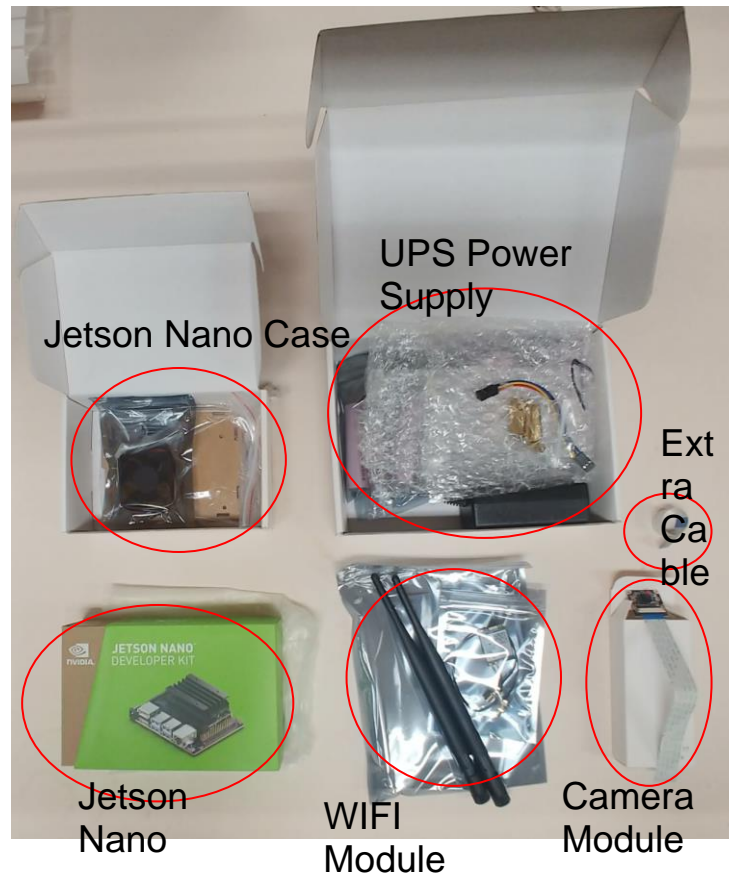


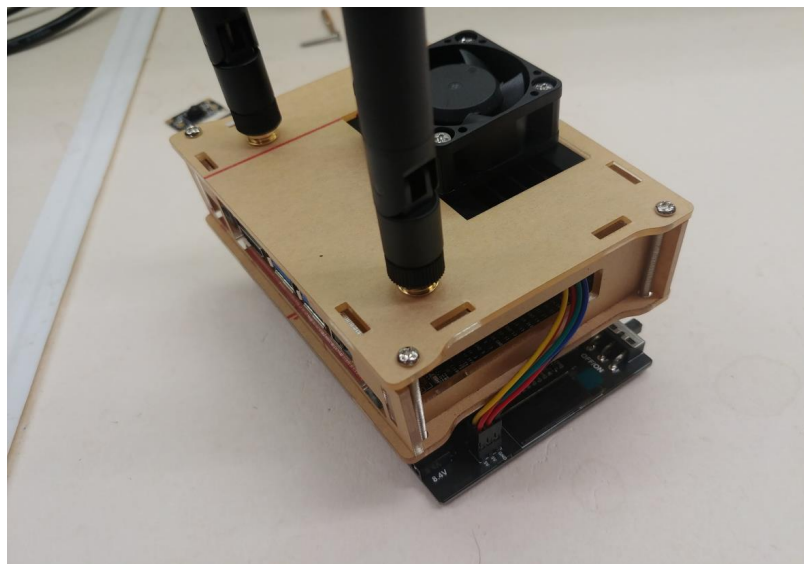
Jetson Nano Setup

Overview:

Before:



After:



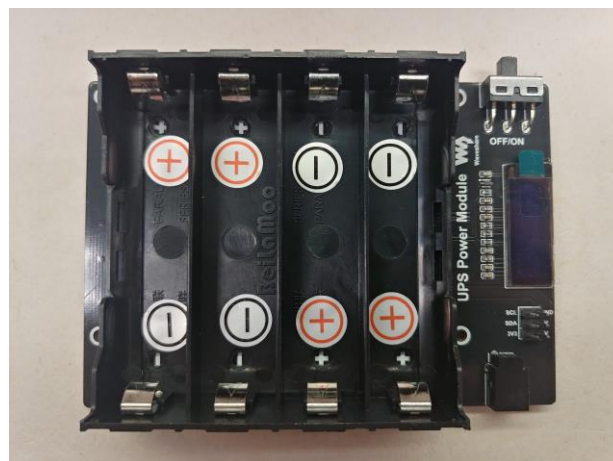
1. Battery board assembly

Please pay attention to the polarities.



Ensure that the UPS Power Module is switched off and insert the batteries according to the labels shown on the UPS Power Module.

Take a picture after completing this step and show it to the TA.



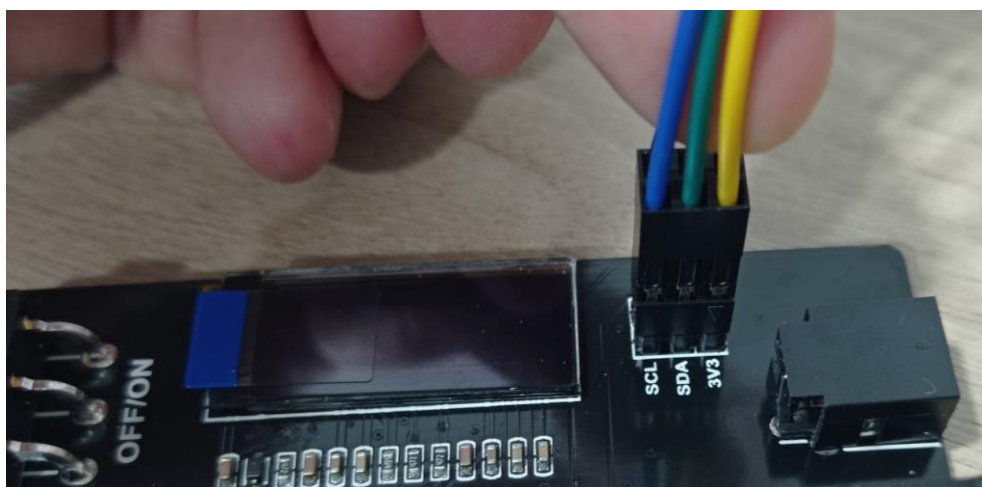
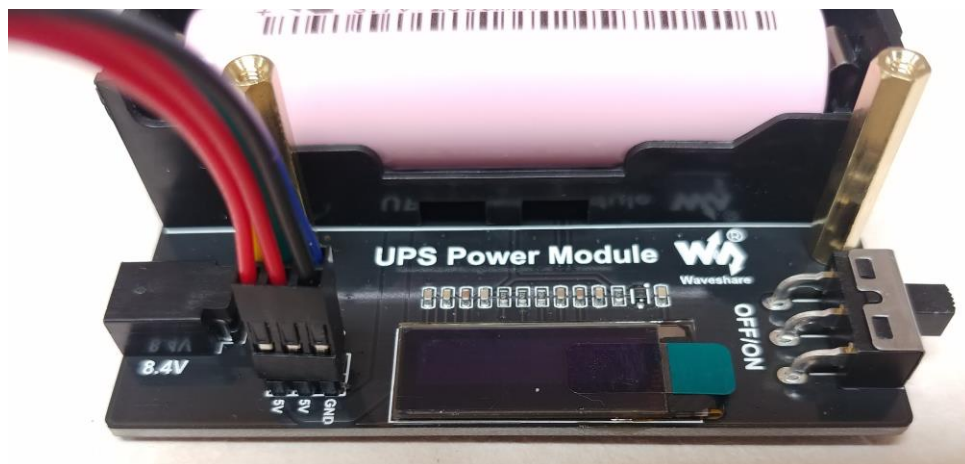
Step 1.1

Insert the cables into the pins on the UPS Power Module. Please follow the colour scheme as shown below.

Note: The colour scheme for the cables may not be the same as the colour scheme shown below. In this case, remove the cables from the connector and insert the cables back into the connector according to the configuration shown below.

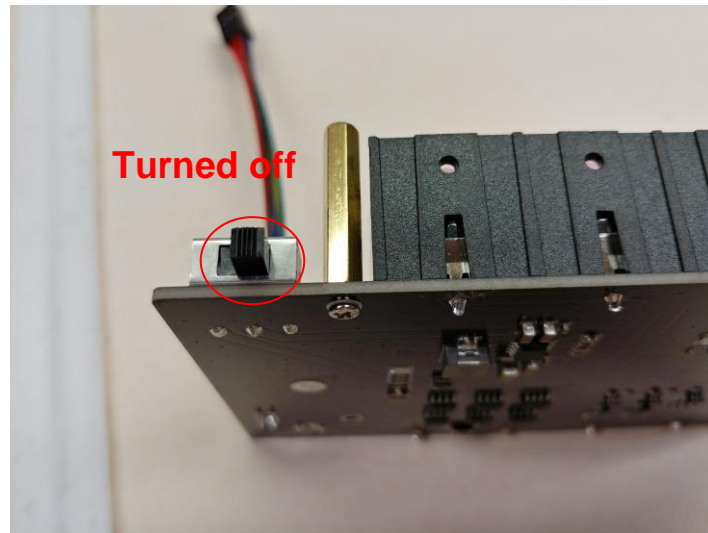
Warning 1: Make sure you do not reverse the connections of the power cables otherwise the Jetson Nano may be burnt.

Warning 2: Double check that the pins have been connected properly. Pull and plug the connectors a few times to ensure that the pins are connected securely. Please ask TA for assistance if you have any questions.



Step 1.2

Screw the 4 copper standoffs to the UPS Power Module with the screws provided in the package.



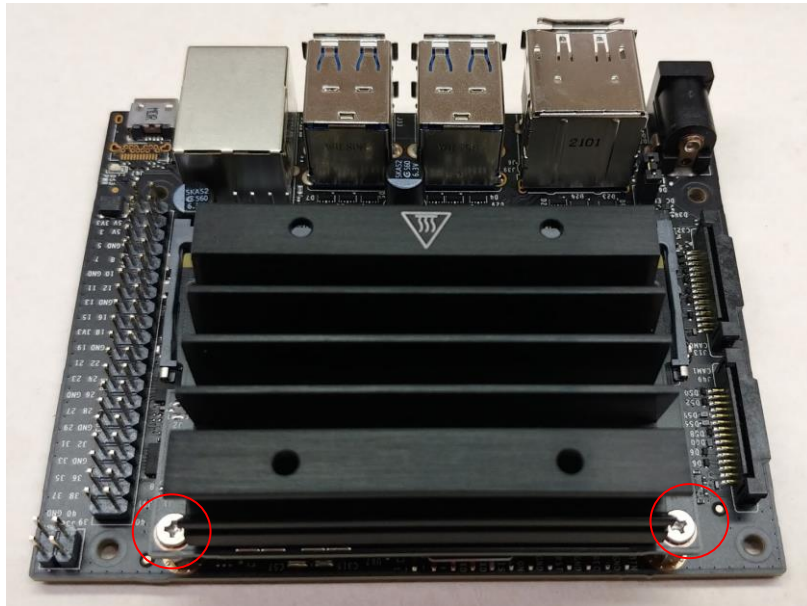
Your finished product should look like this.



2. Jetson Nano Assembly

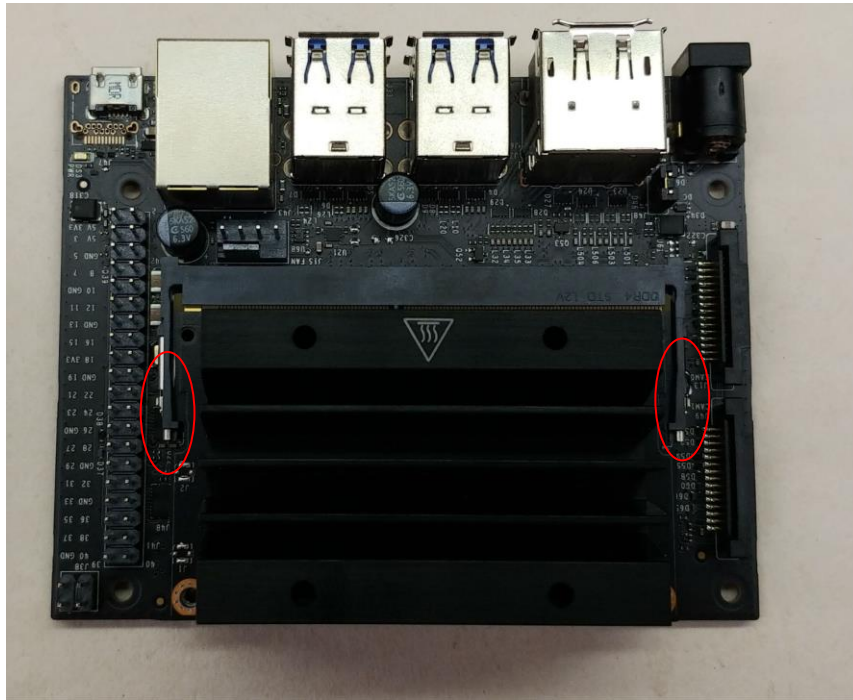
Step 2.1

Unscrew the 2 screws holding the core in place.



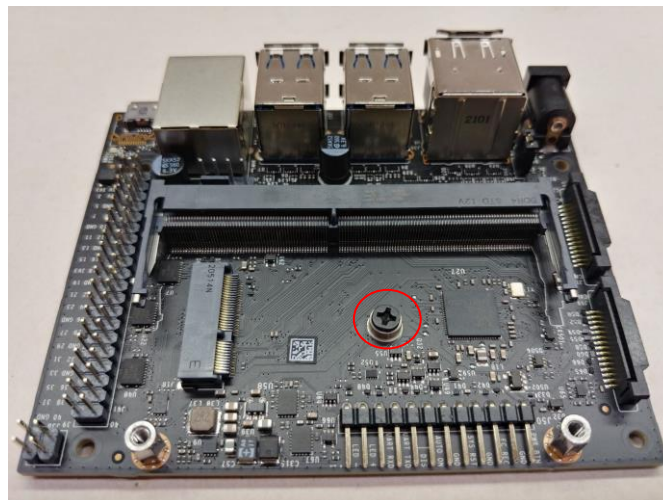
Step 2.2

Gently pull the 2 flaps simultaneously to release the Nano core and pull it out.



Step 2.3

Unscrew the black screw under the Nano core.



Step 2.4

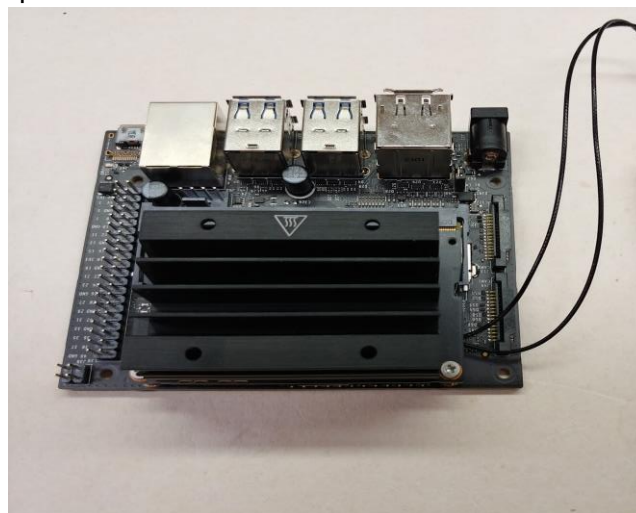
Insert the WIFI module into the M.2 slot and screw the black screw back into position.

Warning: Beware of the two antenna connectors. Once they fail off, it is not easy to put them back.



Step 2.5

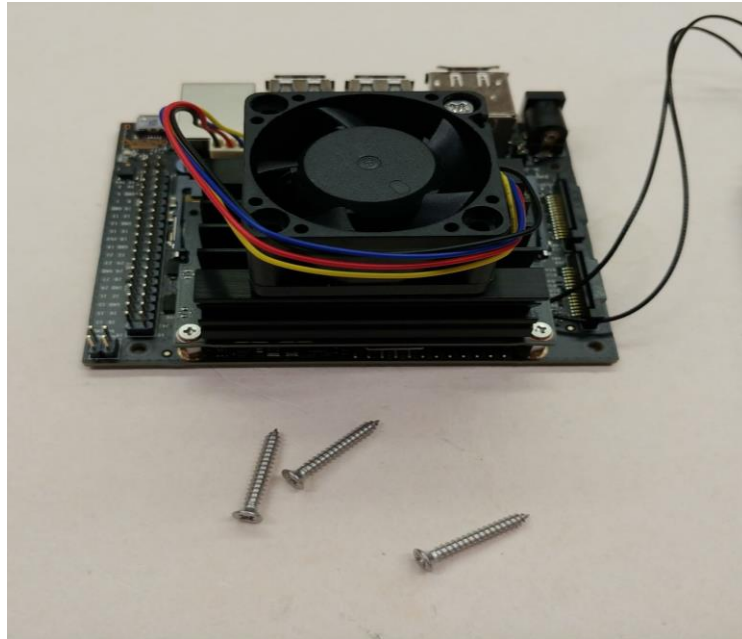
Insert the Nano core back into the DDR4 SODIMM slot, push down, and re-screw to screw the Nano core back in place.



Step 2.6

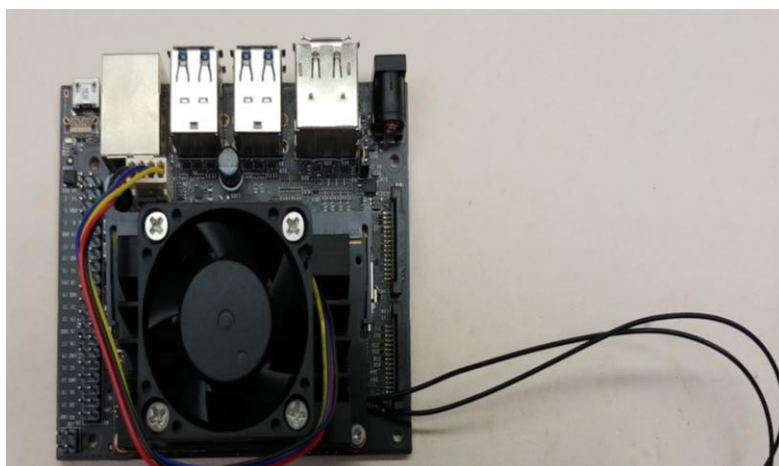
Screw the fan onto the heatsink with the 4 pointed screws and connect the fan to the Nano.

Note: Pay attention to the orientation of the fan. The side without the sticker should be facing upwards.



Step 2.7

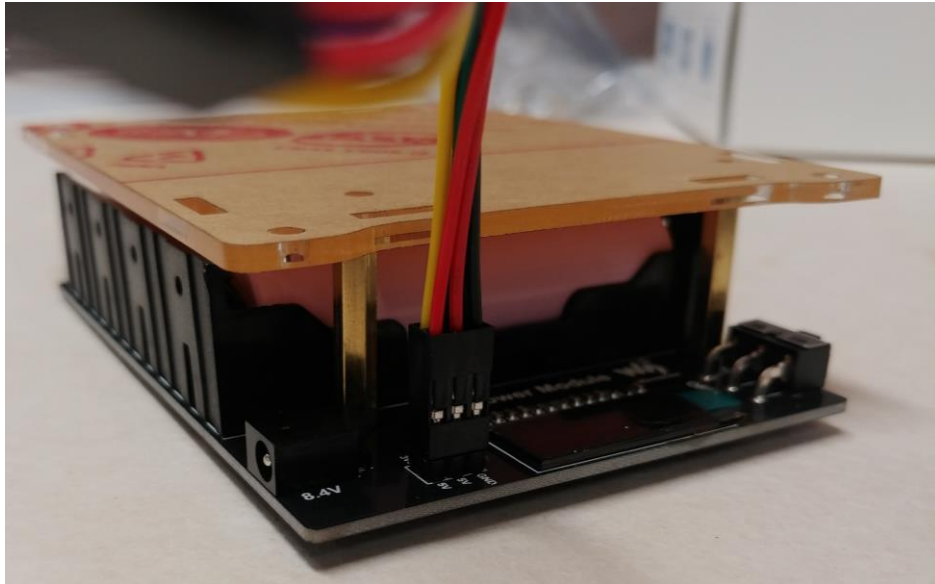
Your finished product should look like this.

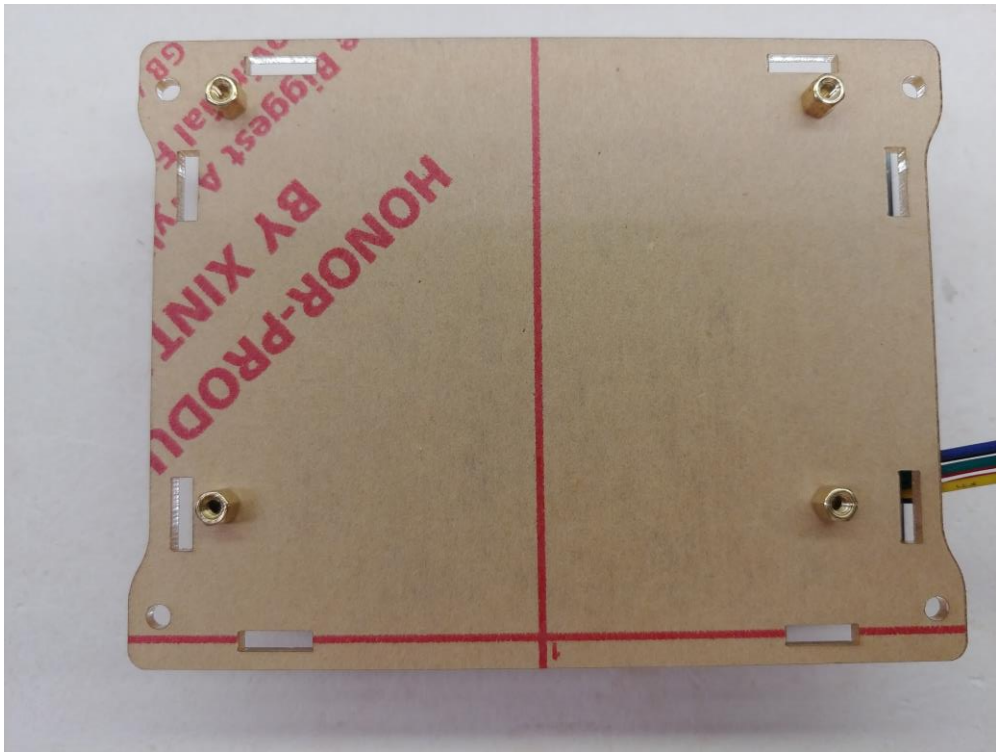
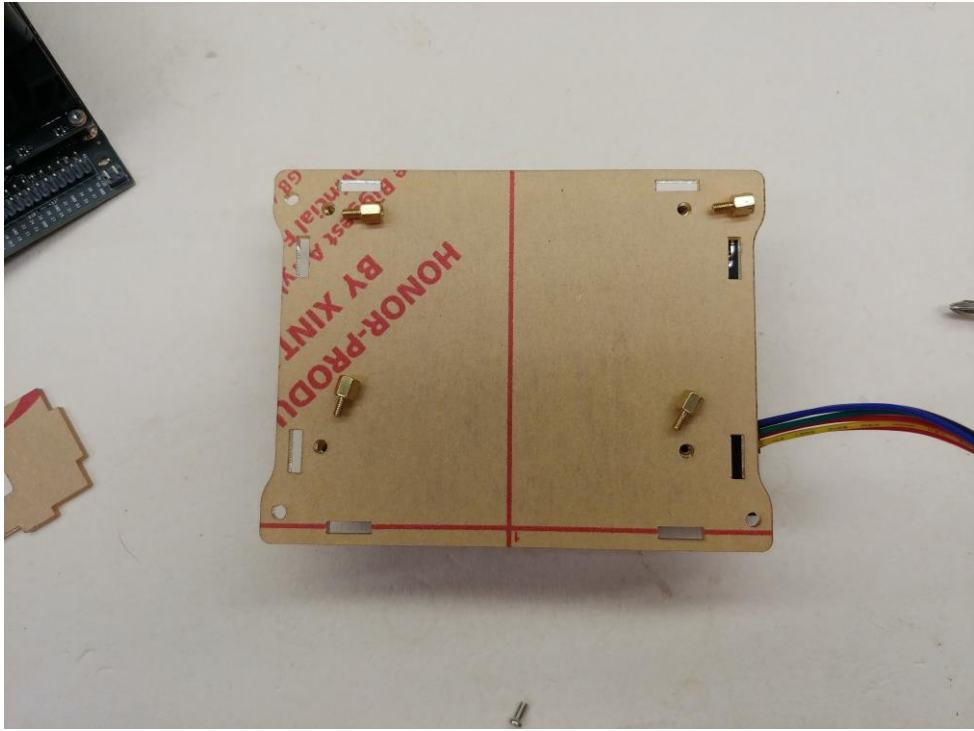


3. Box Assembly

Step 3.1

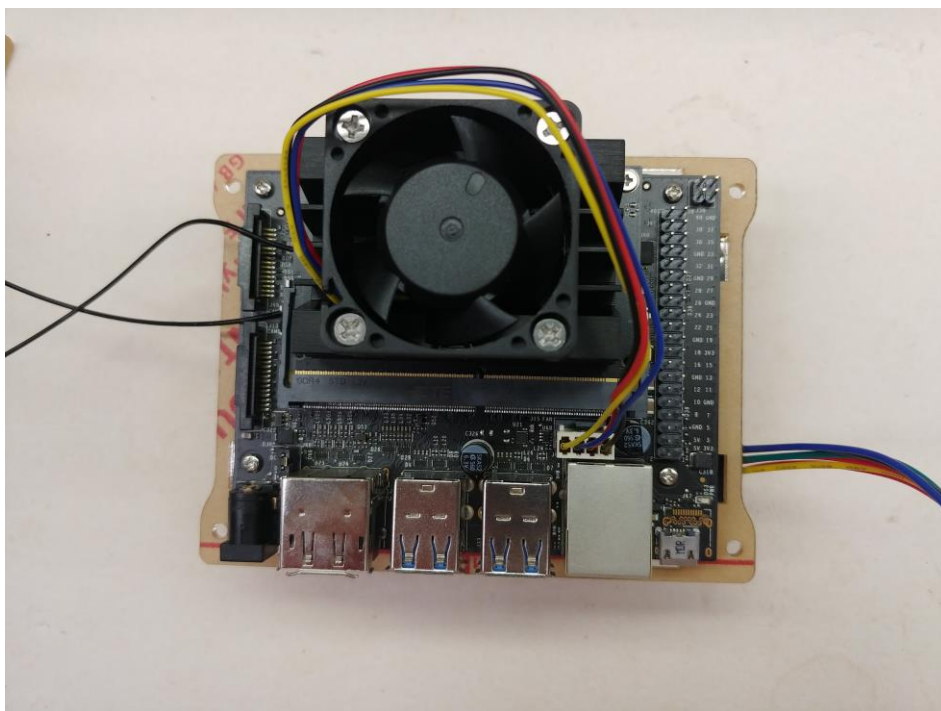
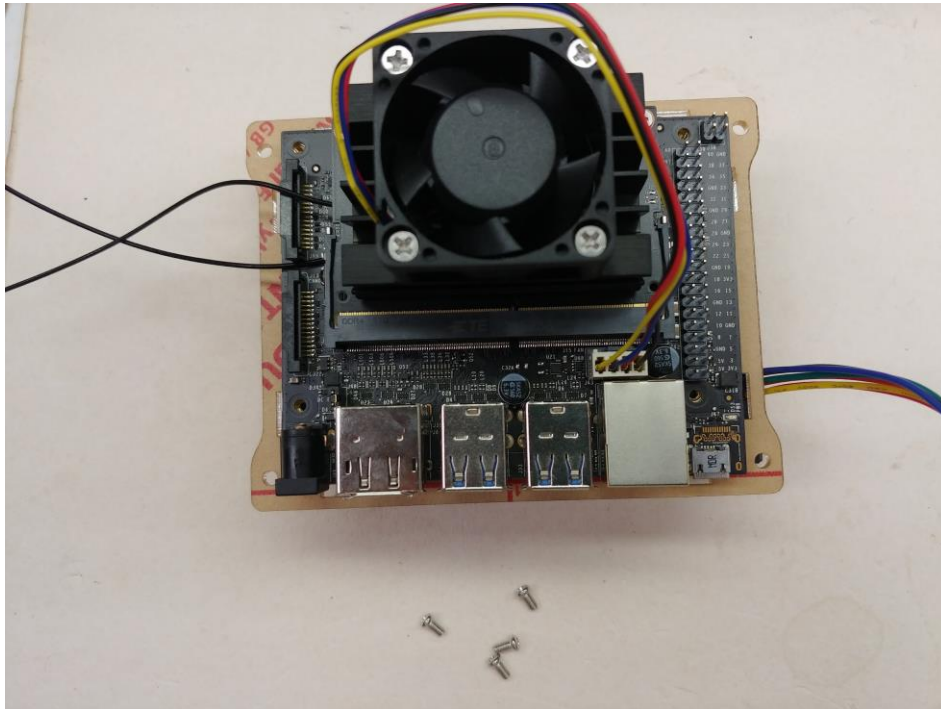
Place the (solid) board onto the UPS Power Module's standoffs and screw the 4 screws in place. Pay attention to the orientation of the board as the screw holes are not symmetrical.





Step 3.2

Place the Nano board on top and secure the board with the 4 short screws. Pay attention to the orientation of the Nano board. The fan's connector and the UPS Power Module's connector should be on the same side.



Step 3.3

Insert the UPS Power Module's wires through one of the side panels and connect its pins to the GPIOs on the Nano.

Pay attention to the pin connections to ensure you have connected the correct pins to their respective GPIOs.

Cables to Nano:

Red = 5V

Red = 5V

Black = GND

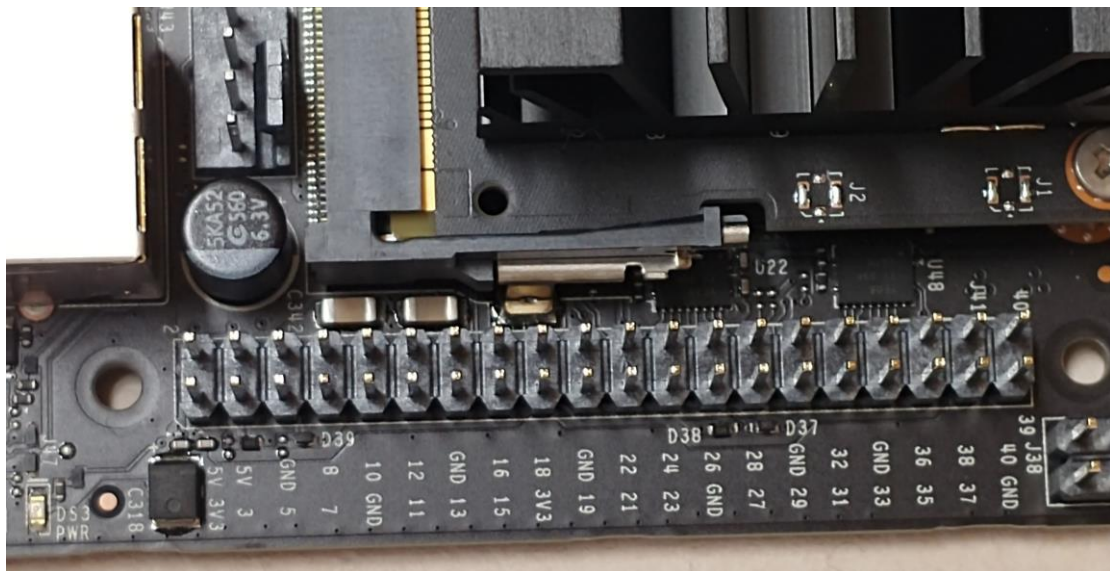
Yellow = 3V3

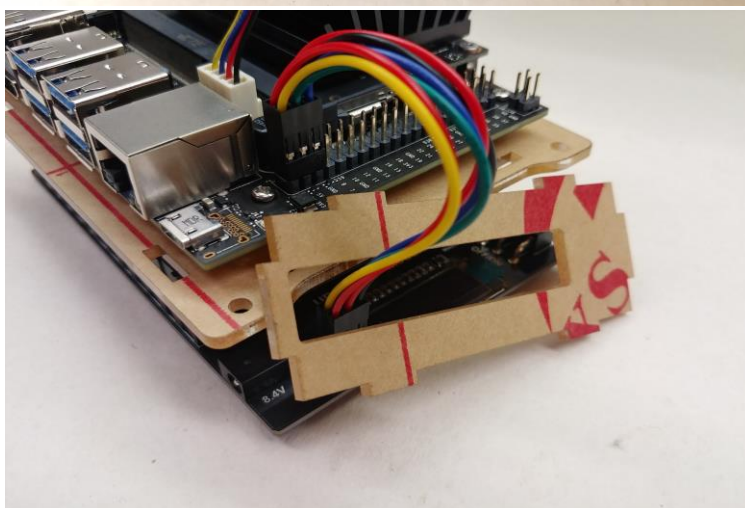
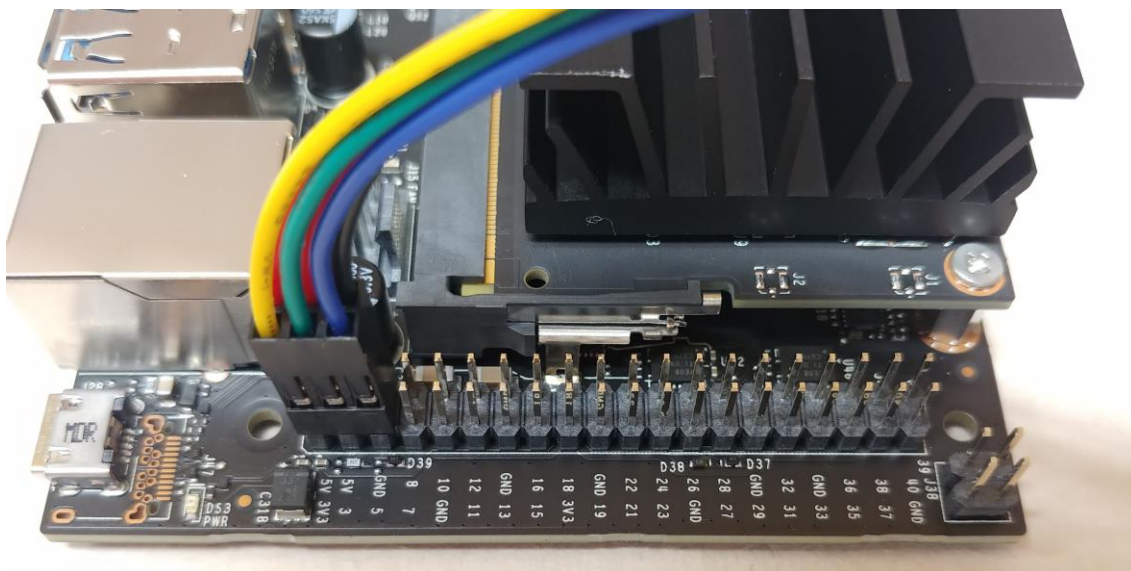
Green = 3

Blue = 5

Warning: DO NOT turn on the Nano. Find a TA to inspect your connections first.

Note: Make sure your connections are connected properly as the GPIO connections may be loose.

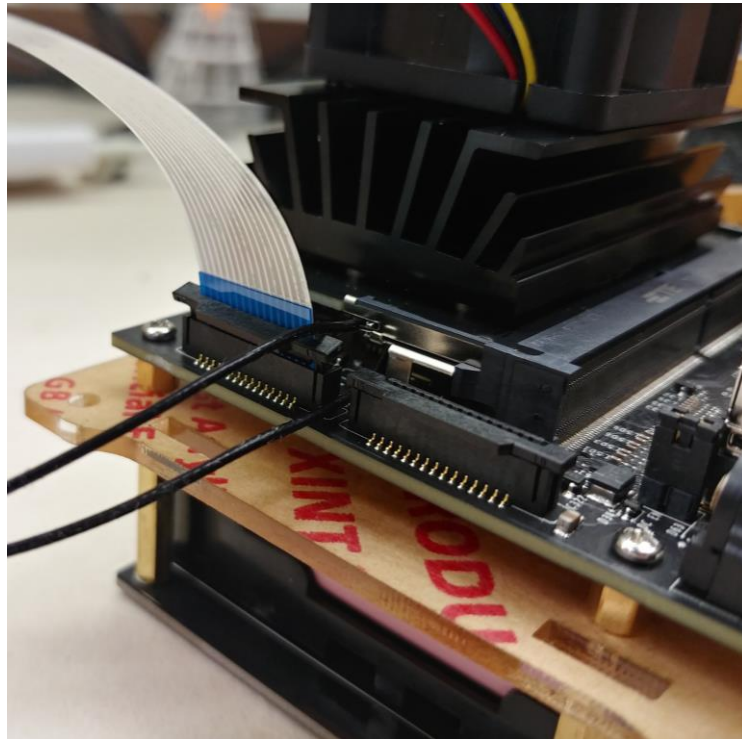




Step 3.4

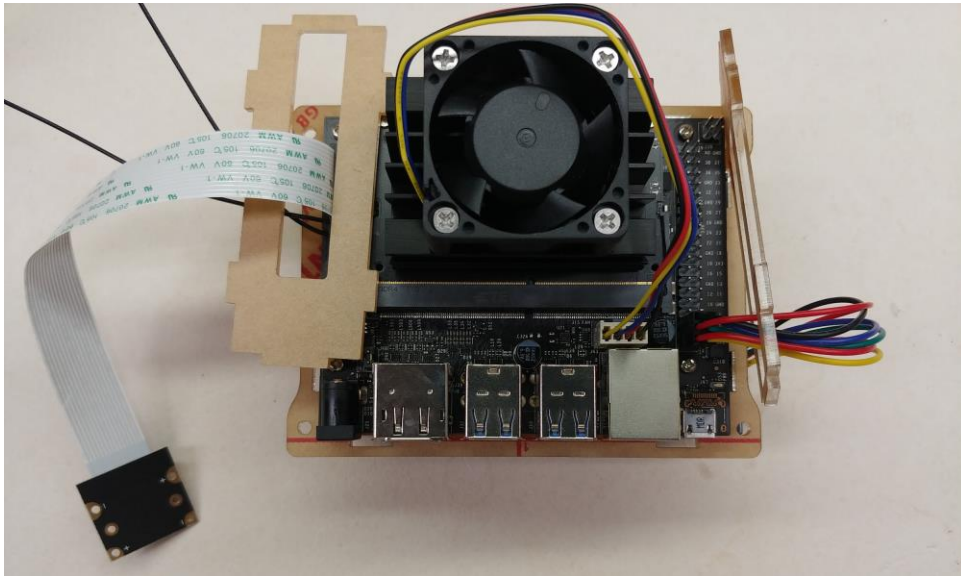
Connect the camera module to slot CAM1. Pay attention to the orientation of the camera module's connector. The metal pins should be touching the metal contacts. Note: There may be a protective screen on the black connector, please remove it.

Note: The blue side of the camera module's connector should be facing outwards.



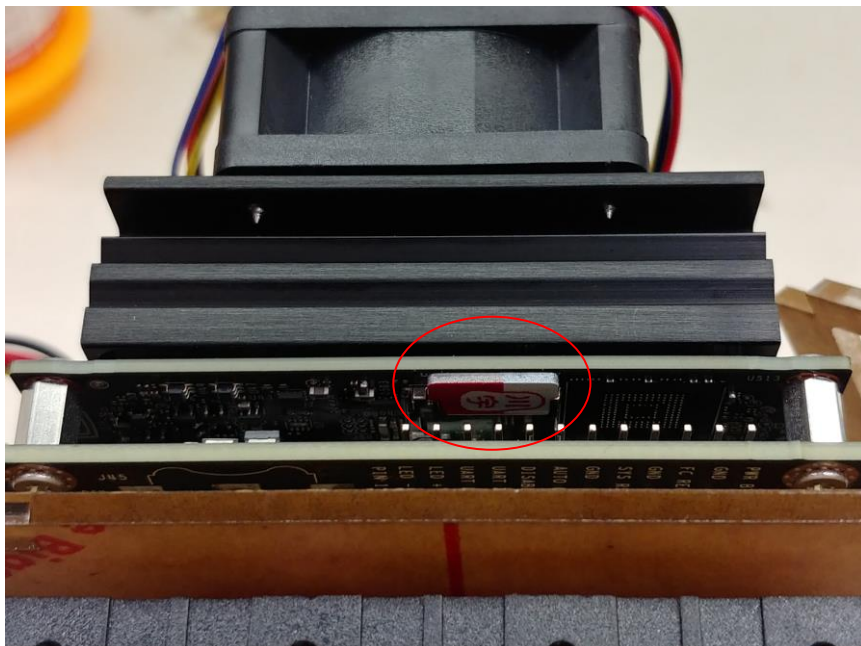
Step 3.5

Insert the camera module through the other side panel as shown below.



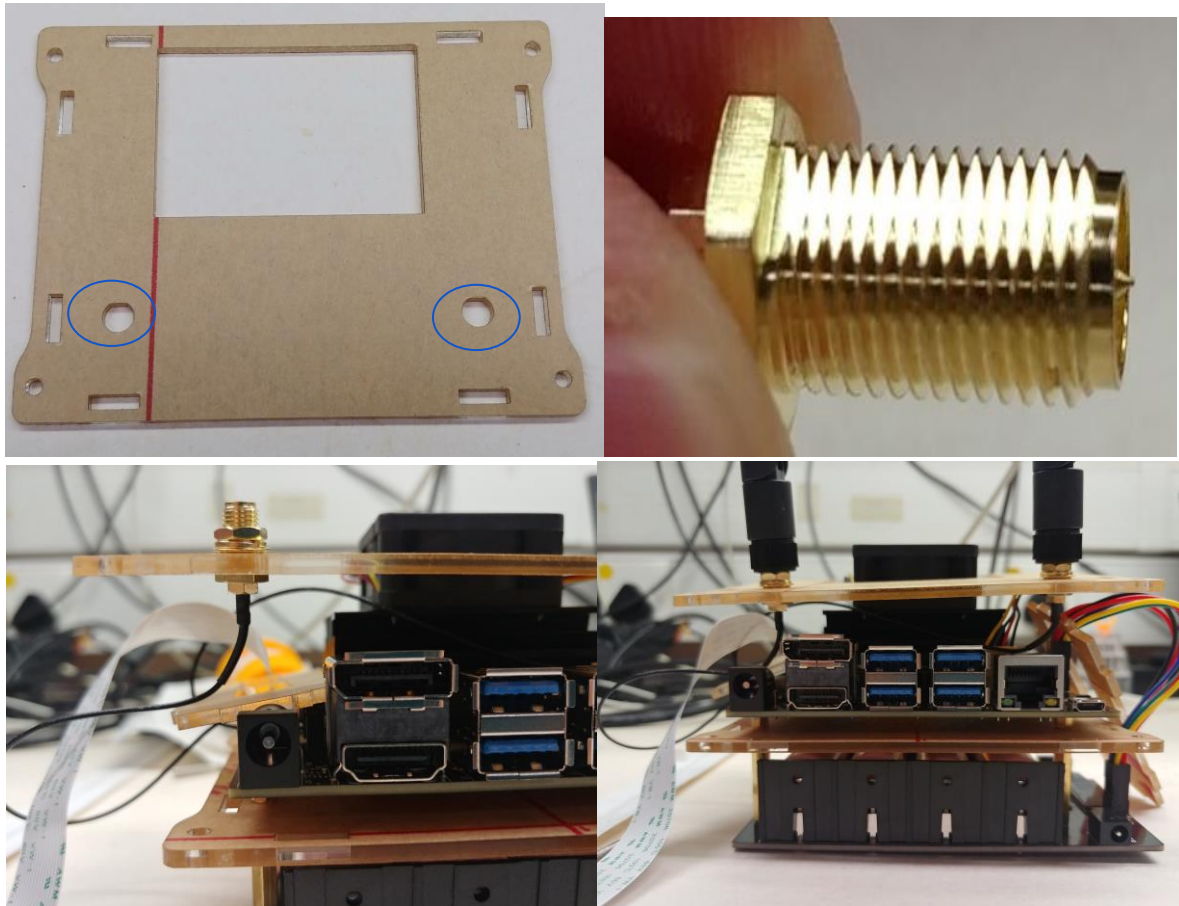
Step 3.6

insert the SD card into the SD card slot located under the Nano core.



Step 3.7

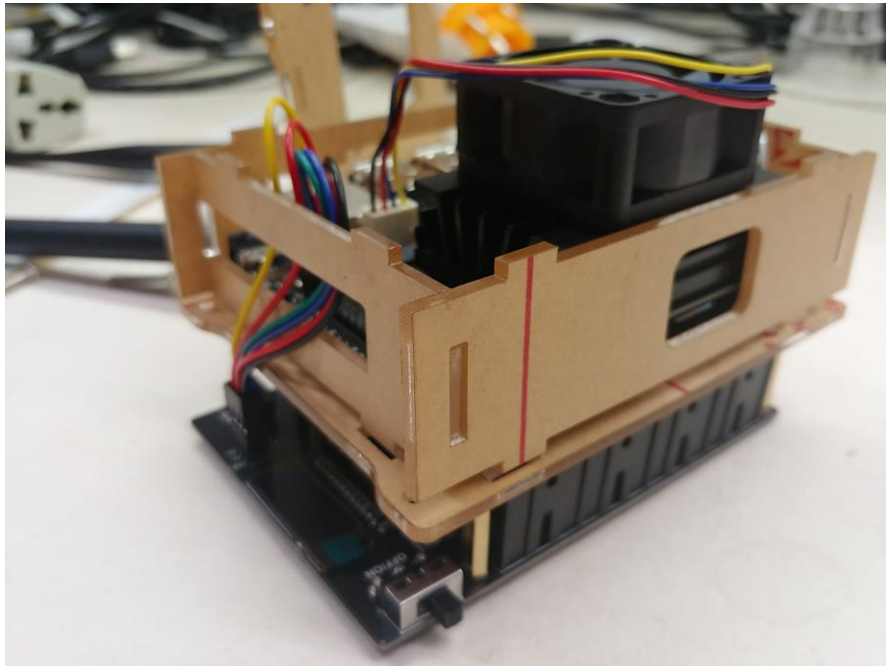
Remove the copper nuts from the WIFI module's connectors. Insert the connectors of the WIFI module into the top panel. Notice that the 2 holes in the top panel are not circular while part of the WIFI modules connector is shaved off. Therefore, the orientation of the WIFI modules connector is crucial for fitting the connector through the WIFI top panel. Also note that the circular copper nut's teeth should be facing the plastic panel as shown below.



Step 3.8

Attach the side panels together to form a box.

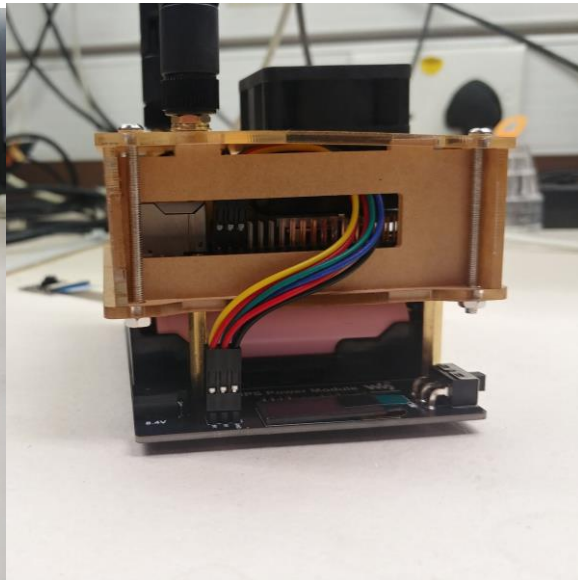
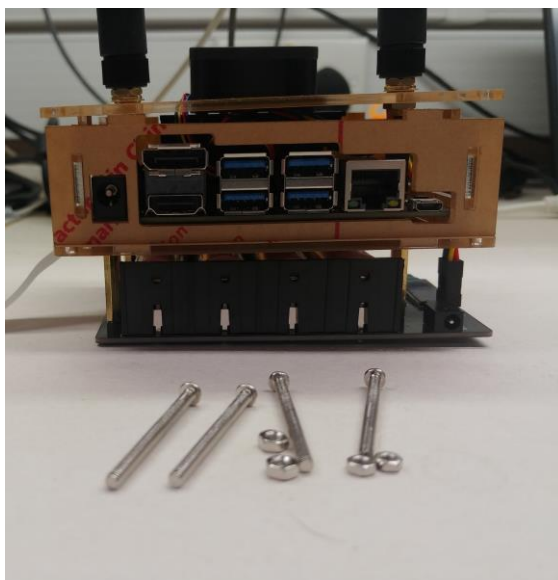
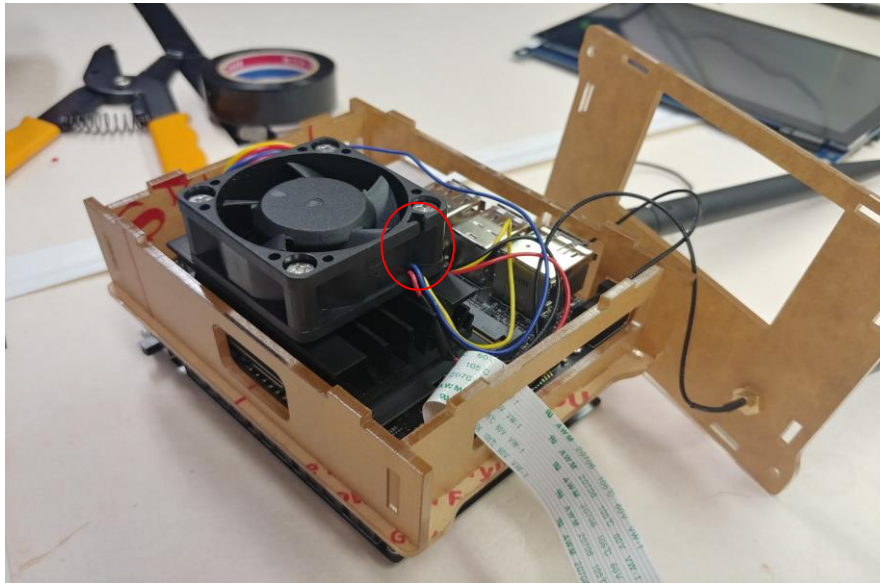
Hint: Remember to tuck in the WIFI module's cables

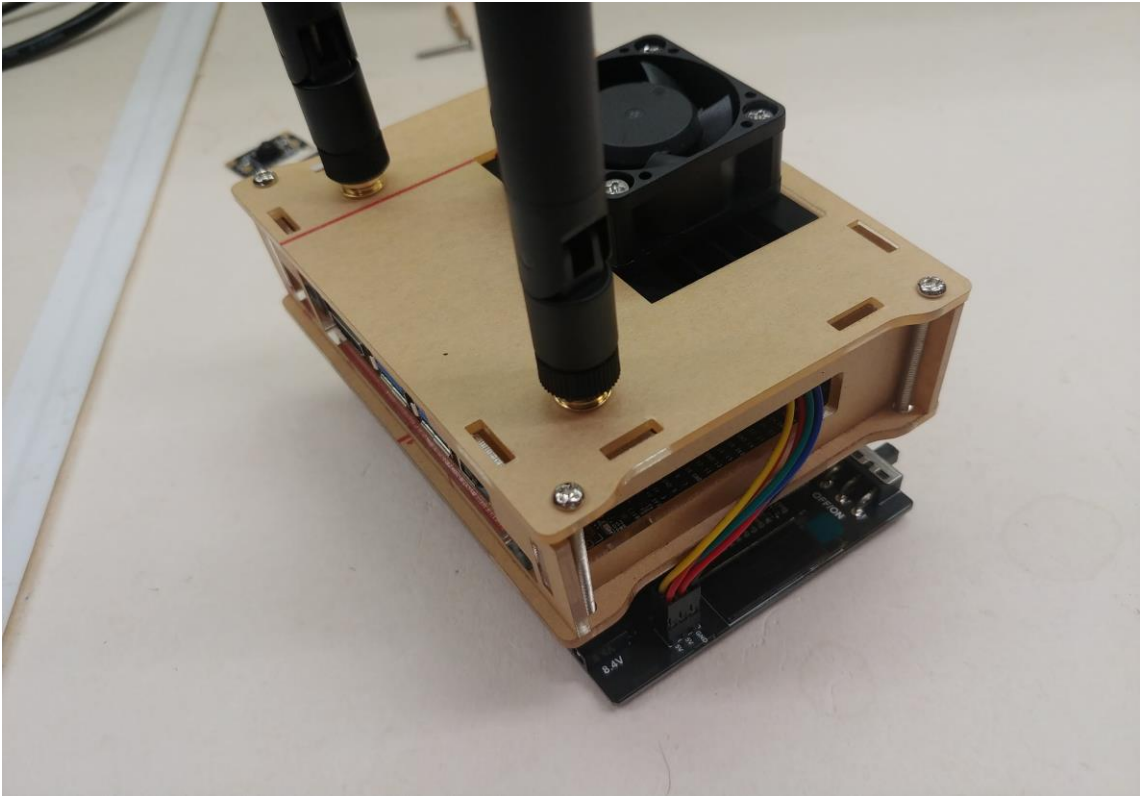


Step 3.9

Insert the long bolts and nuts to secure the box. Note: Pay attention to the nuts. There may be different sizes.

Hint: Tuck in the fan's wires into one of the gaps of the heatsink to prevent damaging the wires (as shown below). It is important not to damage any wire during installation. Thanks.





END OF GUIDE