWR'.

8 a)Plugs the X735 straight into your Raspberry Pi's GPIO
     header and screw down **(M2.5*5mm screws)**
   b) Plug in the 2-pin power cable into the female JST
      connectors on X735 and X835.
   **Power adapter must be connected to the X835 only , not Raspberry Pi and
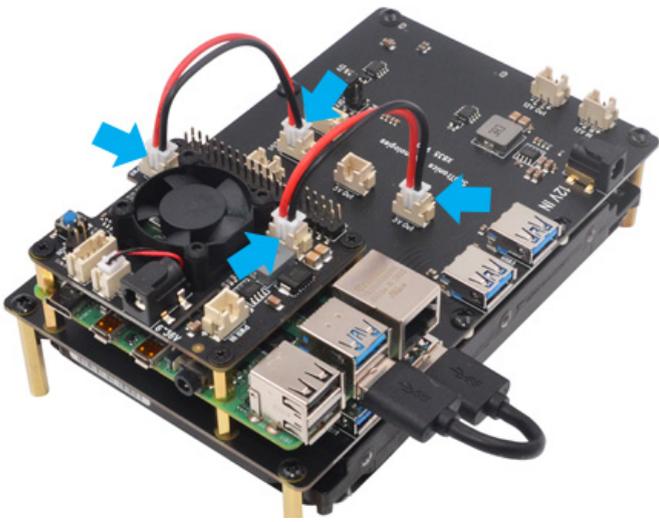   X735.**

9 a)Plugs the X710 straight into your Raspberry Pi's GPIO
     header and screw down **(M2.5*5mm screws)**
   b) Plug in the 2-pin power cable into the female JST
      connectors on X710 and X835.
   **Power adapter must be connected to the X835 only , not Raspberry Pi and
   X710.**

10 Optional - X835 is stackable and supports multiple HDDs working at the
    same time

    Push a screw **(M3*8mm)** up through the mounting hole on the topside of
    the first X835 and screw the spacer **(M3*40mm)** down until it is hand
    tight.

11 Push the second X835 up through the M/F M3*40 spacers on the underside of the first X835 and screw down **(Spacer F/F M3*32mm, if add one more X835 then using a spacer M/F M3 x40mm)** until it is hand tight.

12 a) Connect the USB3 cable from "USB1" port on the first X835 to the "UPPORT" on the second X835.
b) Connect the 2-pin power cable from "12V out" JST connector on the first X835 to the "12V in" JST connector on the second X835.
Power adapter must be connected to the first X835