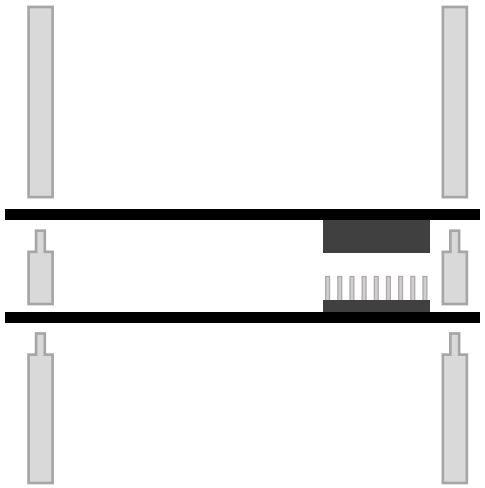
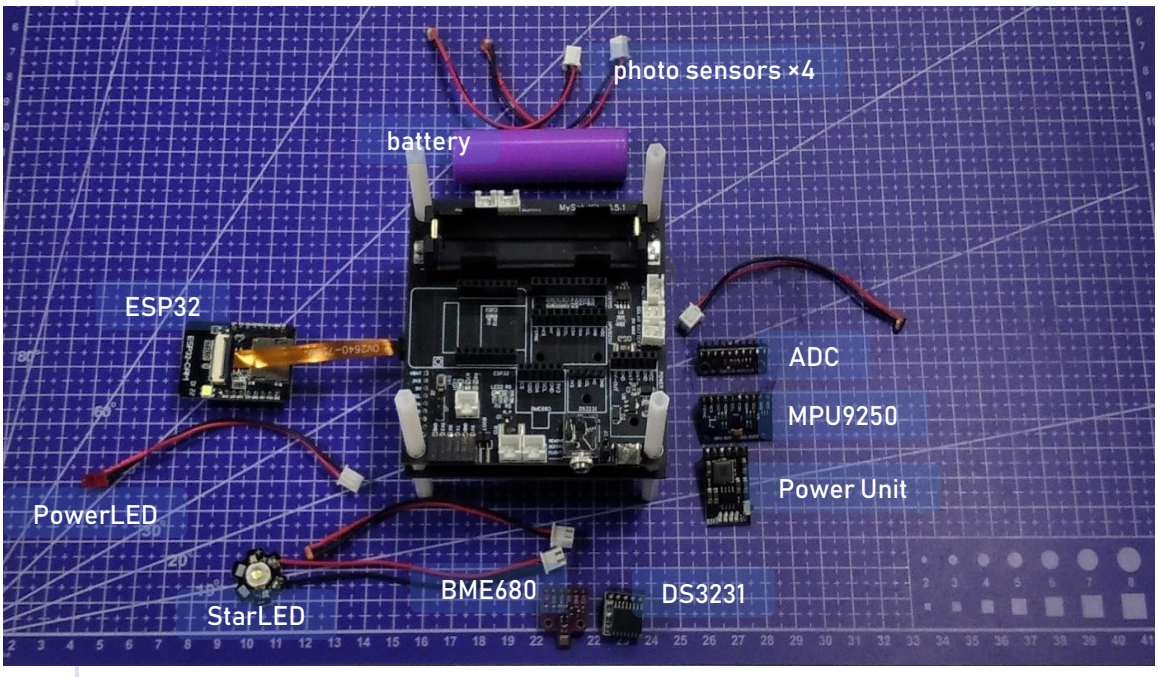
Assembly instructions

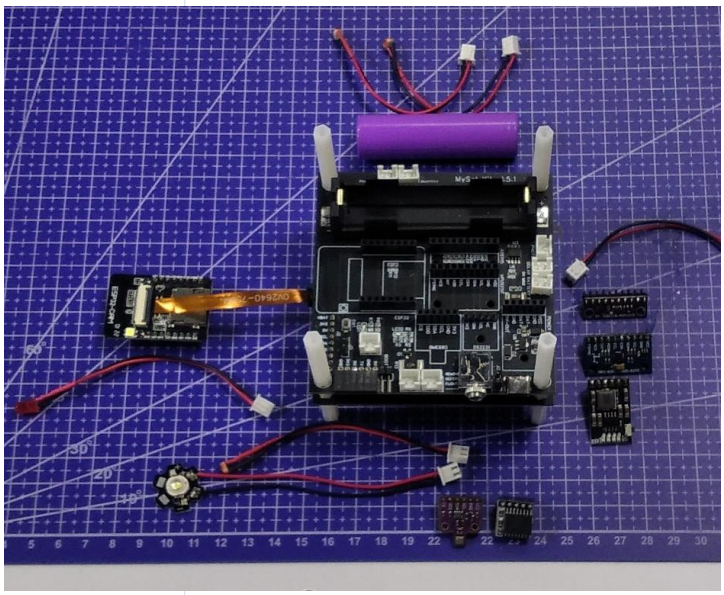
for MySat Space FAN Kit

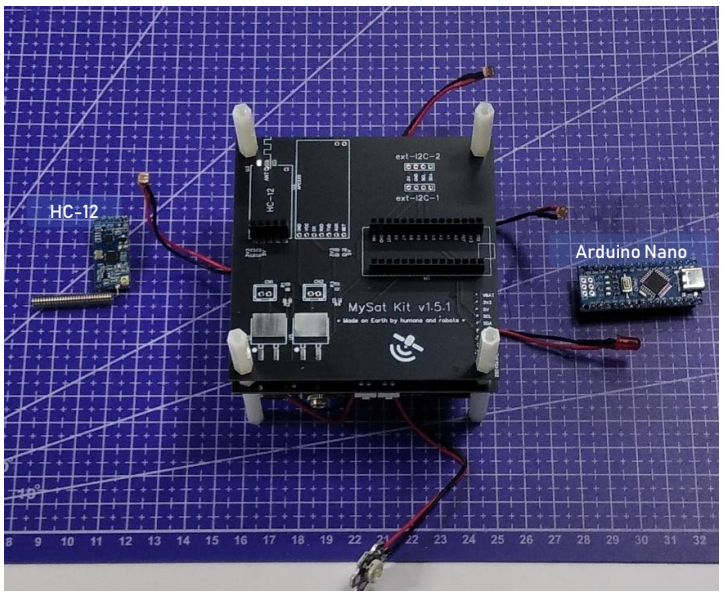
1 Start with the boards. Attach the standoff pillars first to the bottom board, then put the top board on it and screw the remaining pillars on top.



Get to know the components.

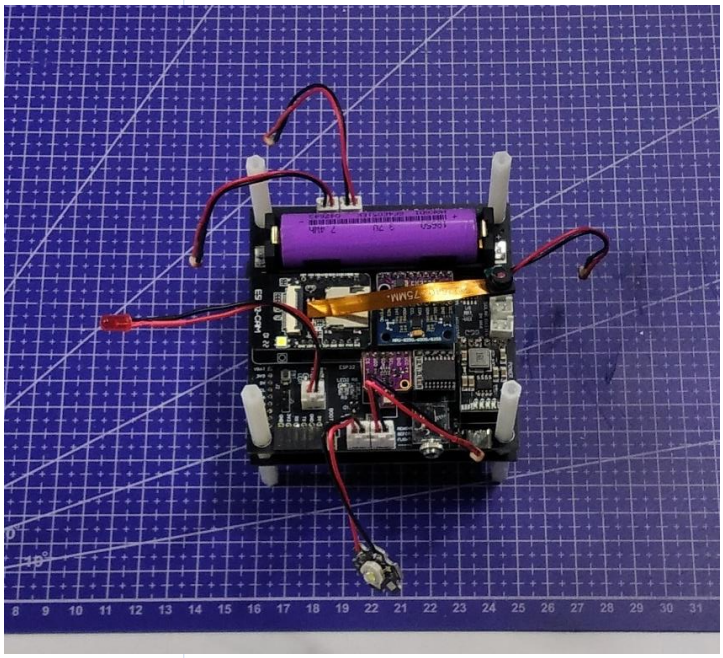


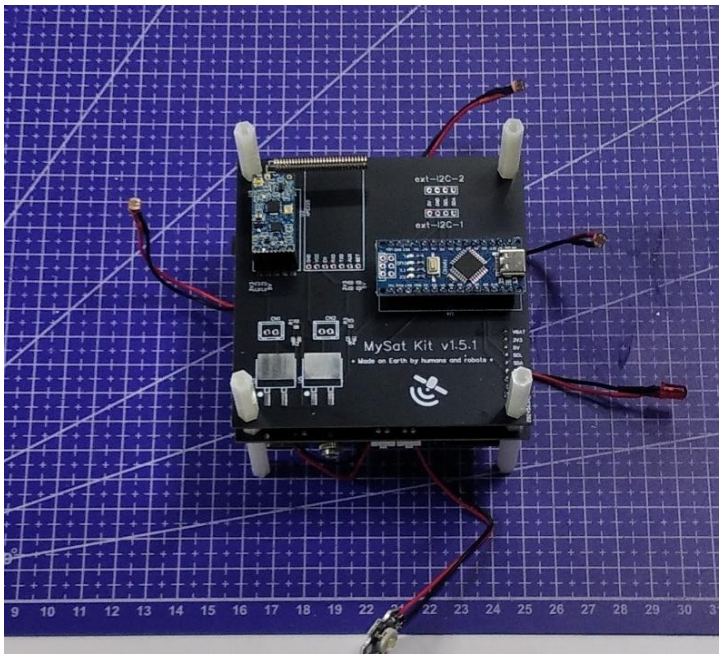




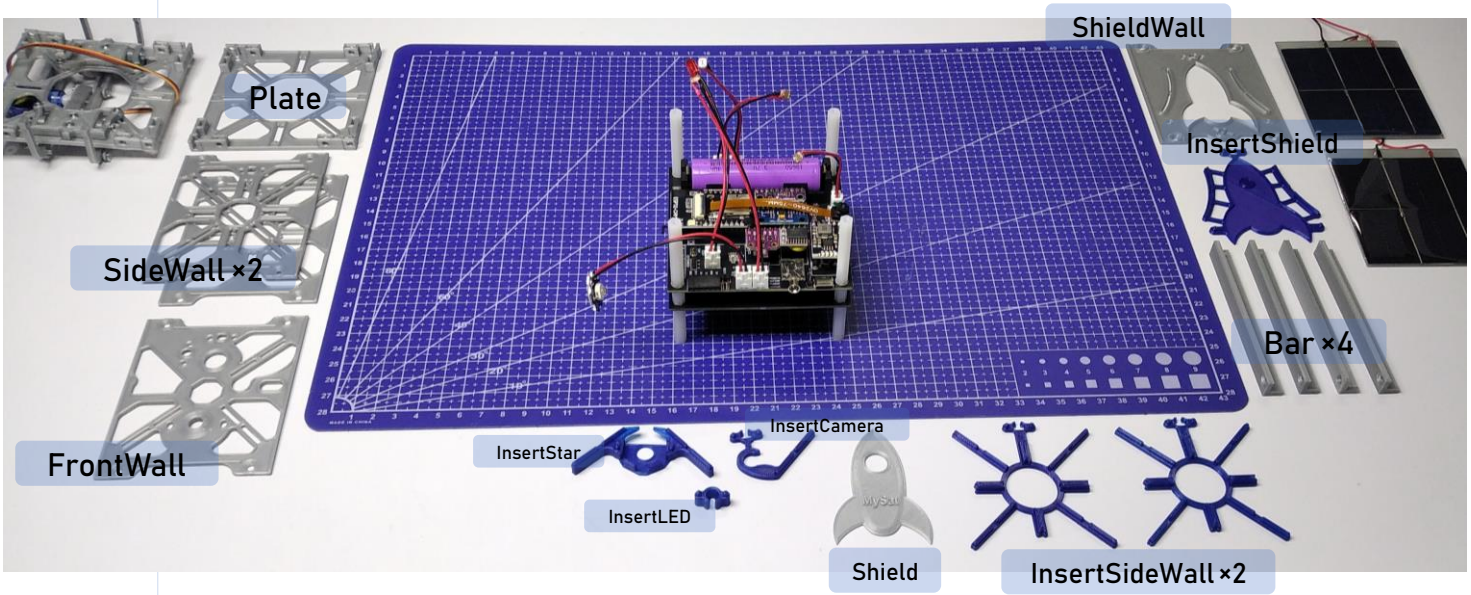
2 Insert all electronic components into both boards according to the labels on the board (do not reverse the battery polarity!).

Insert the red PowerLED into the `Power` socket on the board, and the large black StarLEDinto the `Star` socket. Also insert 4 photo sensors into the 4 sockets provided for them.





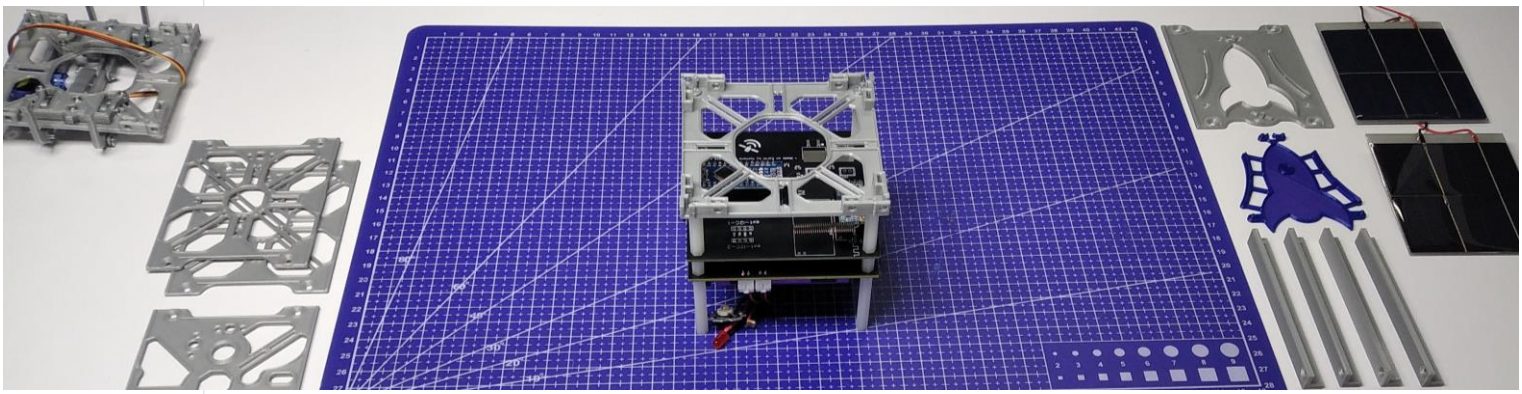
Get to know the components.



3

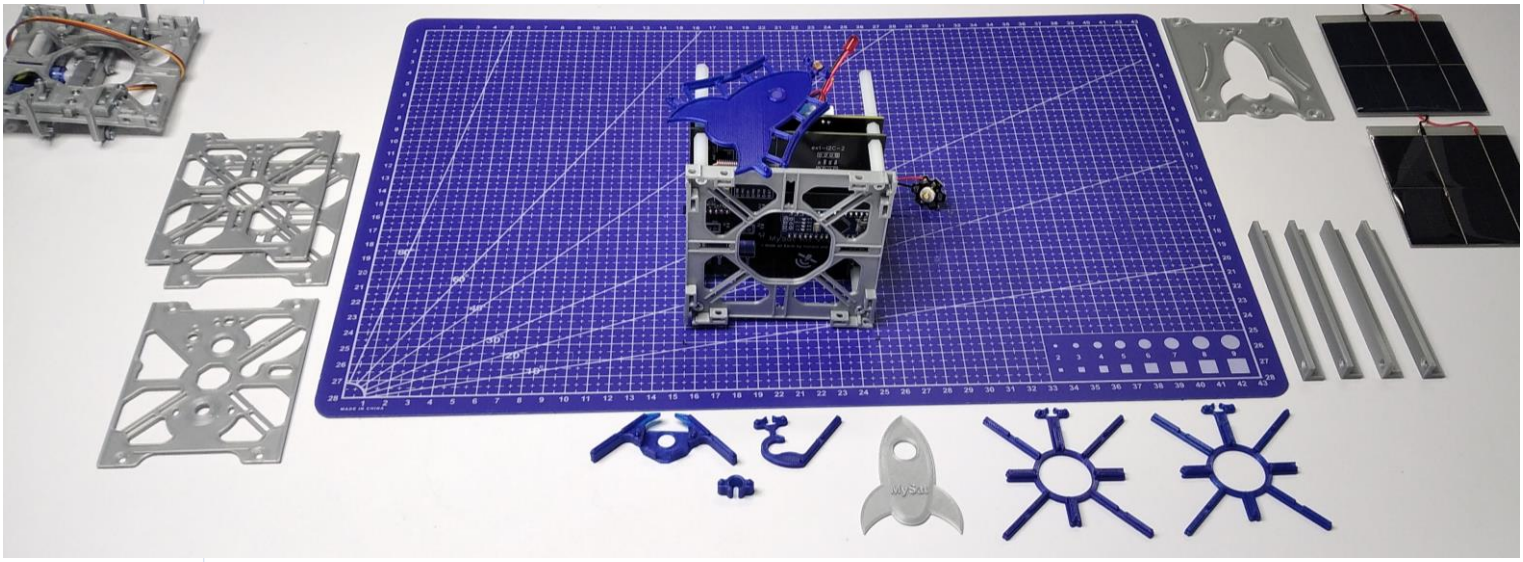
Secure the **Plate**, the bottom of the satellite, with 4 screws into the threads in the pillars. Do this from the bottom board side (where the Arduino Nano is located).

Do not confuse the position of the part. The smooth side should be facing the board.

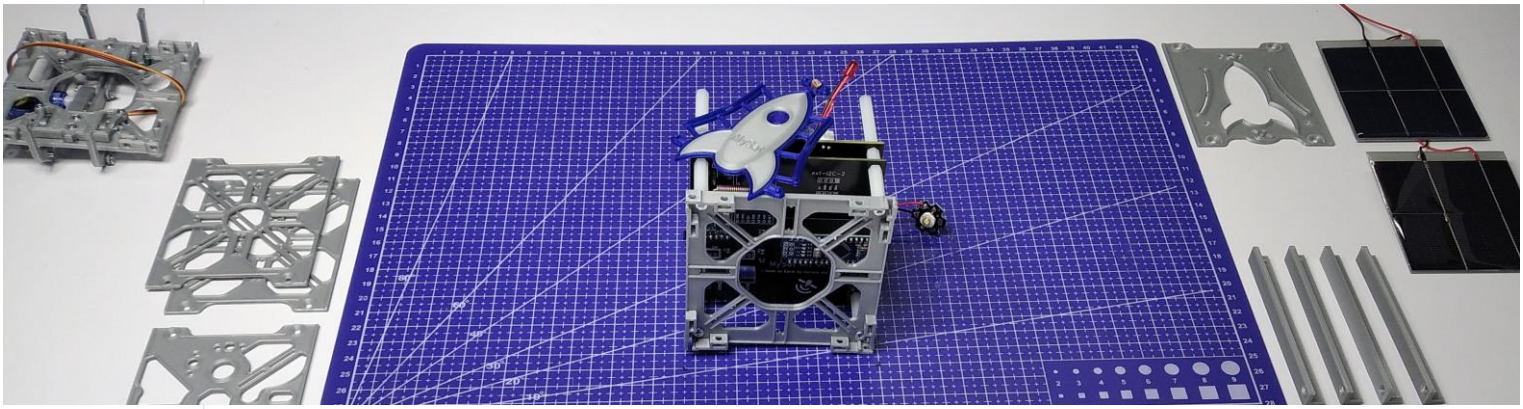


4

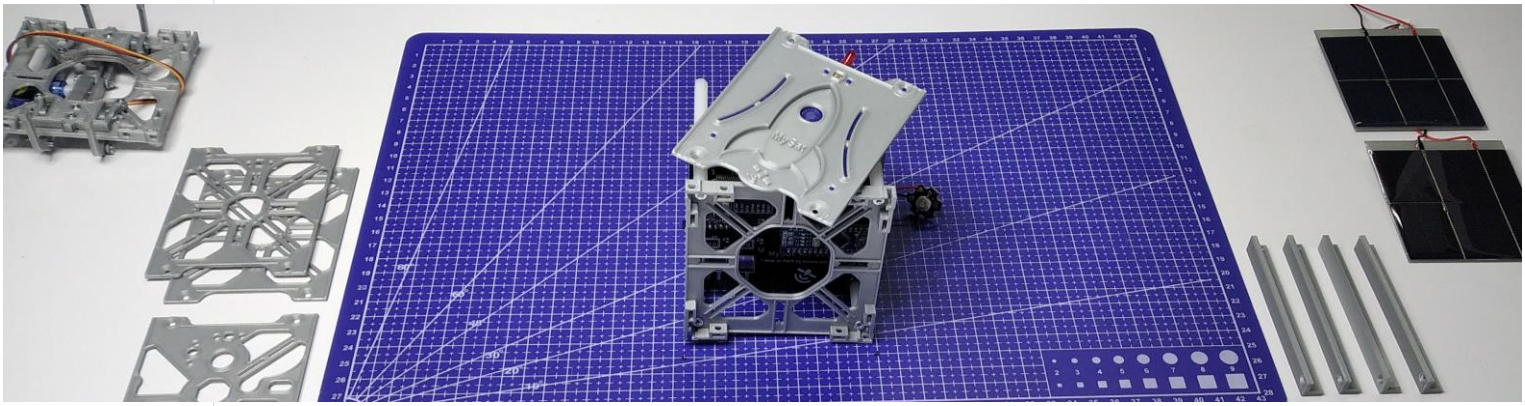
Take the **InsectShield**, and insert the wires from the photo sensor you inserted into the `PHOTO 2` connector into the slot on top to secure it.



Insert **Shield** into **InsertShield**.

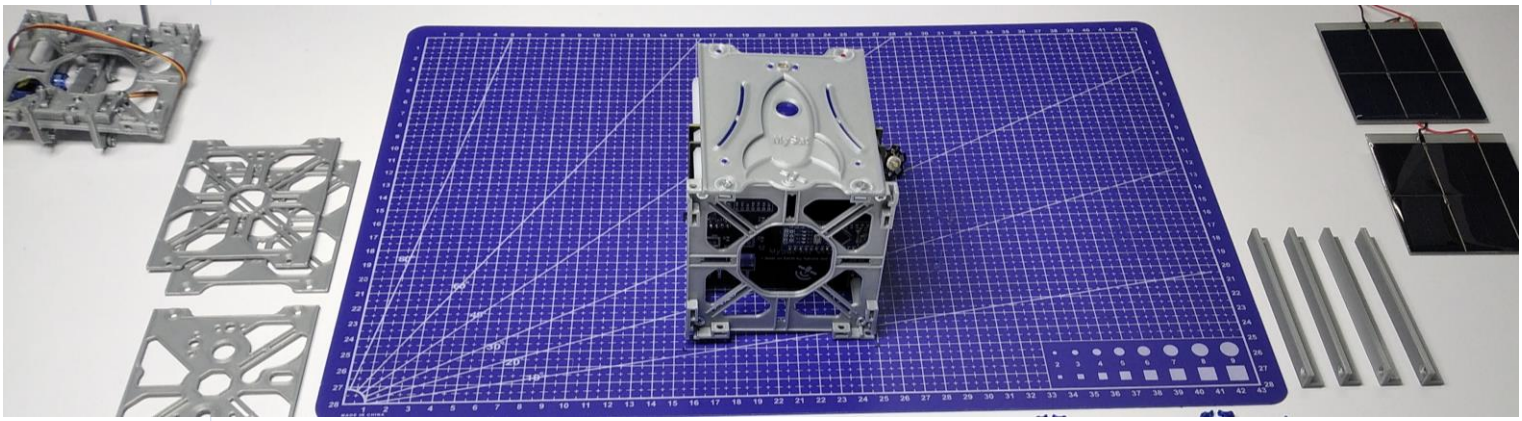


5 Attach **InsertShield** to **ShieldWall**.



Secure the underside of the wall to the **Plate** (this wall should be adjacent to the boards near the battery) using two screws and two nuts.

Insert the nuts into the square cells on the **Plate**.



6

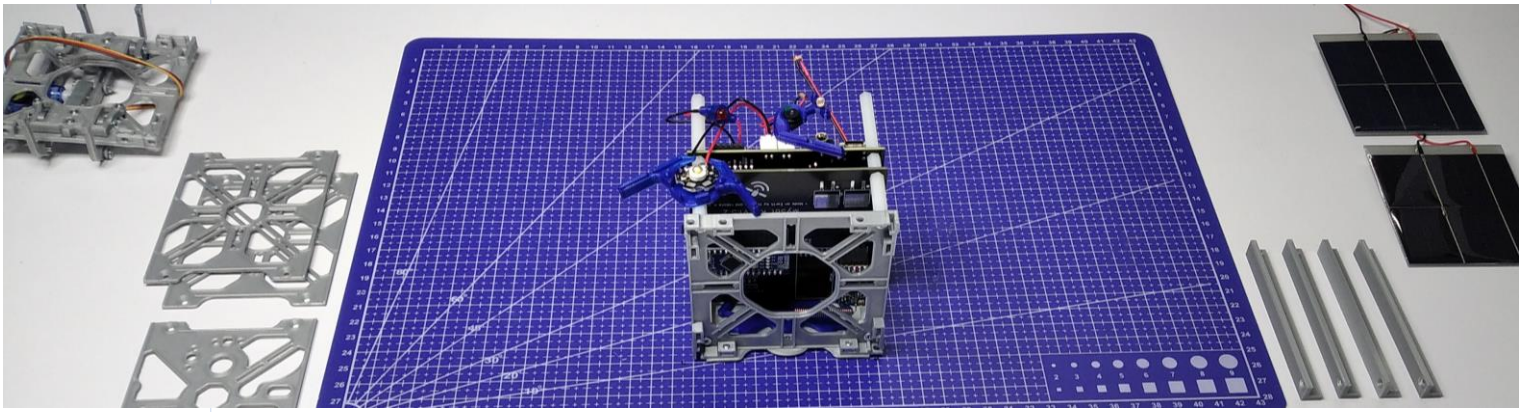
Turn the satellite over to the opposite side.

Prepare the **InsertStar**, **InsertLED** and **InsertCamera** mounts.

Insert the red PowerLED into the **InsertLED**. To do this, slightly push the edges of the part apart with your fingers.

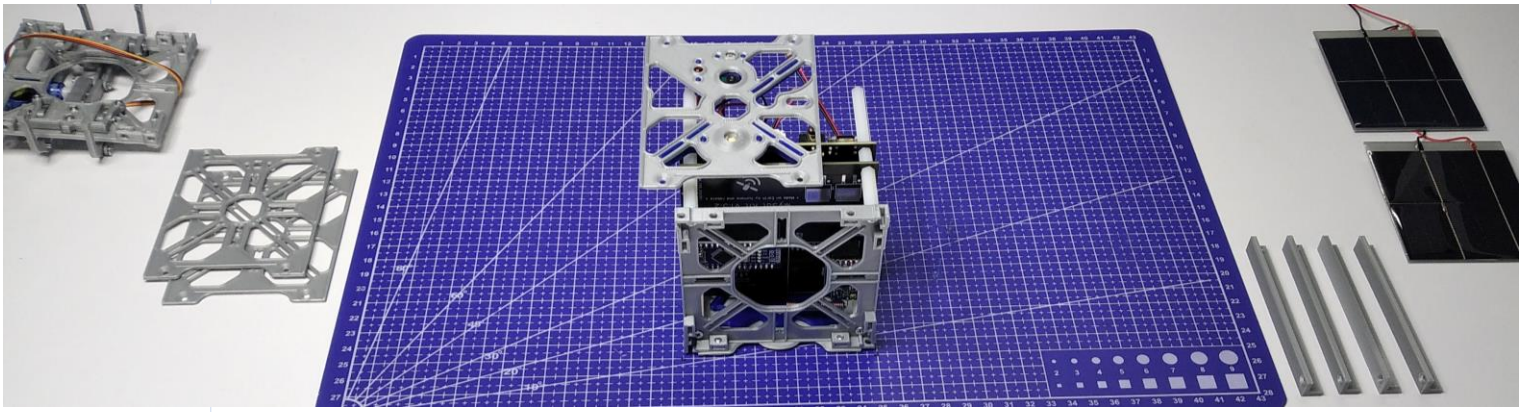
Insert the camera into the **InsertCamera** (be extremely careful to not tear off the cable) and the photosensor from the `PHOTO 4` socket.

Place black StarLed into **InsertStar**.



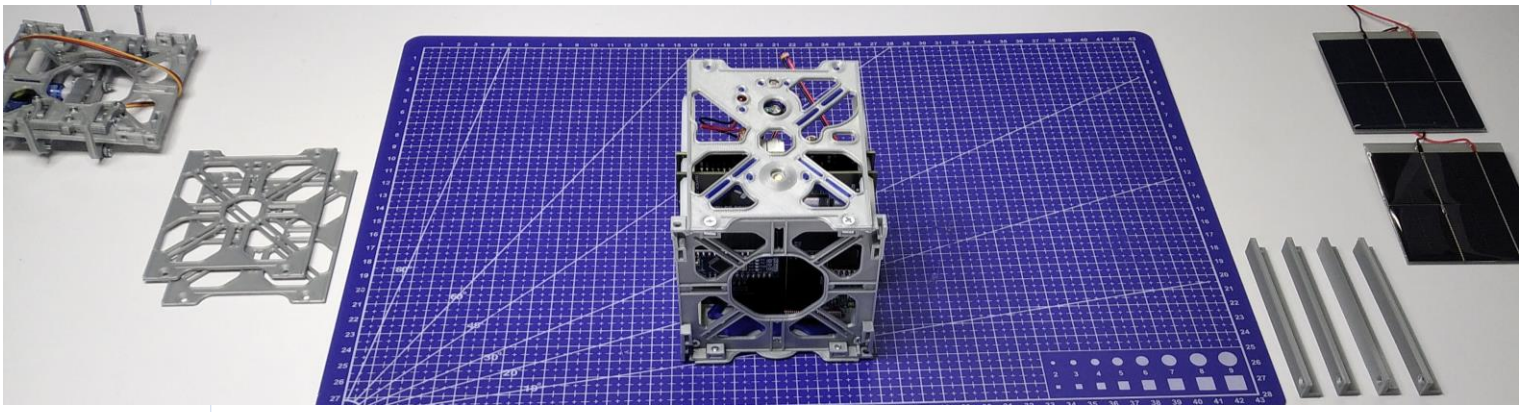
7

Insert all three parts into the **FrontWall** (still be careful with the camera cable).



Fix the **FrontWall** on the side of the connectors (on the opposite side from the wall that you fixed before).

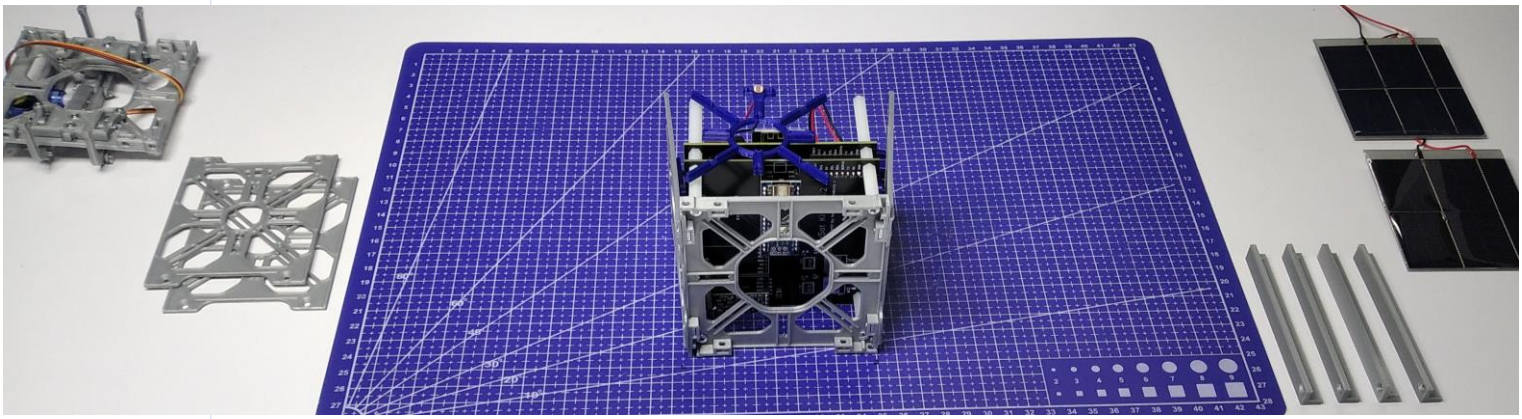
To do this, attach it to the bottom of the satellite in the same way using two screws and two nuts.



8

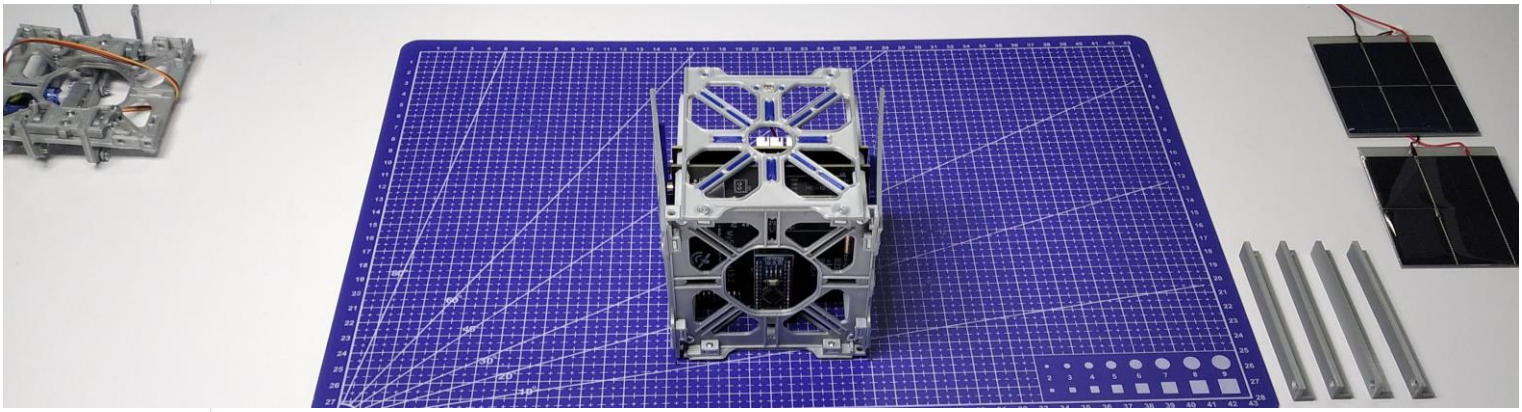
Now it remains to fix the side walls.

Fix the two remaining photosensors in the **InsertSideWall** mounts. When looking into the camera, the photosensor from the `PHOTO 1` socket should go to the right wall, and from the `PHOTO 3` - to the left wall.



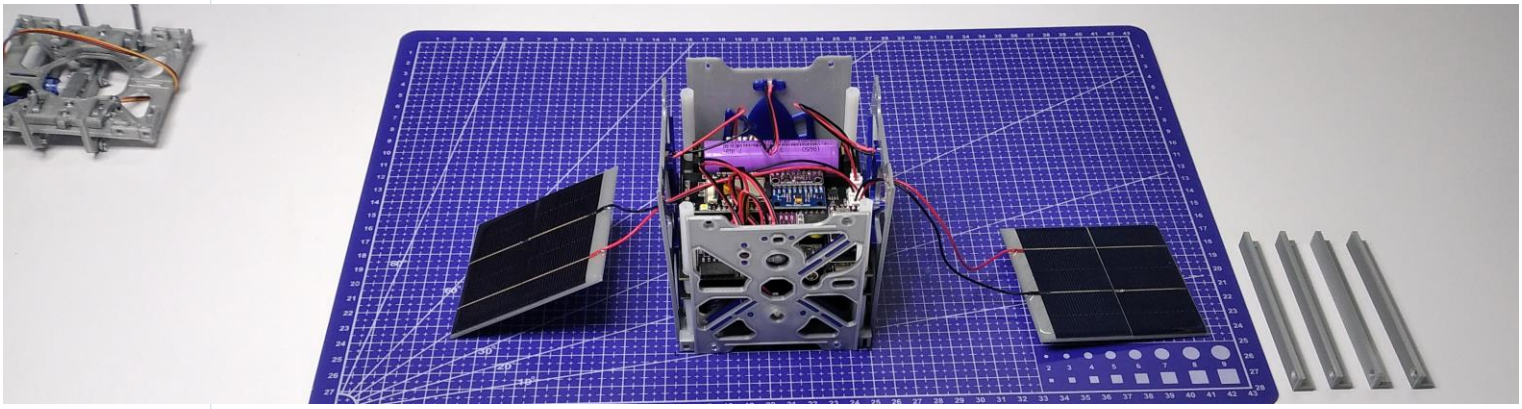
Insert the **InsertSideWall** into the **SideWall**.

Fix the **SideWall** with two screws and two nuts each.



9

Now thread the cables from the solar panels through the holes in the **SideWall**s on the left and right, and connect them to the corresponding sockets on the board.

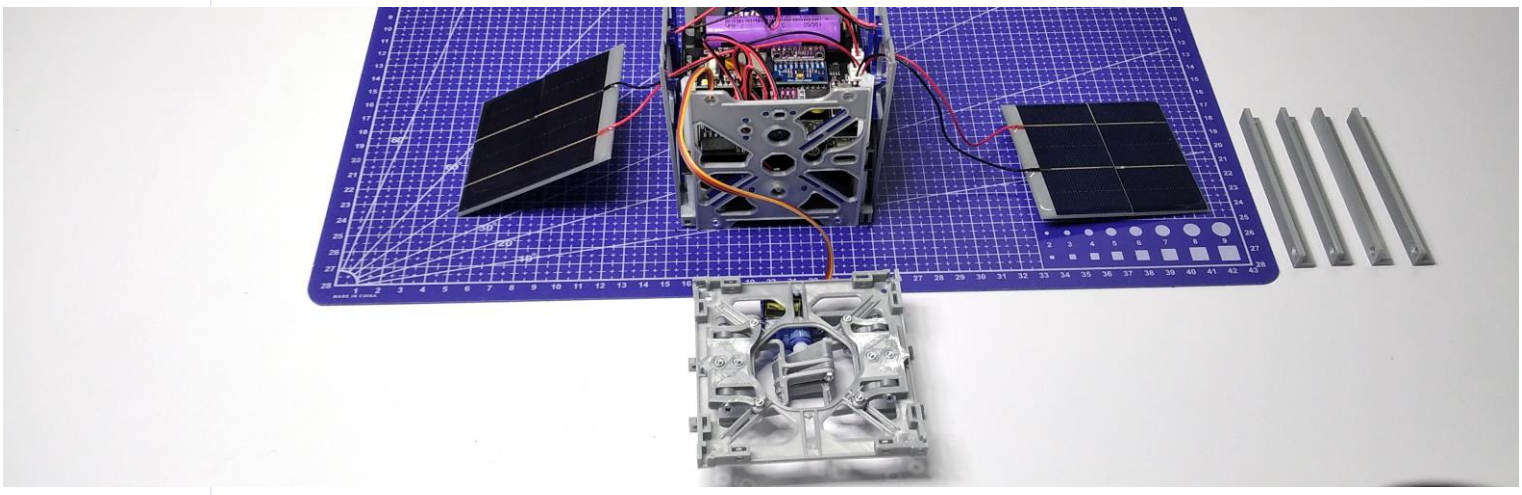


10

Prepare the top **Plate** with the assembled solar panel unfolding mechanism.

If the arms are in the extended position, protruding beyond the edges of the **Plate**, you can roll them up and hide them by carefully turning the motor shaft counterclockwise.

Connect the servo motor cable to the special connector so that the **brown** cable (“G”) faces the battery and the **yellow** cable (“S”) faces the camera.

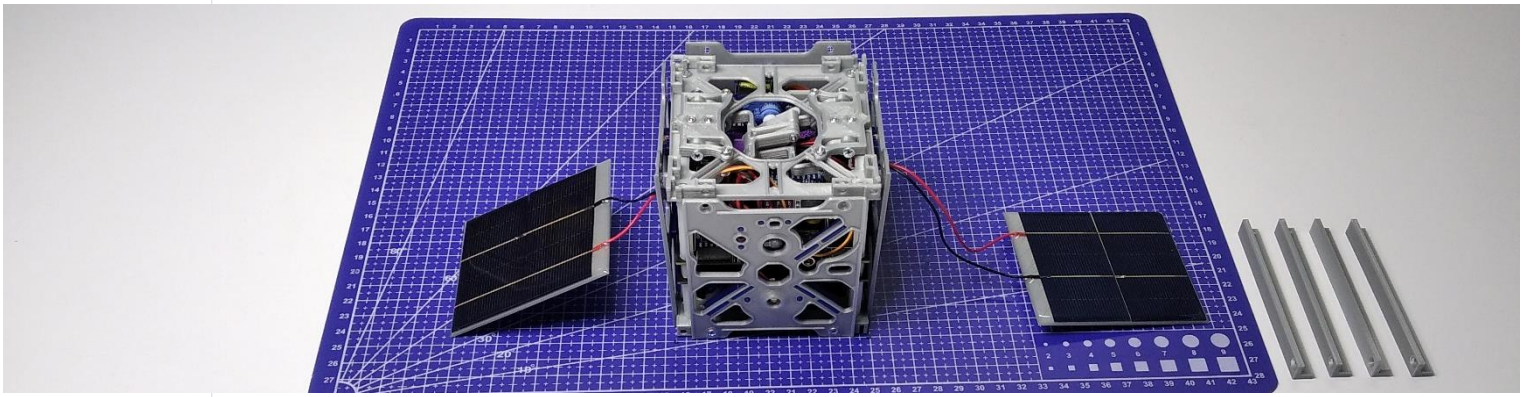


11

Place the **Plate** with the mechanism on top of the satellite so that the servo (blue) is above the battery.

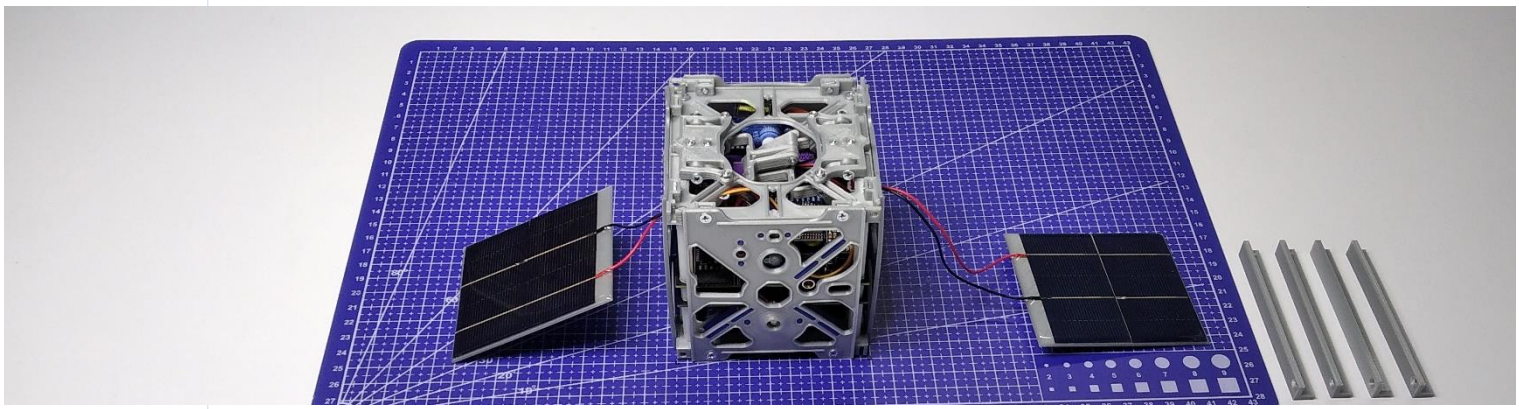
Attention! When attaching the top cover, make sure that the servo motor wire or any other wires inside the satellite do not block the mechanism! If possible, bend the wires so that they are pressed against the walls of the satellite to free up space.

Secure the **Plate** to the board stands with four screws.



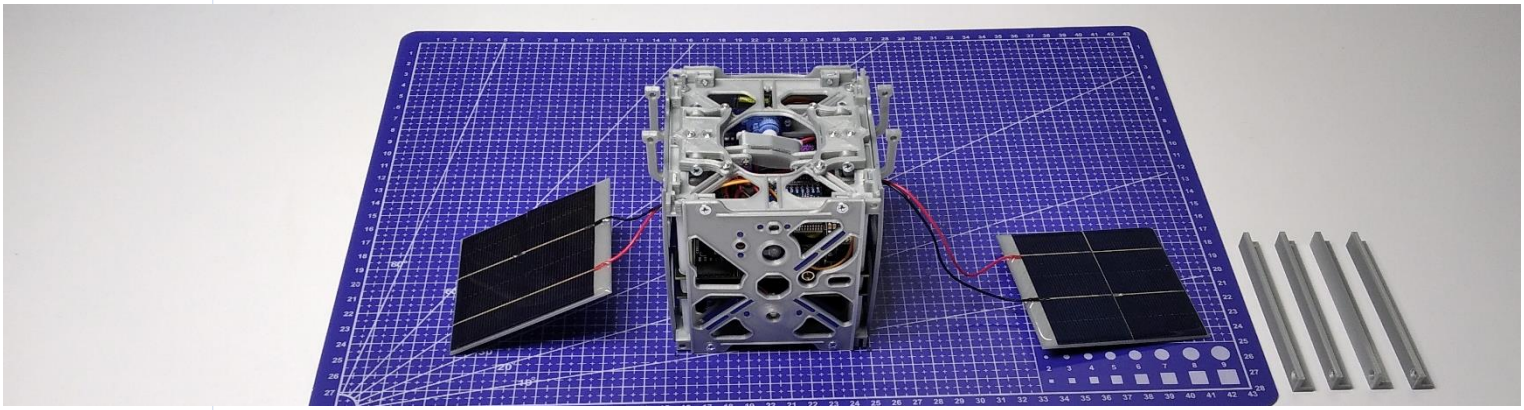
12

Attach the top edges of all four walls to the top **Plate** using eight screws and eight nuts.

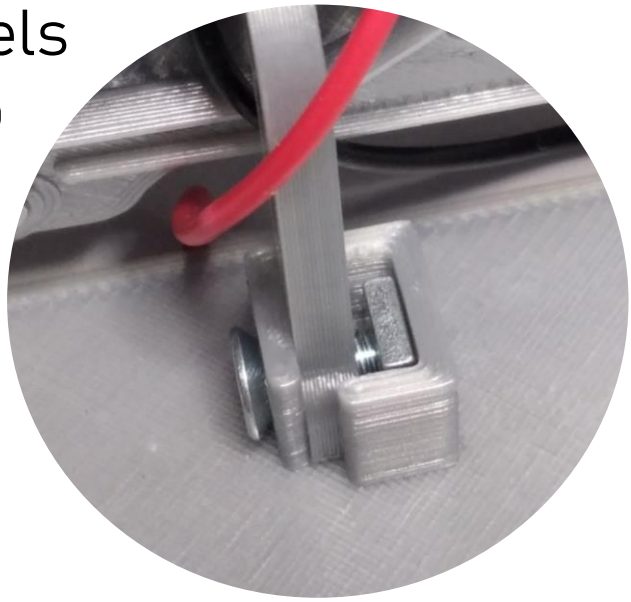


13

Slide the solar panel deployment mechanism levers out of the housing by gently turning the servo shaft clockwise.



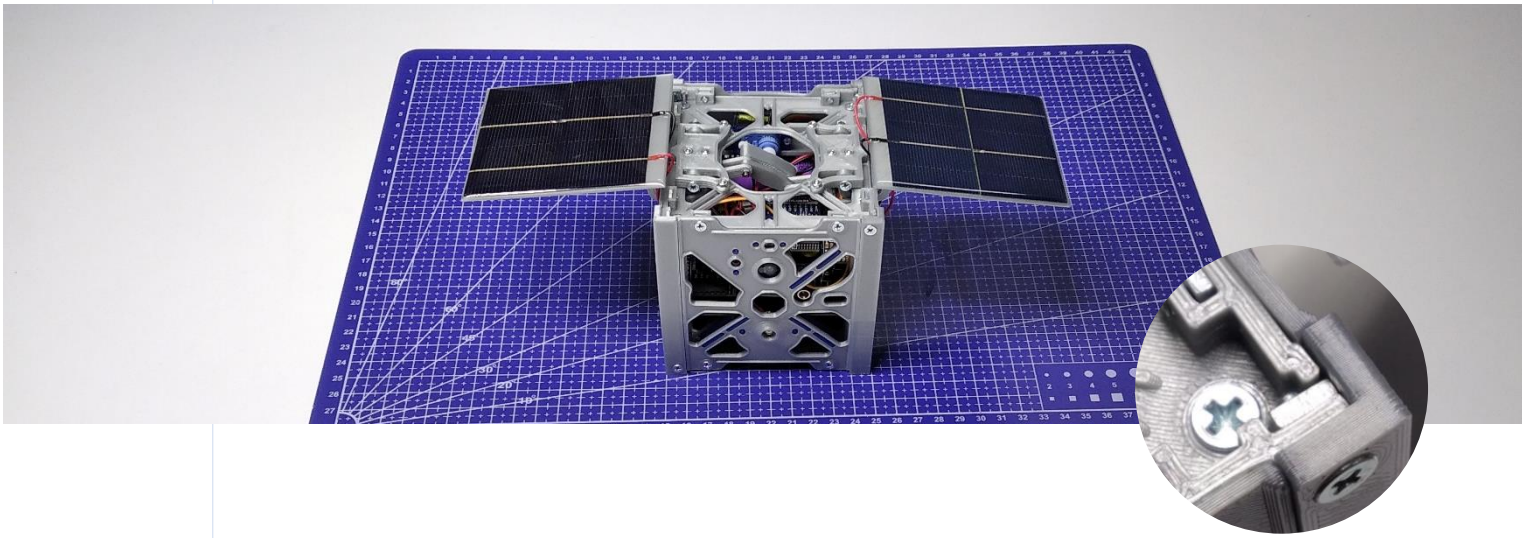
Turn the satellite upside down. Insert the levers into the cells on the solar panels. Insert square nuts into the same cells. Secure the panels to the levers with two screws for each.



For this, use the set of fasteners "for solar panels"

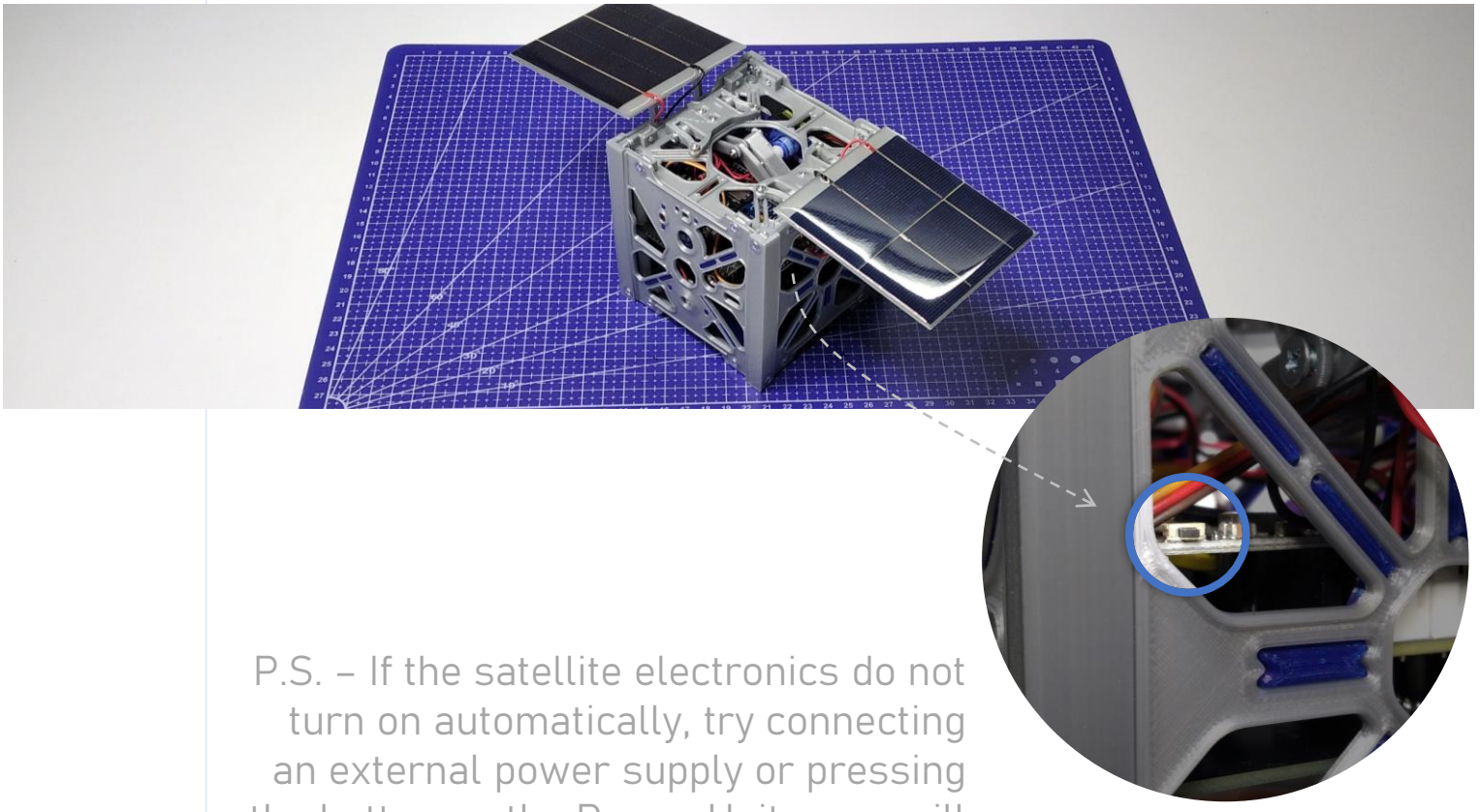
14

Fix the four corner **Bar**s to the corners of the satellite with 8 bolts and 8 nuts.



Congratulations! You've just built your own space satellite!

At the end of the assembly you may have a few spare bolts and nuts left over - and that's okay :)



P.S. – If the satellite electronics do not turn on automatically, try connecting an external power supply or pressing the button on the Power Unit - you will find it on the right **SideWall**.