Saher

Getting scale 1:24 / 1:20 car model on solidworks , where it`s (20.32 ~ 25) cm long as shown in figure below (Fig.1)

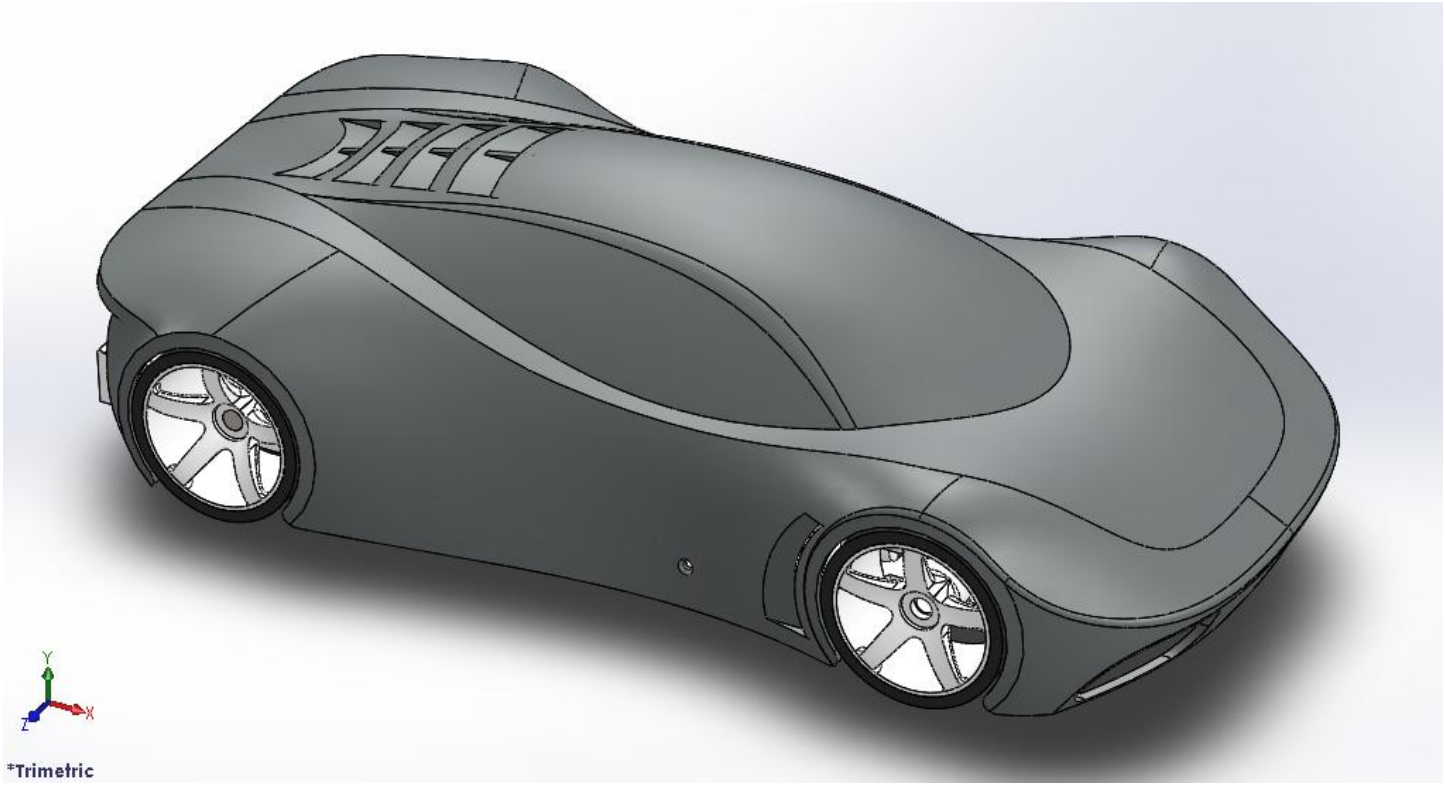


Fig.1

in following (Fig.2) figure 2 , the outer cover of the car is removed , to get into the car chassis

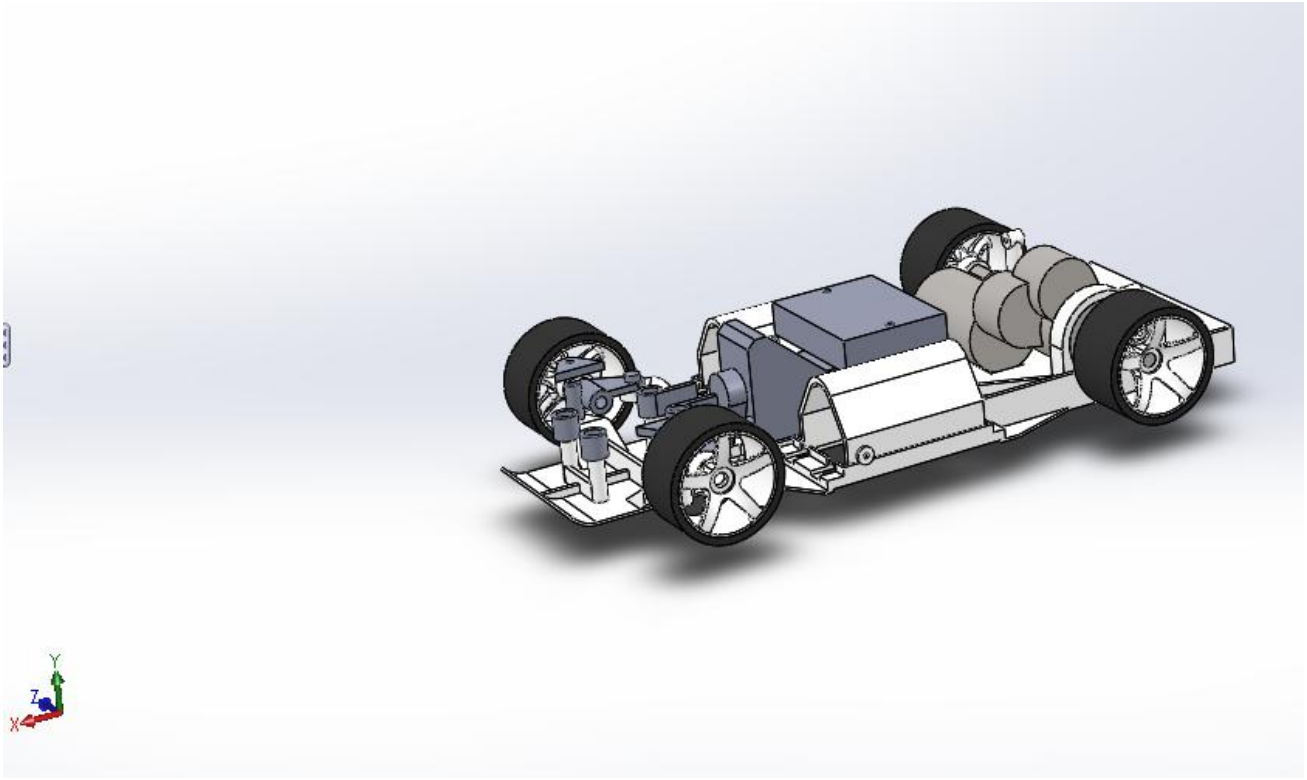
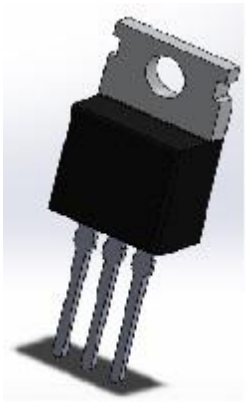


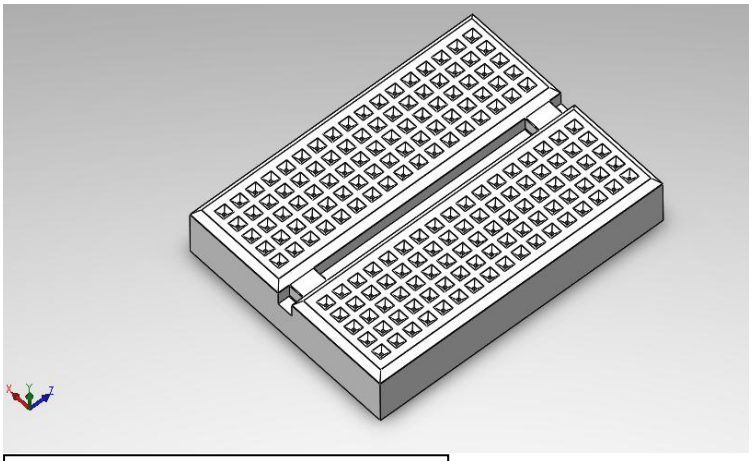
Fig.2

Saher

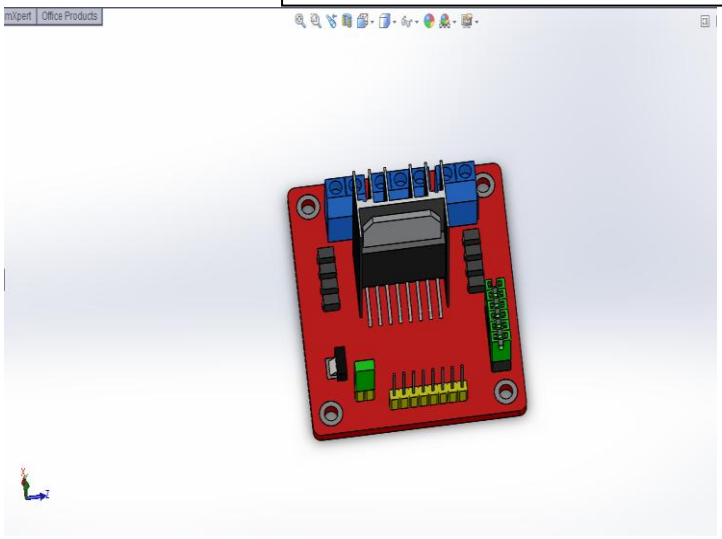
Preparing models as shown in the figures below [raspberry pi , arduino uno , 7805 voltage regulator , mini breadboard for connections , 9 volt battery] models , [custom plastic carriers , long supports , and 2 customized plastic sheets].



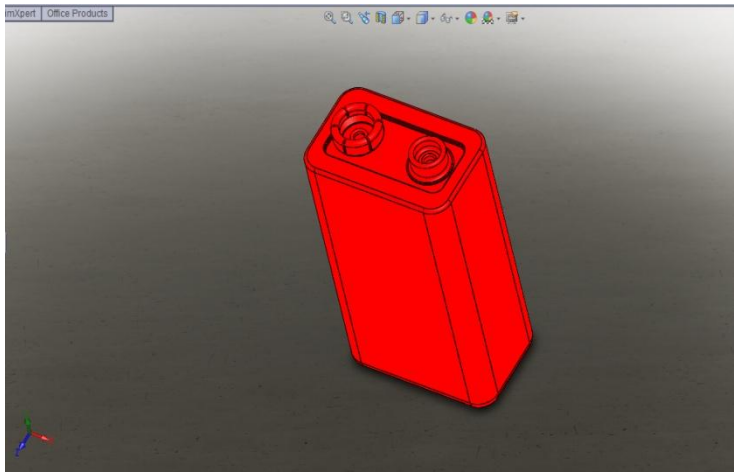
7805



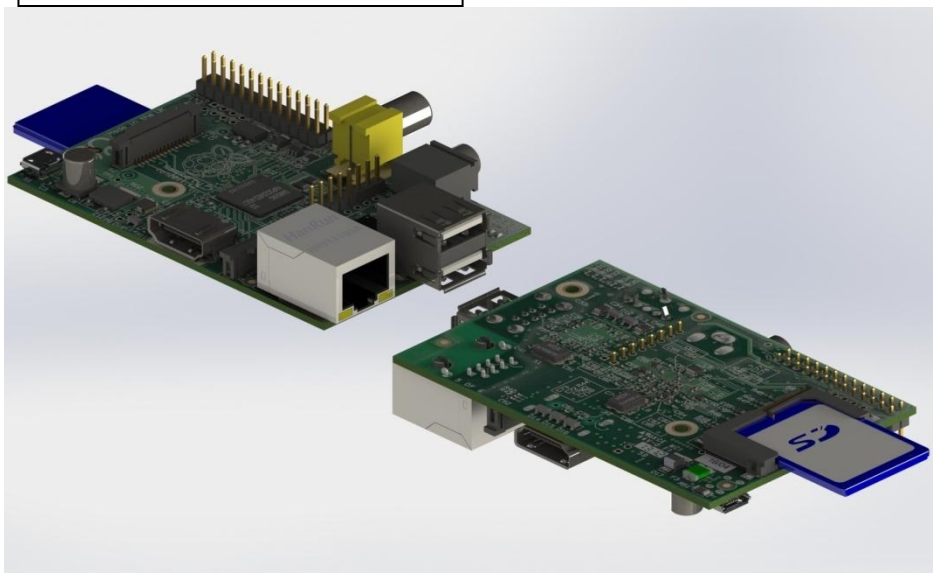
Mini Breadboard



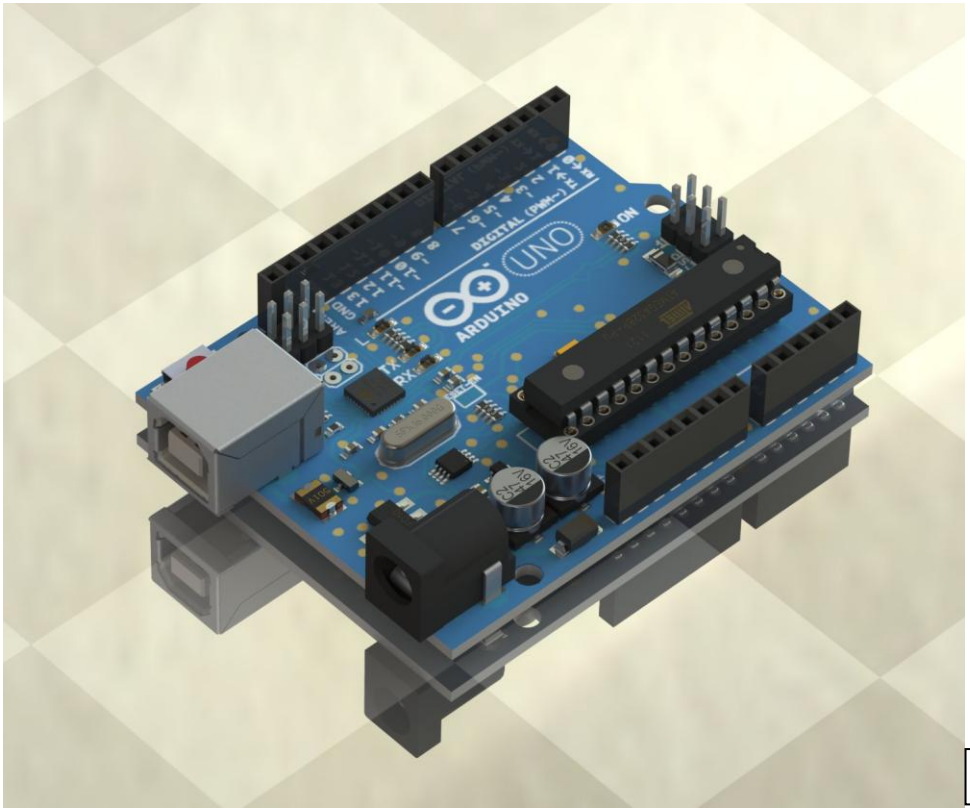
H-Bridge Module



9V Battery model



Raspberry pi board



Arduino uno board

By making Custom carriers for raspberry pi and in contact with customized sheet , and then the customized sheet is glued to the car chassis as shown in (Fig.3)

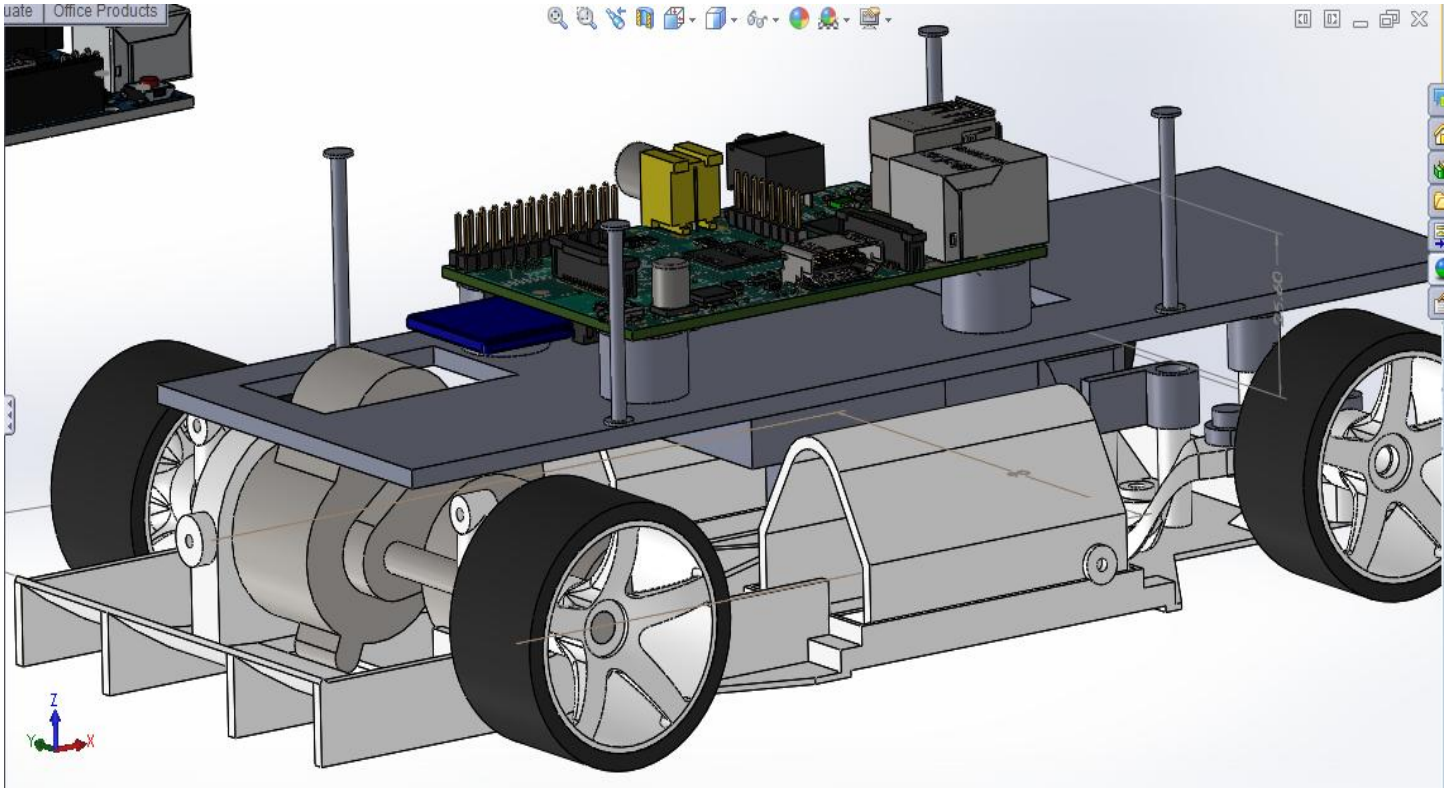


Fig.3

Saher

the following figure (Fig.4) is the top view for the raspberry pi board and carried on the circular carriers and glued to the customized sheet

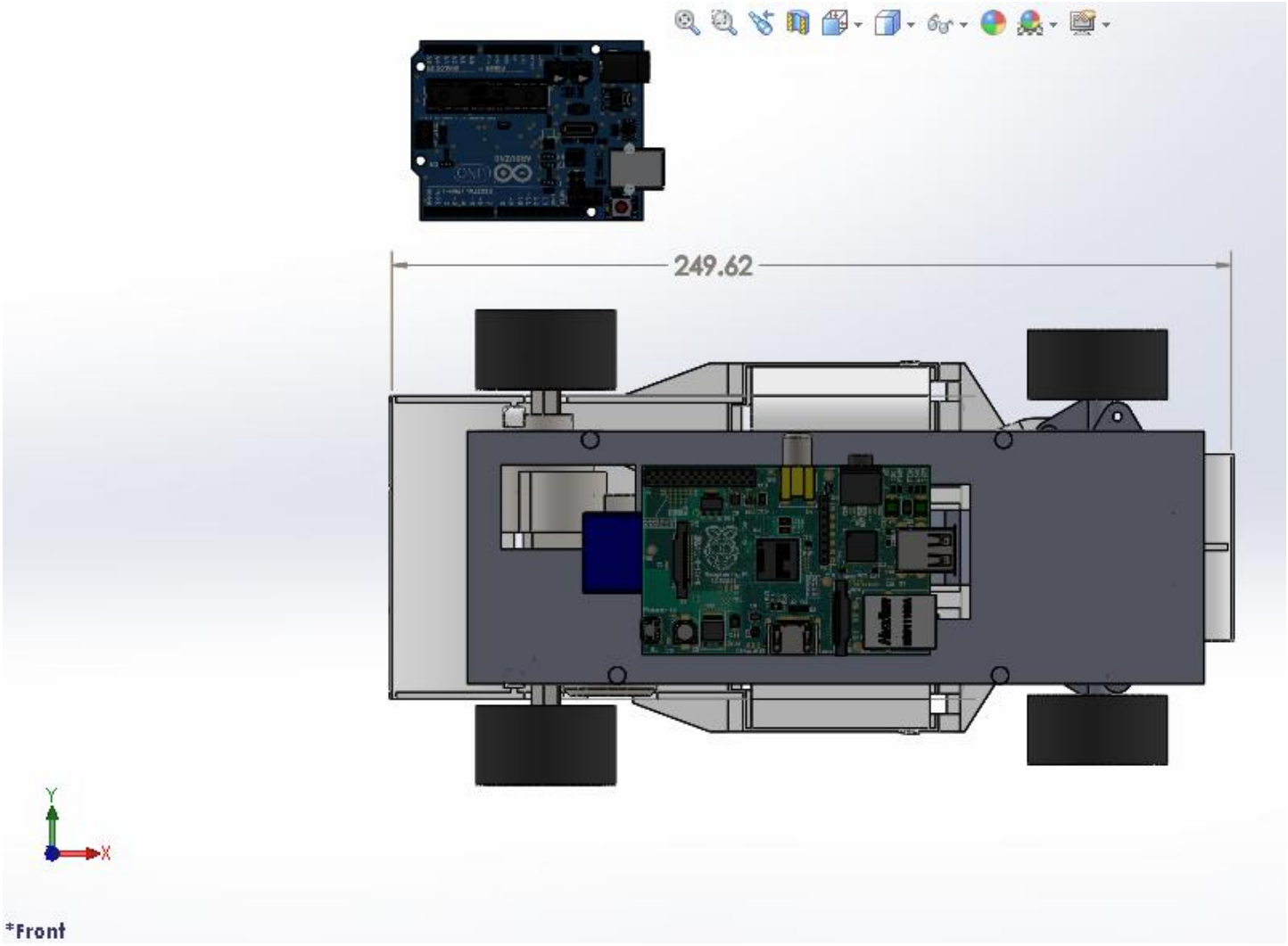


Fig.4, the figure below is side view of the robot (Fig.5)

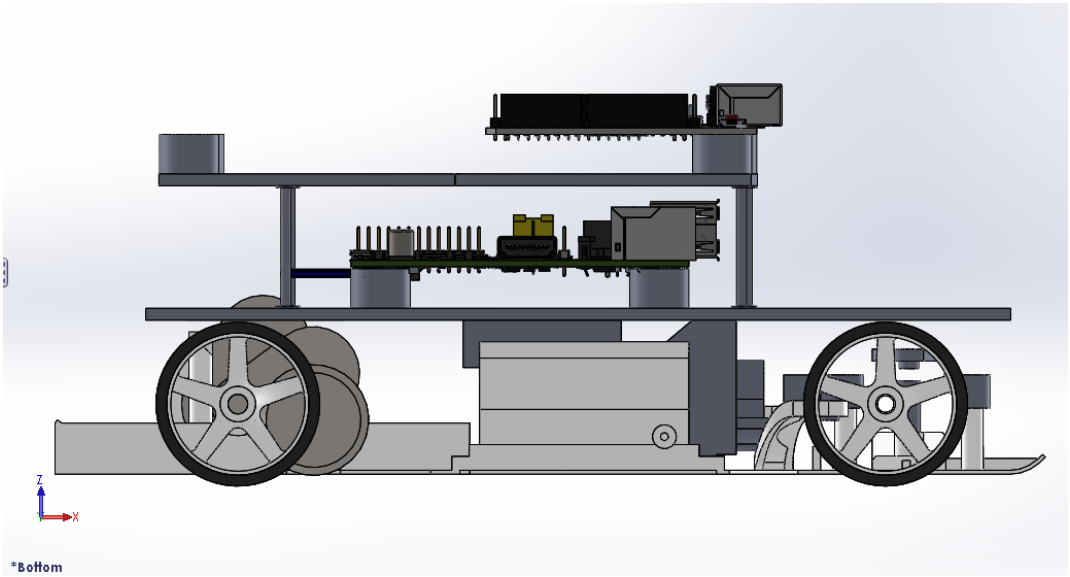


Fig.5

Saher

The following figure (Fig.6) shows the isometric view of the robot , but without adding batteries or breadboard , and voltage regulators.

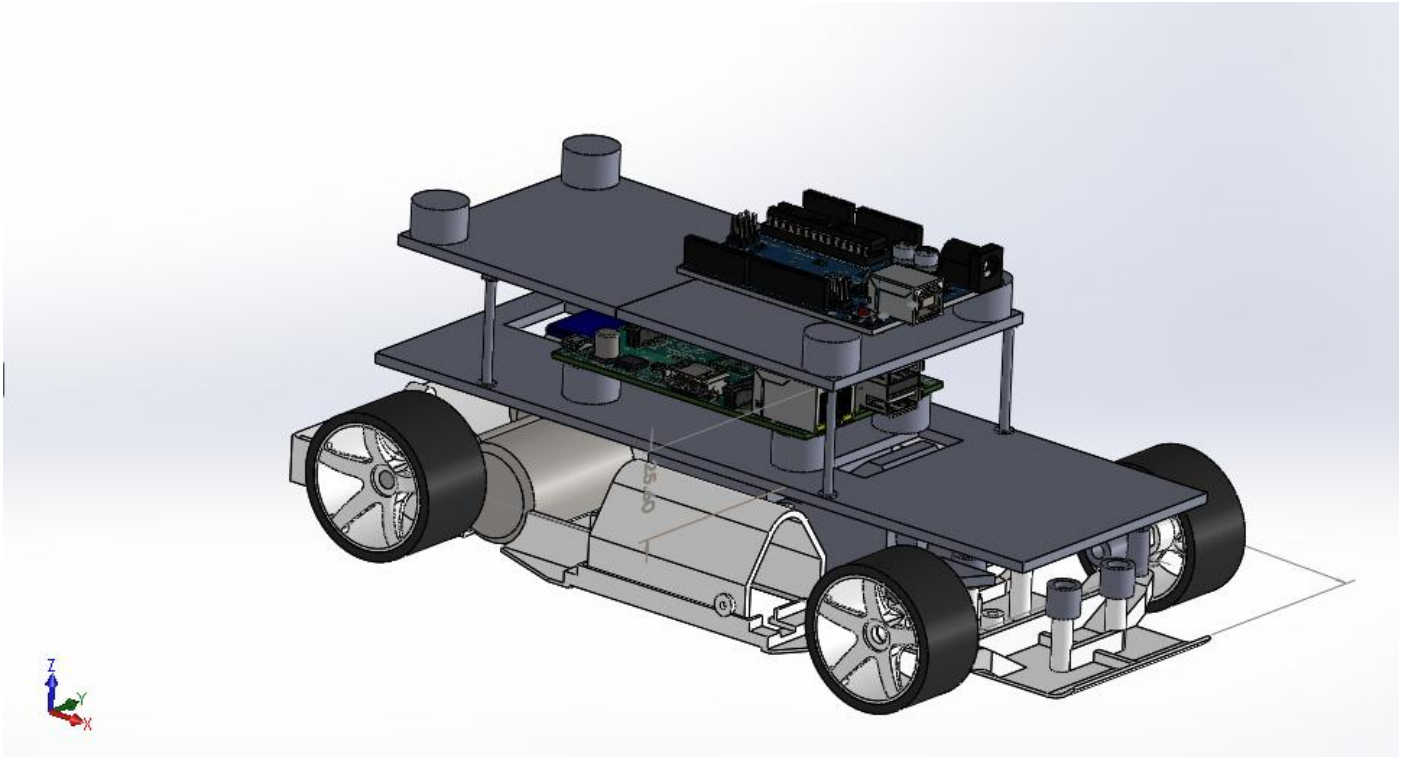


Fig.6

The H-Bridge module is glued to the other small circular carriers as shown in (Fig.7)

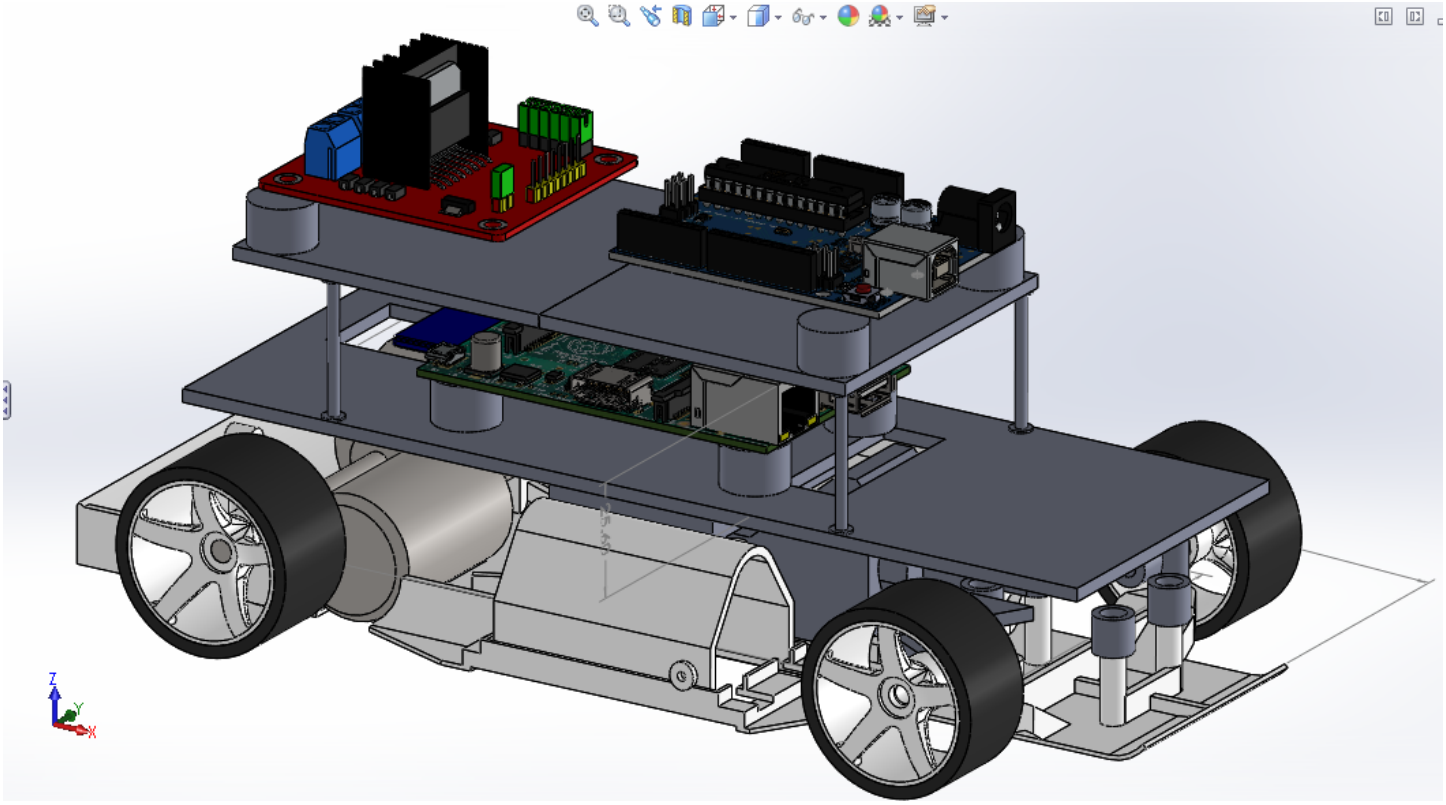


Fig.7

Saher

The following figure (Fig.8) shows assembling the batteries and the mini bread board , one battery for arduino and H-Bridge , and other for powering the raspberry pi

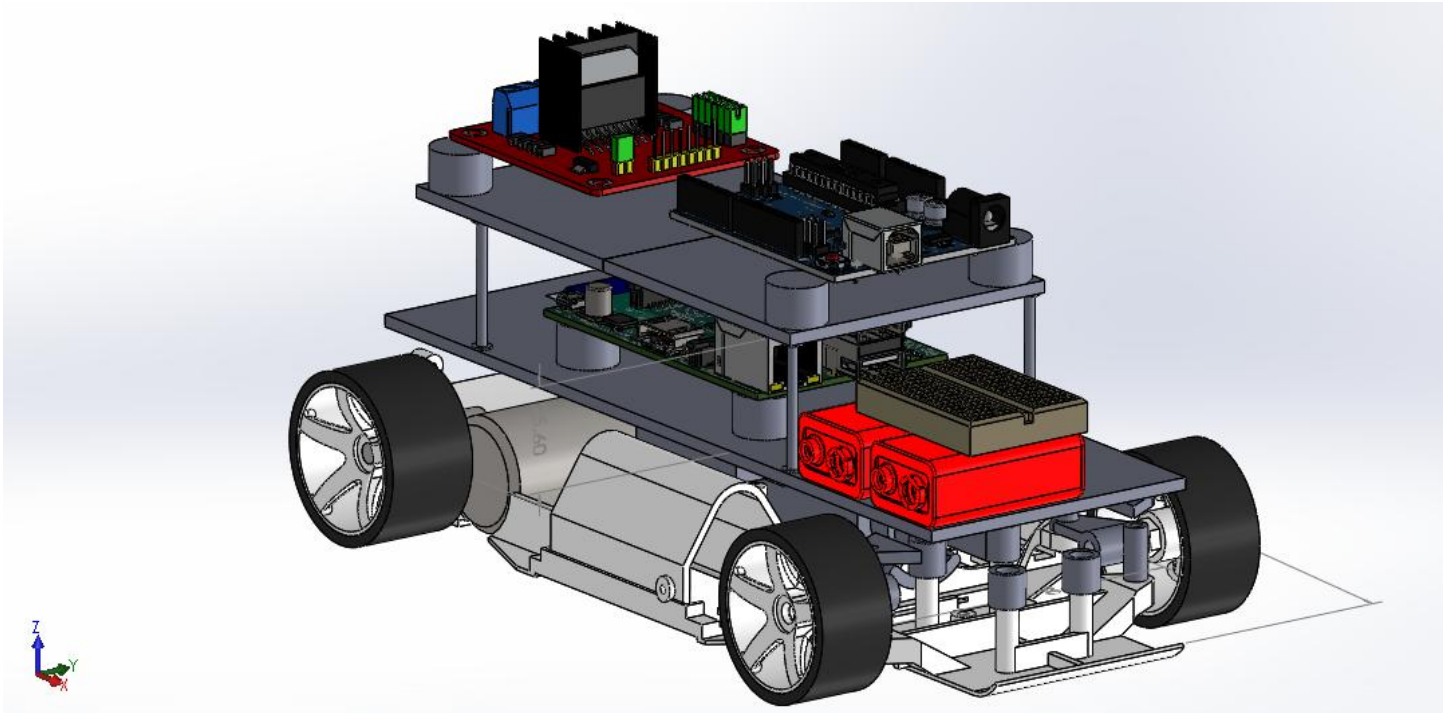


Fig.8

The following figure (Fig.9) shows attaching the 7805 voltage regulators , to the mini breadboard .

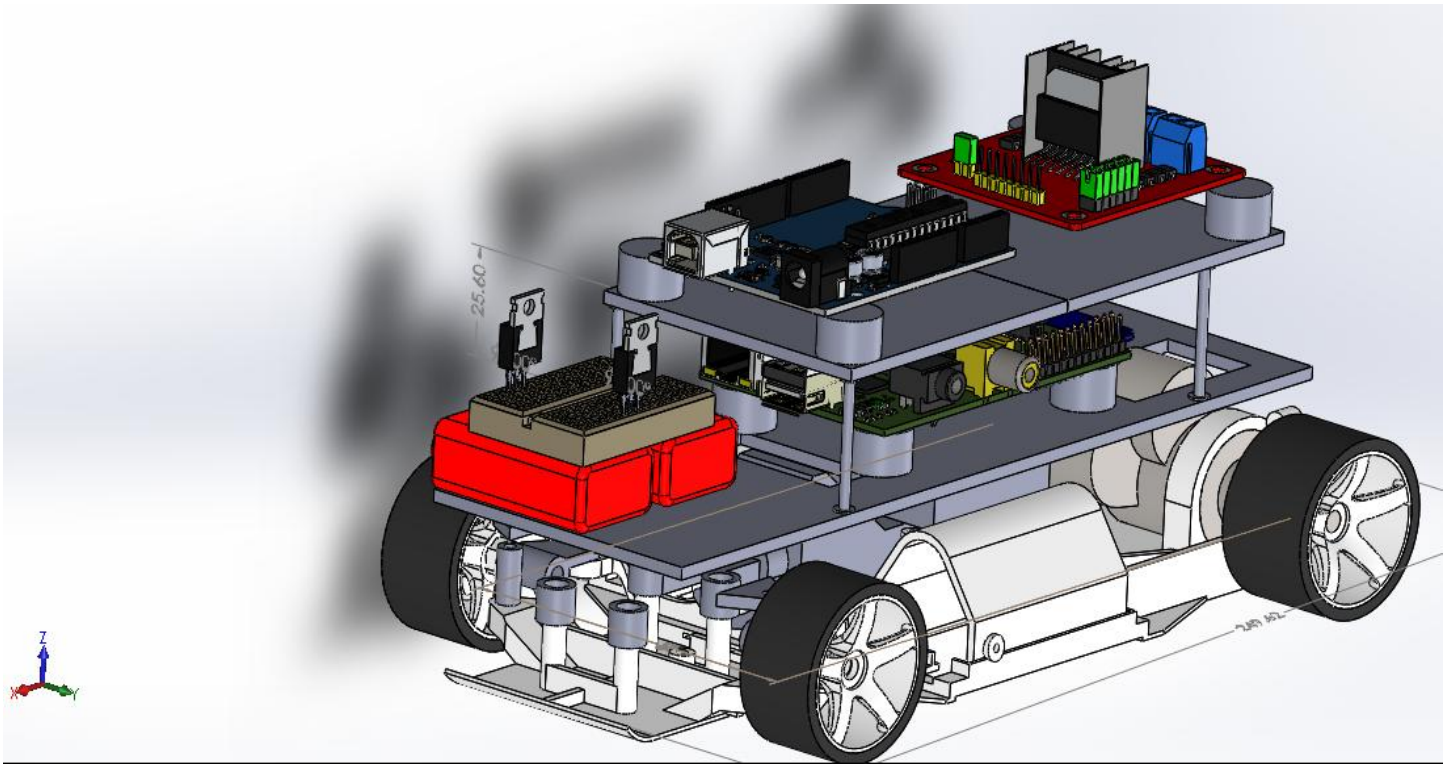


Fig.9

Saher

The following figure (Fig.10) shows that the side view of the full robot assembly .

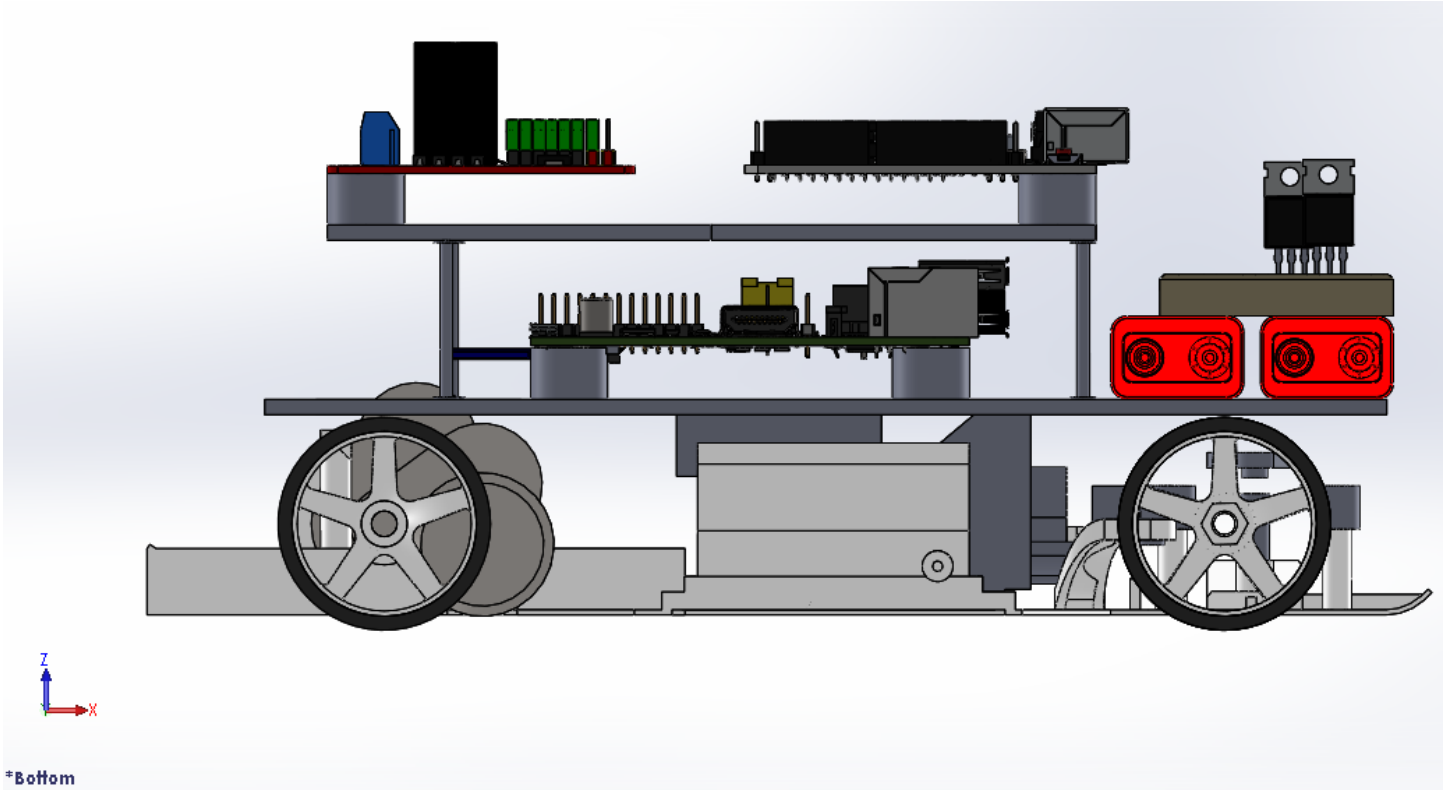


Fig.10

the following figure (Fig.11) shows top view of the full assembled robot .

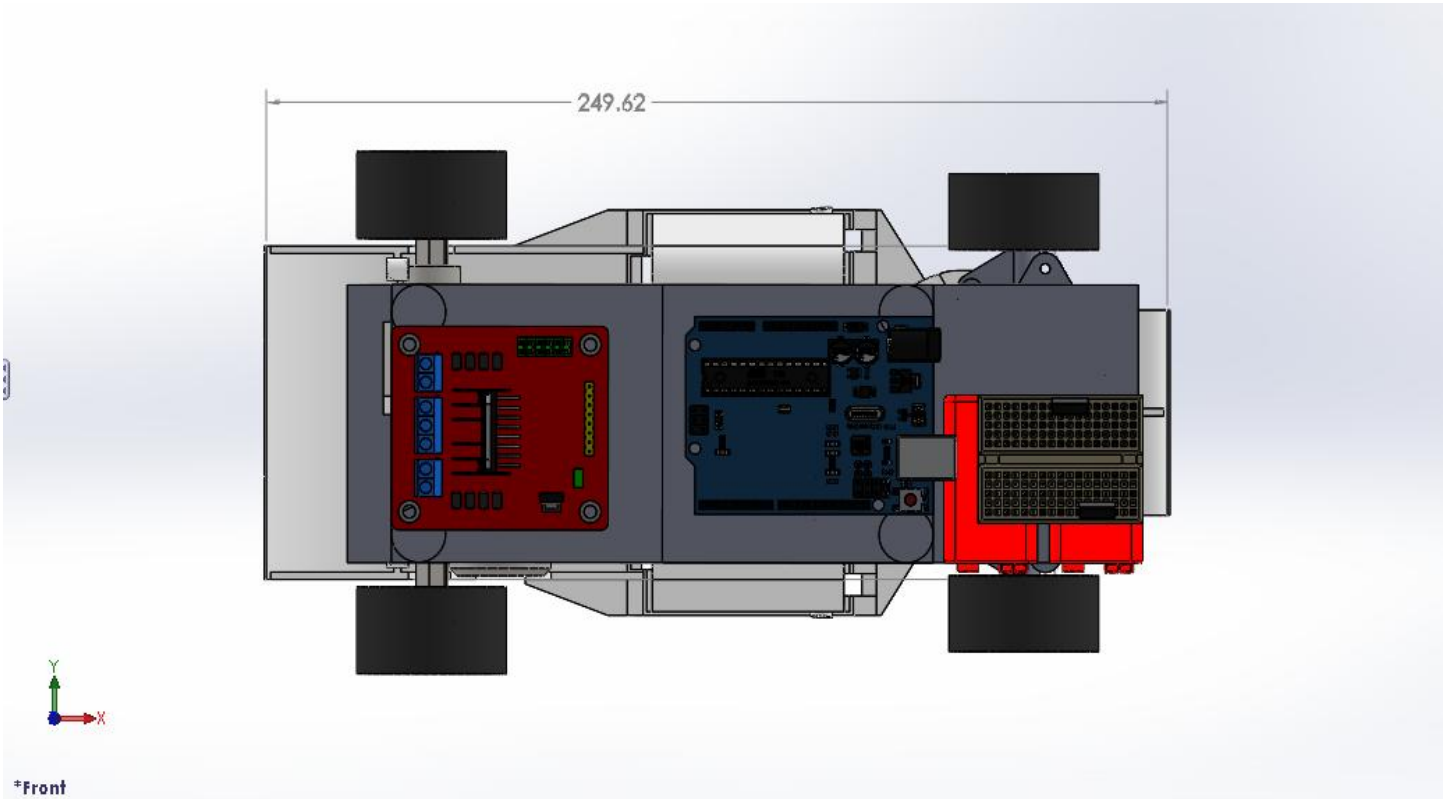


Fig.11

The following figure (Fig.12) contains two simultaneous isometric views of the full assembled robot.

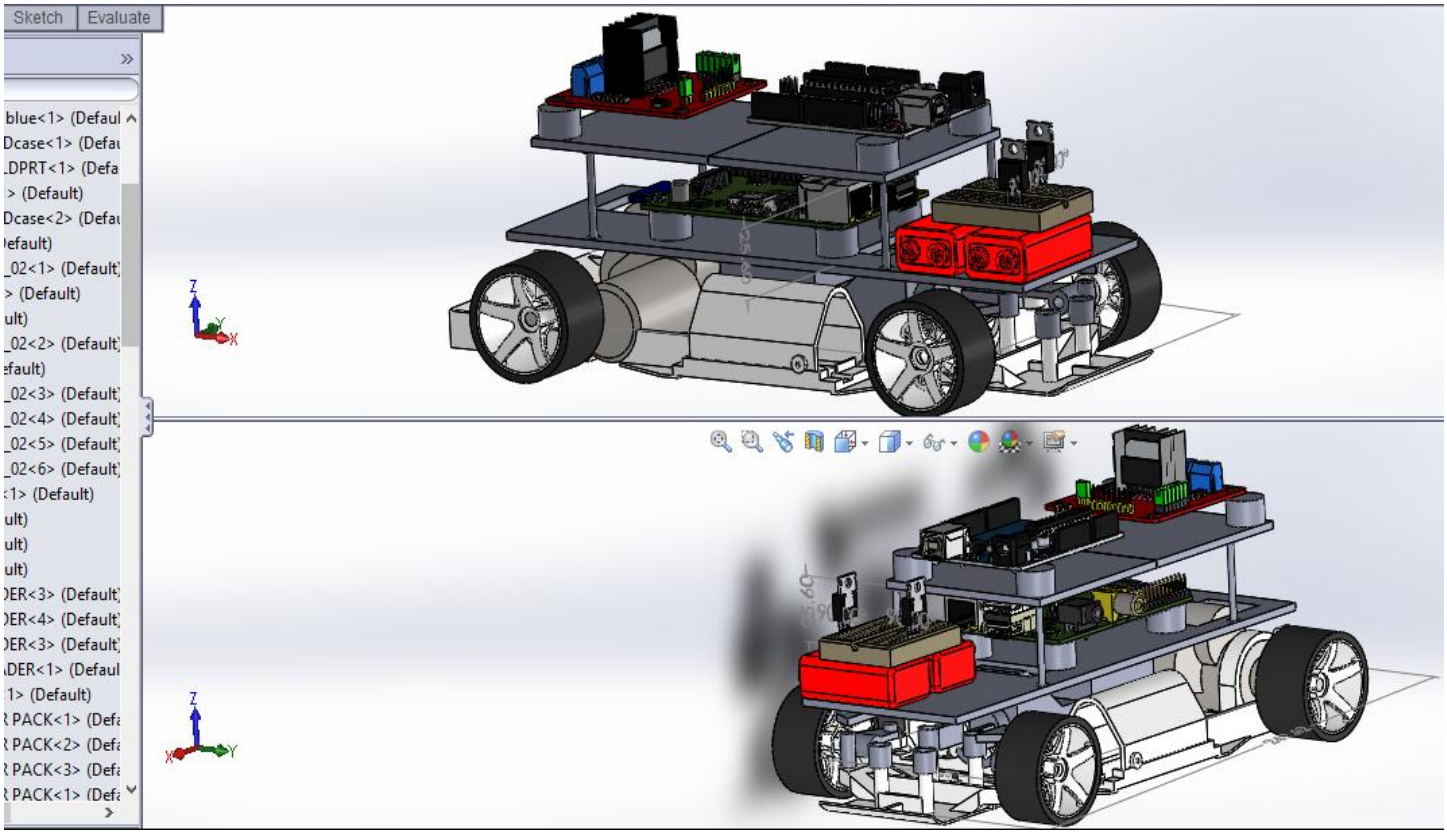


Fig.12

The following figure (Fig.13) shows single isometric view of the fully assembled robot .

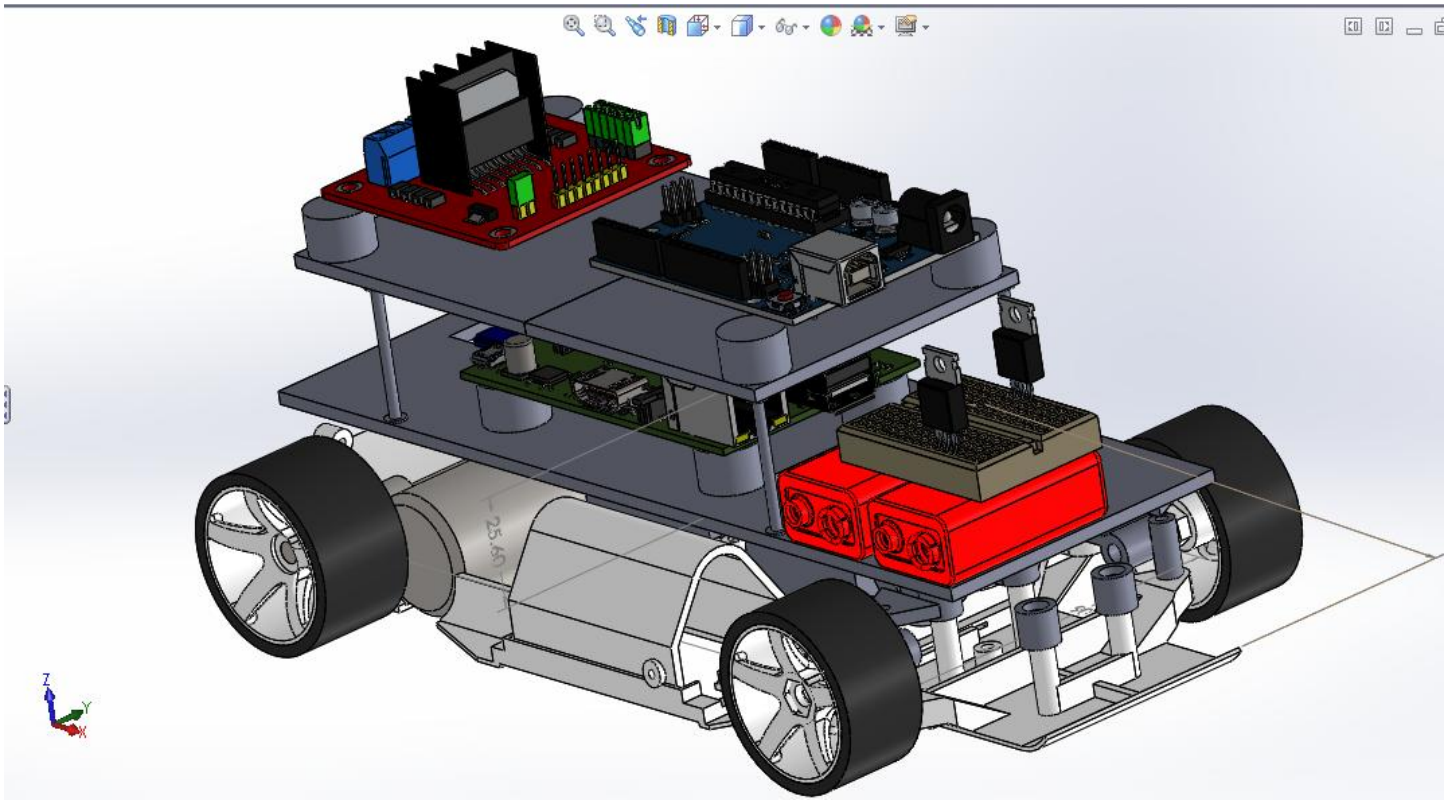


Fig.13