Meet Jain
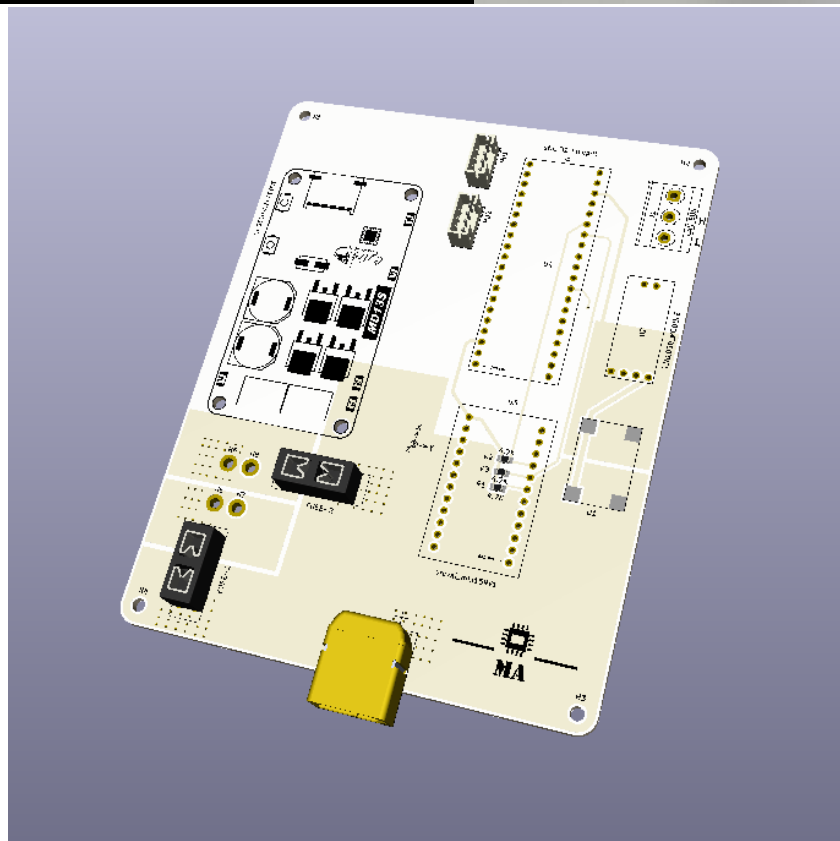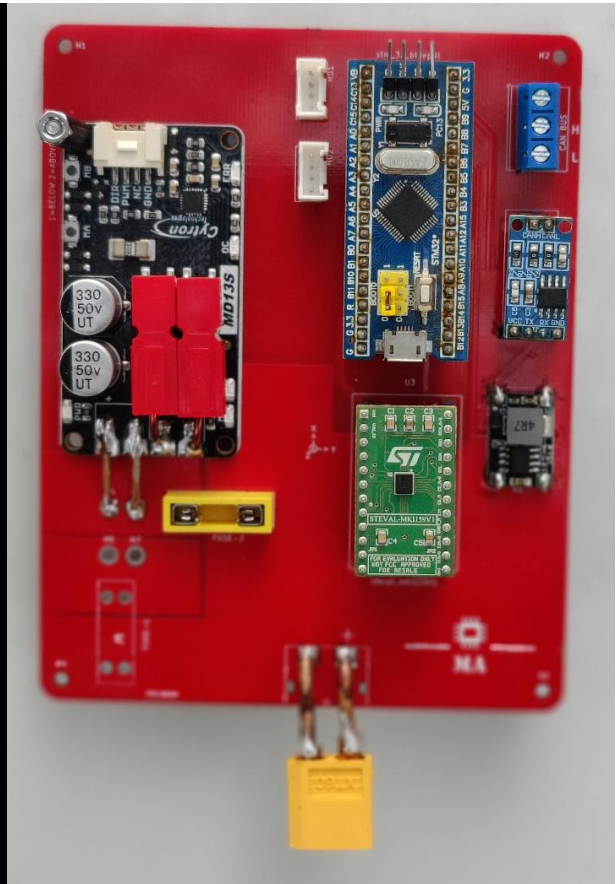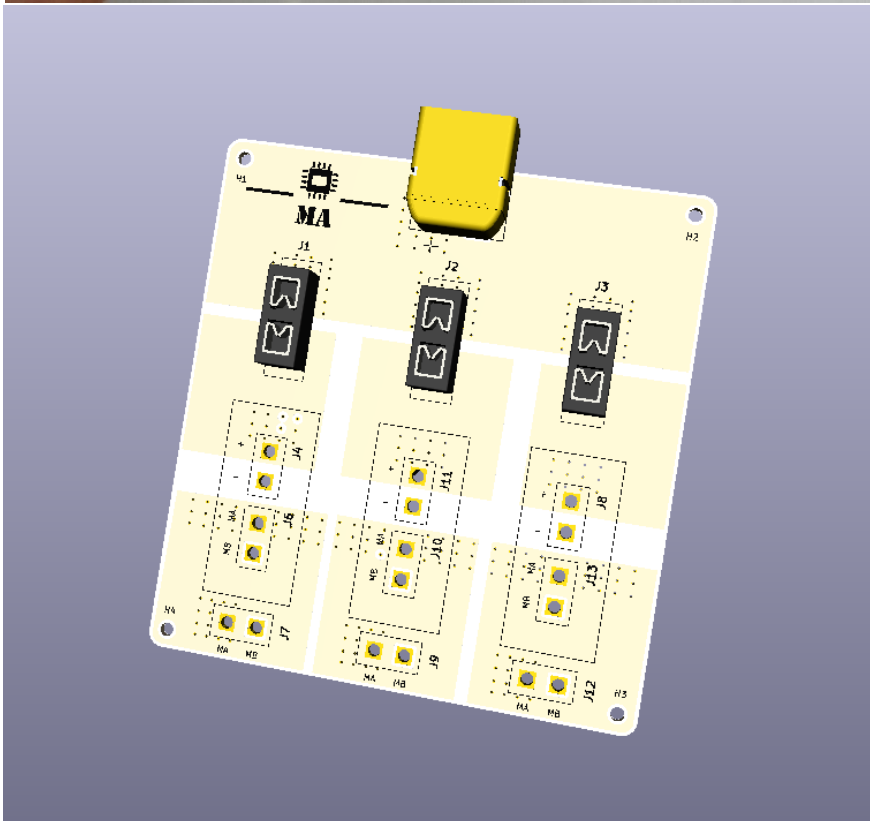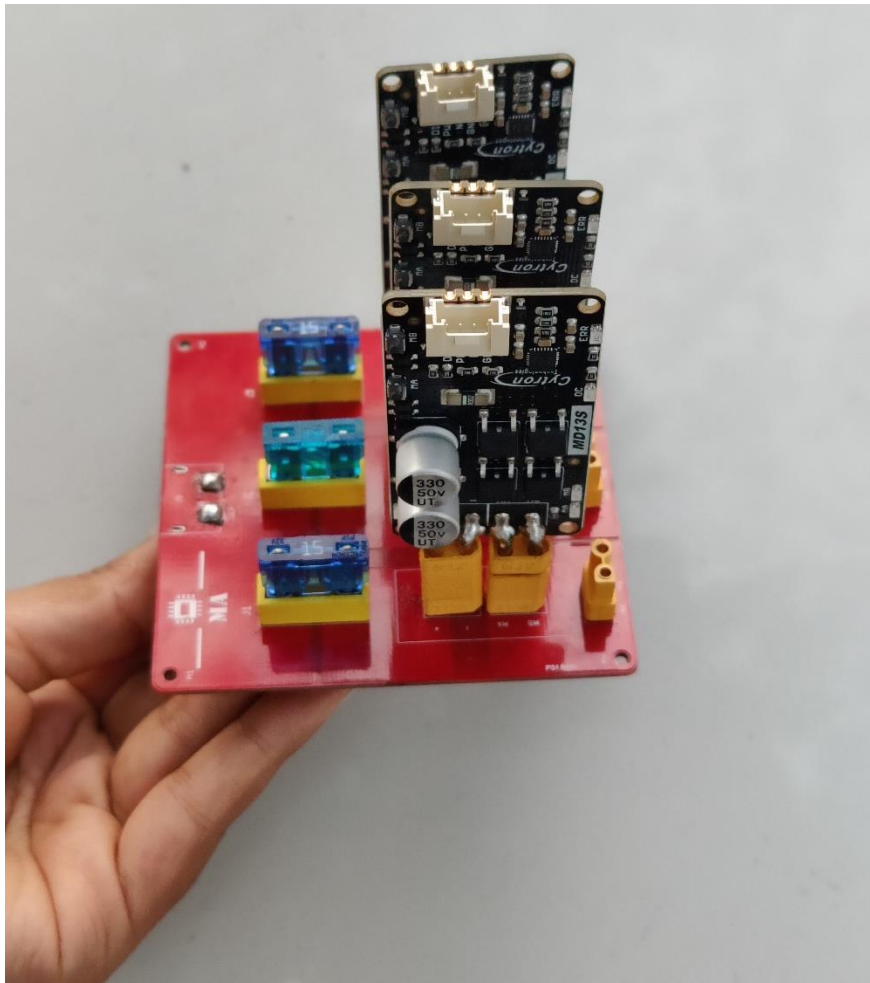**4th year | B tech Mechatronics | Manipal Institute of Technology**

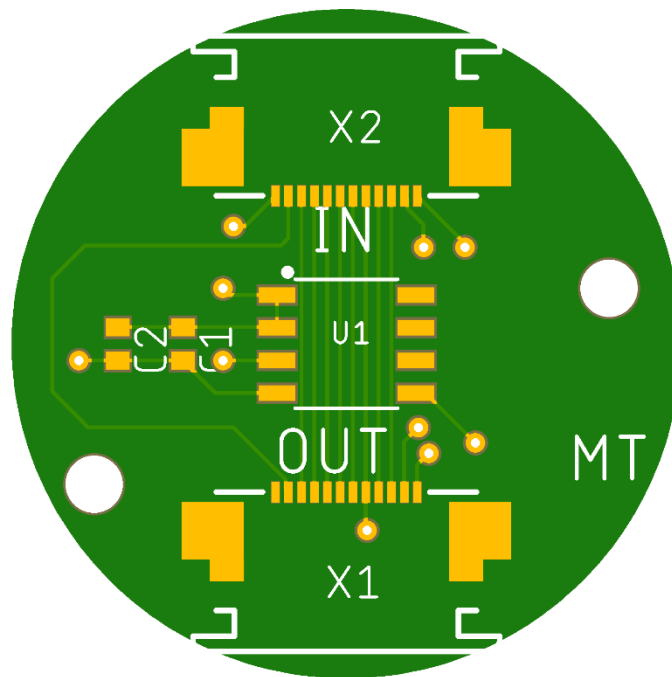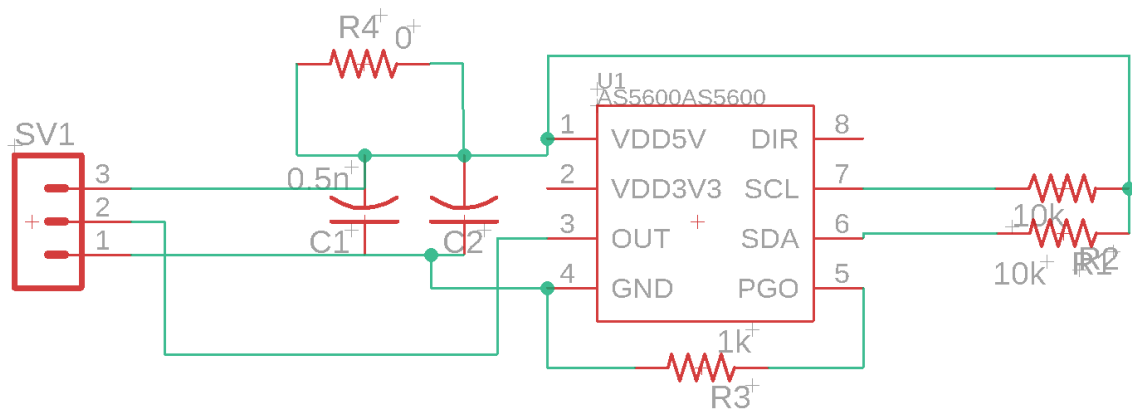These are few of my major hardware projects through Internships, Robotics organization etc.

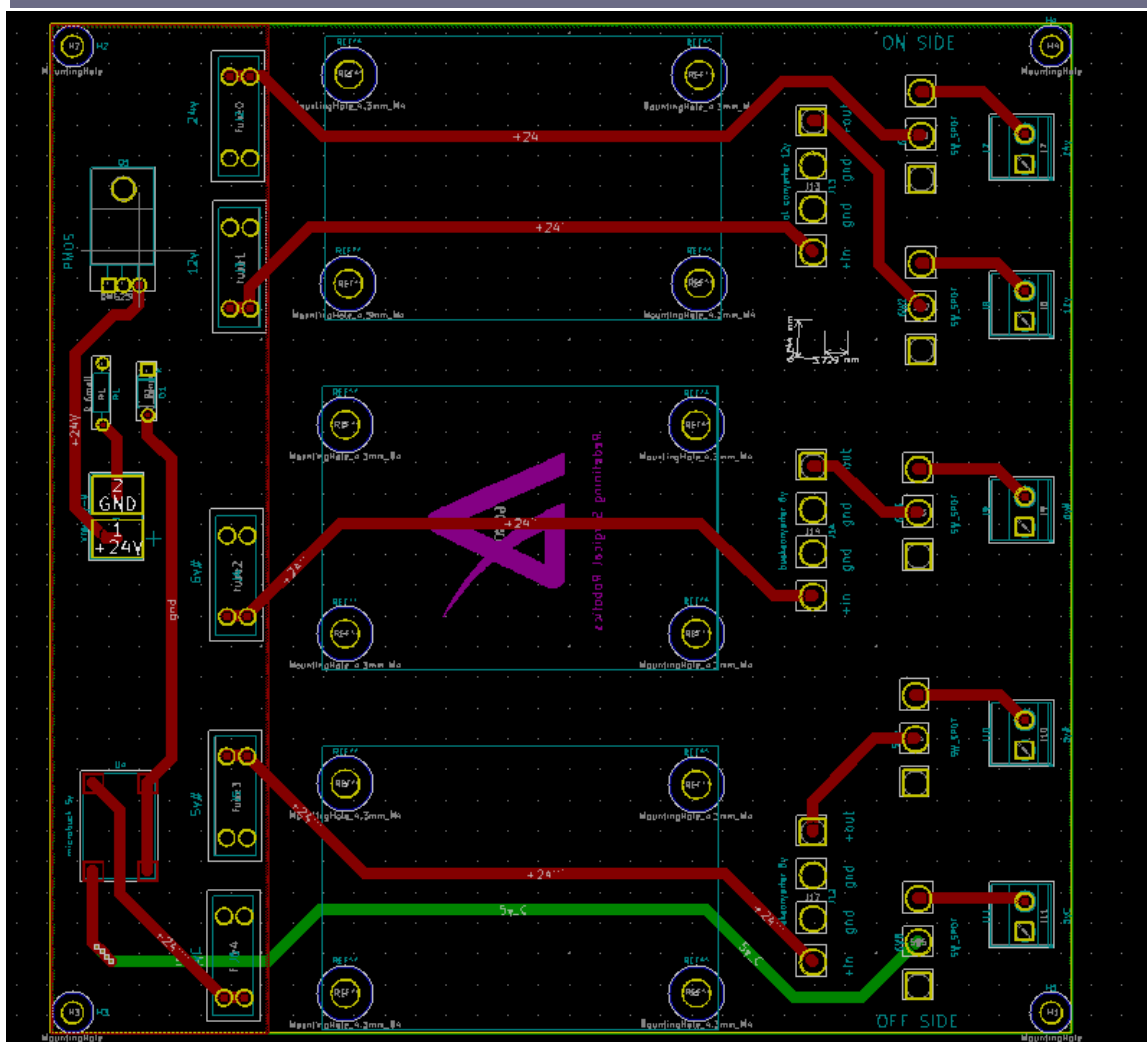1. 6DOF robotic manipulator PCB incorporating Motor drivers, Microcontroller and IMU.
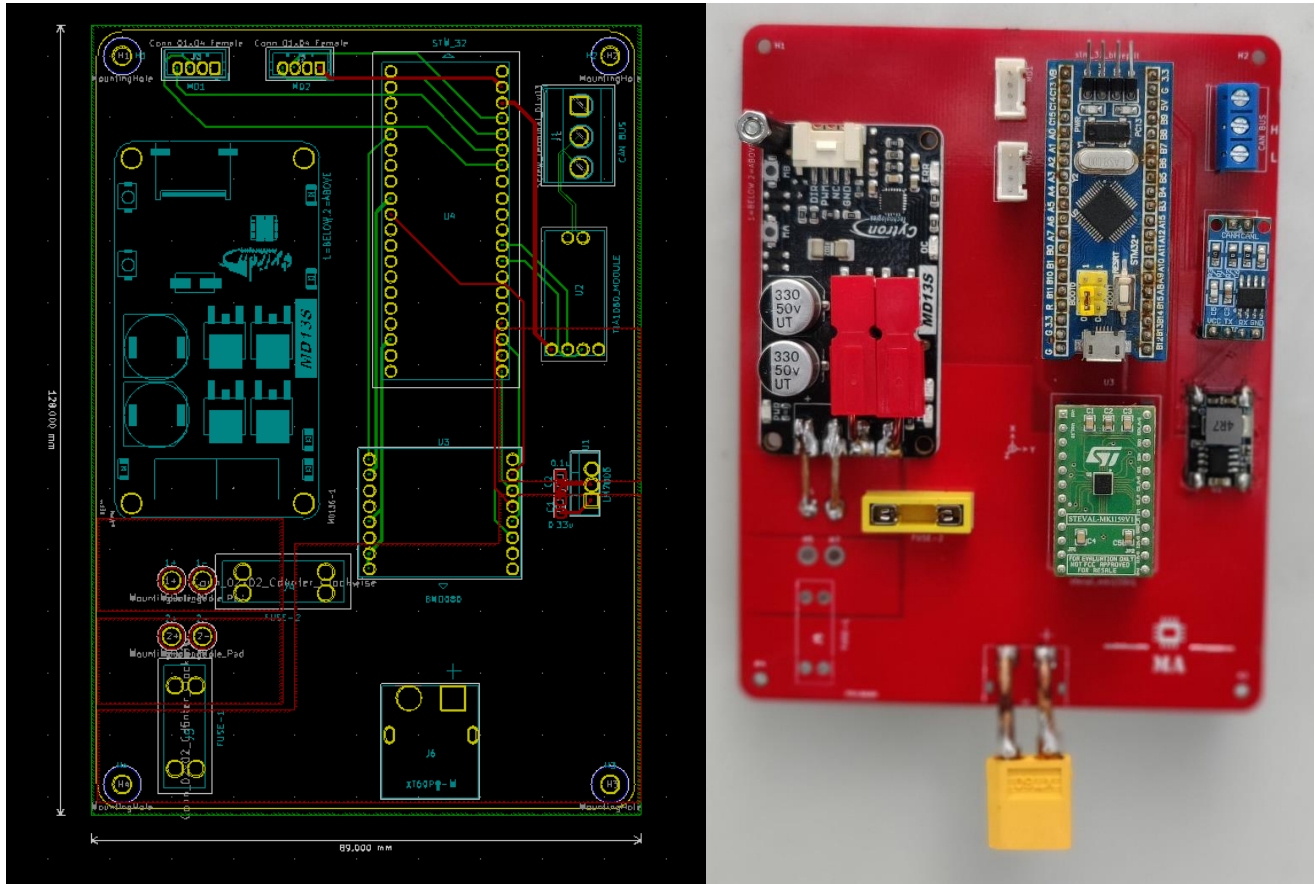
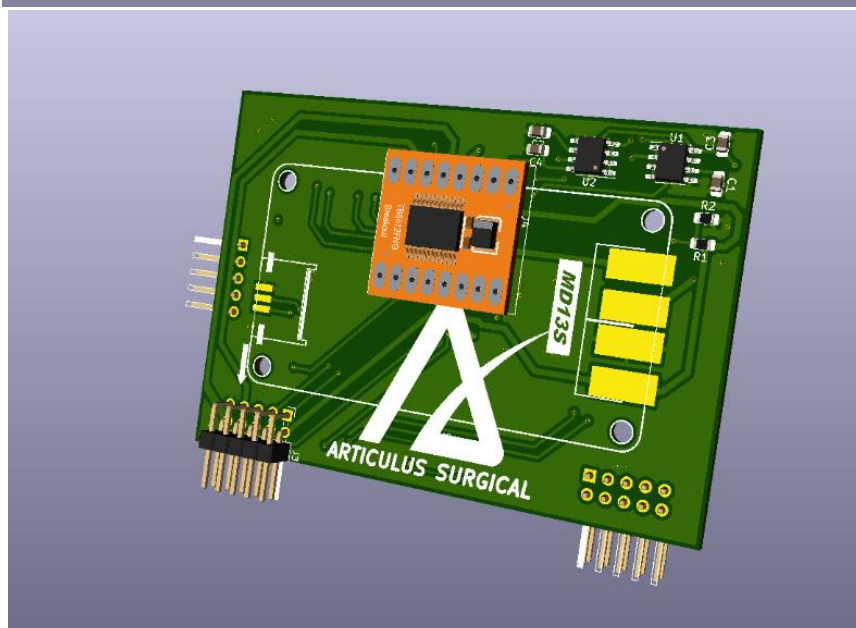2. Driver PCB incorporating 3 motor drivers capable of handling 45 amp currents

3. Custom made encoder for calculating angular orientation between 2 links/arms.

4. Power Distribution Board with 4 layers of protection capable of measuring Voltage and Current.

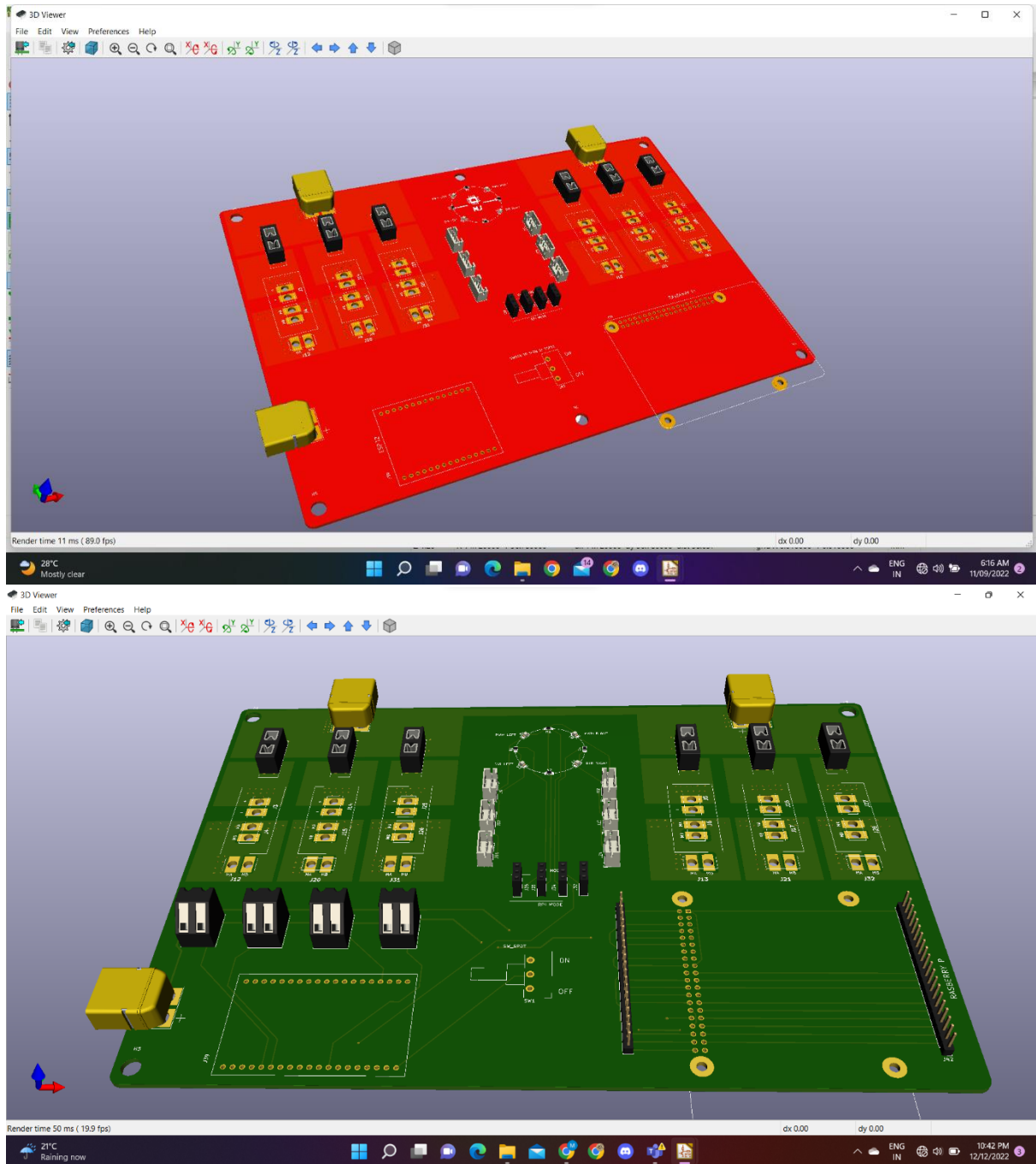## 5. Control PCB for Arduino Mega

6. Swappable PCB with 2 options for motor driver Cytron MD13S/TB66FNG
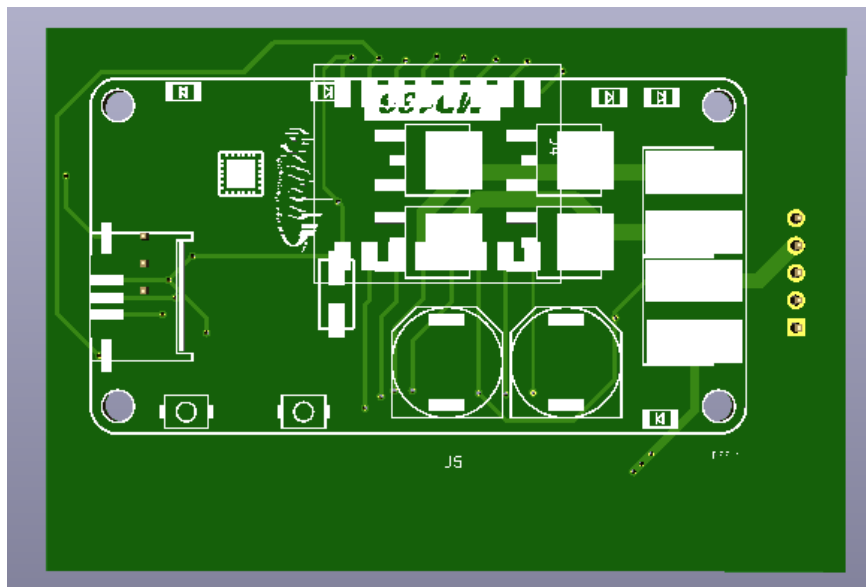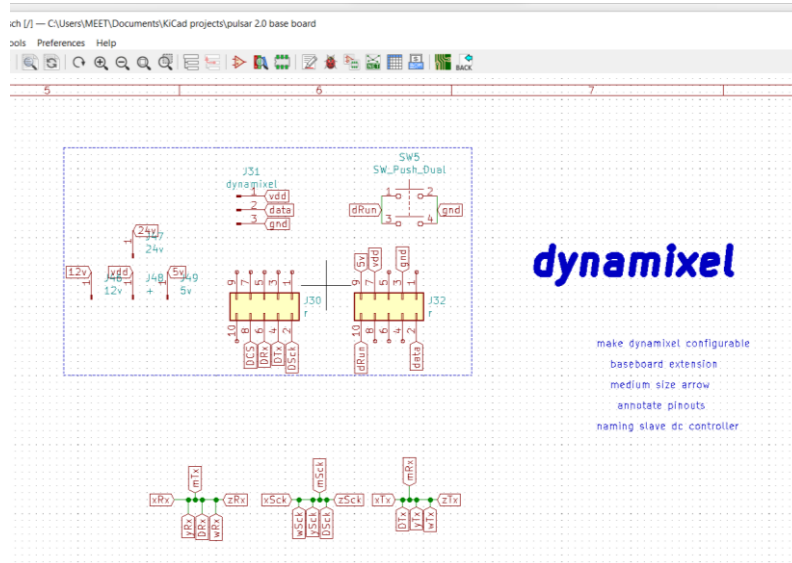
7. Control PCB incorporating 6 motor Drivers with option to be controlled by either ESP32 / RPI. Its capable of handling 45 amp of current.

8. The mother board houses 5 child Boards capable of switching between 5 power supplies, 2 motor drivers and positions between each other. Each child board is beinf controller by RPI Pico.

The mother Board can connect to another mother board of same kind allowing 5 more motors to be controlled.
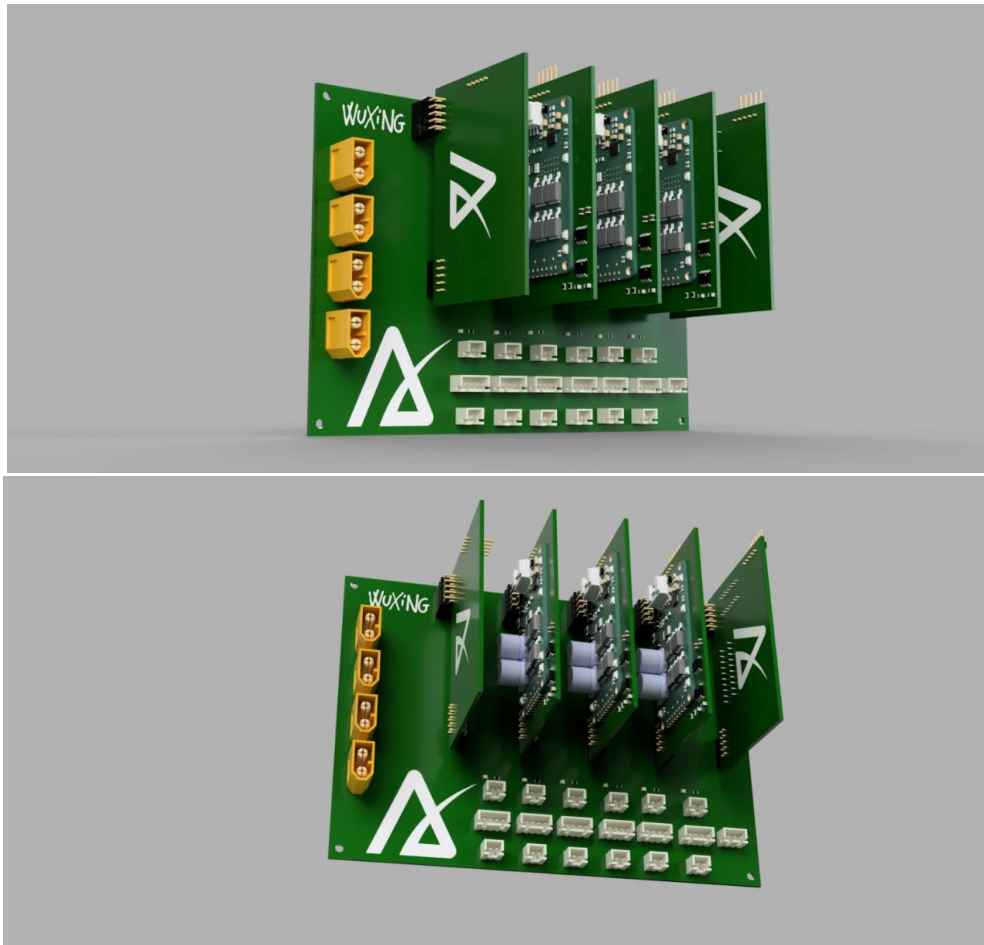
9. Modular PCBS capable of driving a 6 wheeled unmanned ground vehicle with 6DOF robotic manipulator. It consists of power distribution board, motor drivers, control boards and protection circuit.