

Experience in PCB Design



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PCB design piques my curiosity. I have finished a few PCB projects and design work during my undergraduate studies. From there, I've highlighted a finished project in the list below.

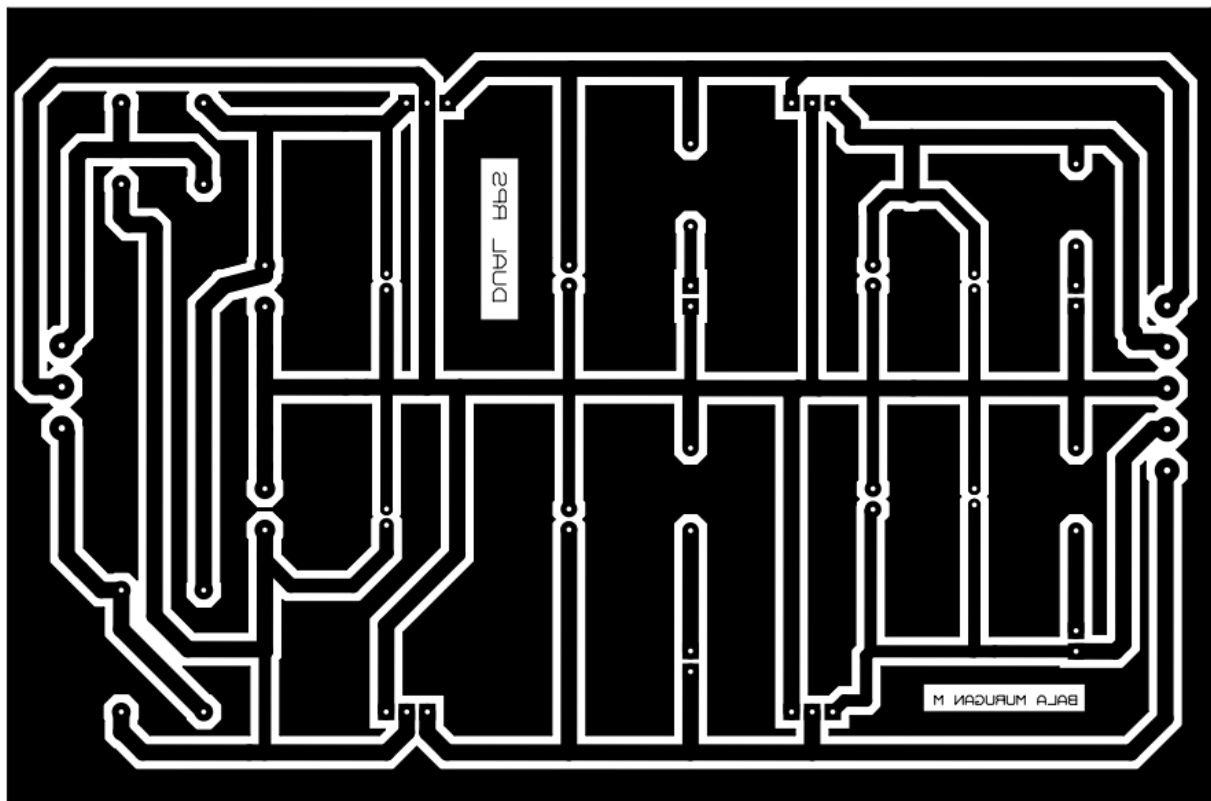
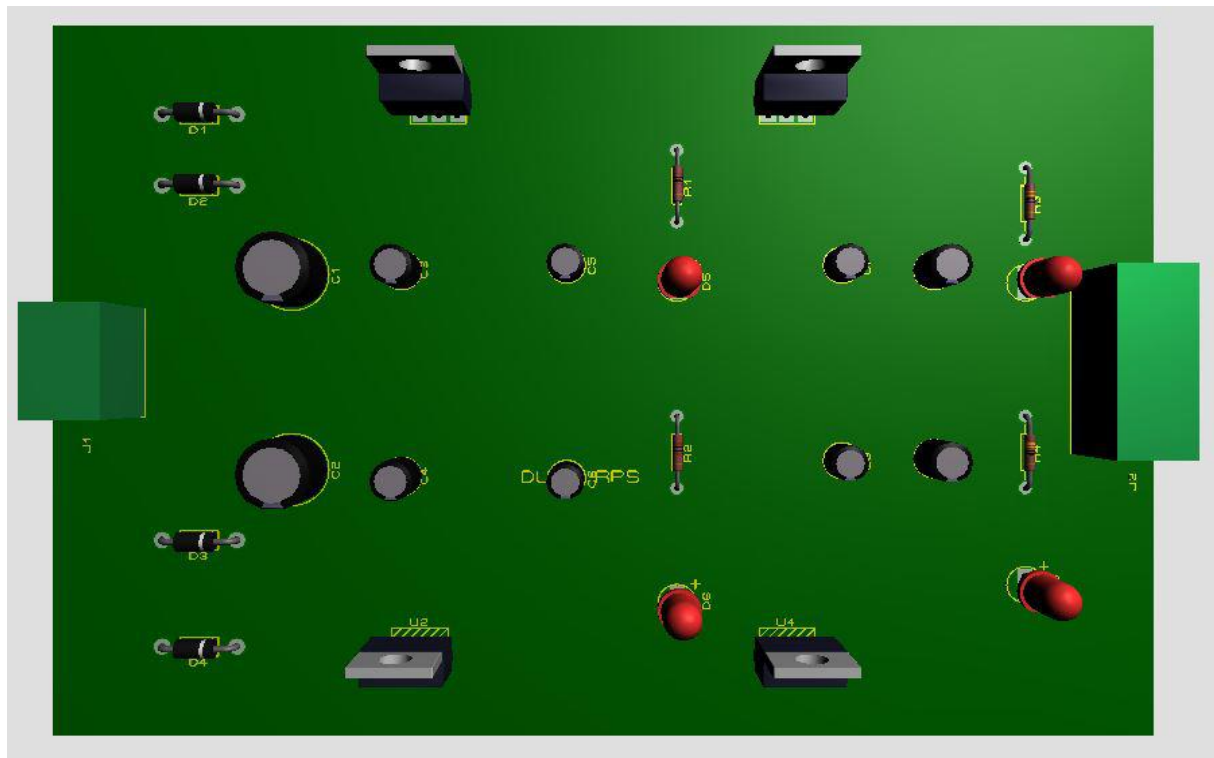
Project Work:

1. Dual Regulator Power Supply (+12V & -12V AND +5V & -5V) 1Amax.
2. Over & Under Voltage Protection of Electrical Appliance.
3. Variable Power Supply Using LM317.
4. Traffic Light Controller Interface Card.

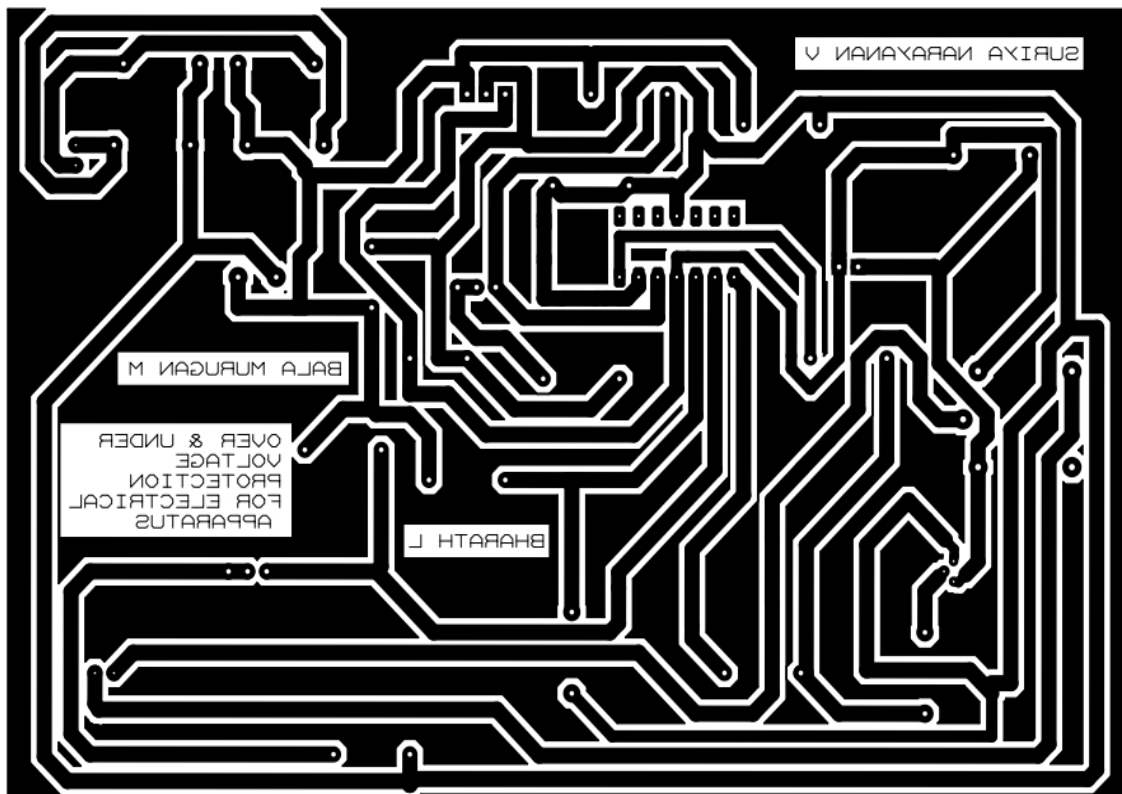
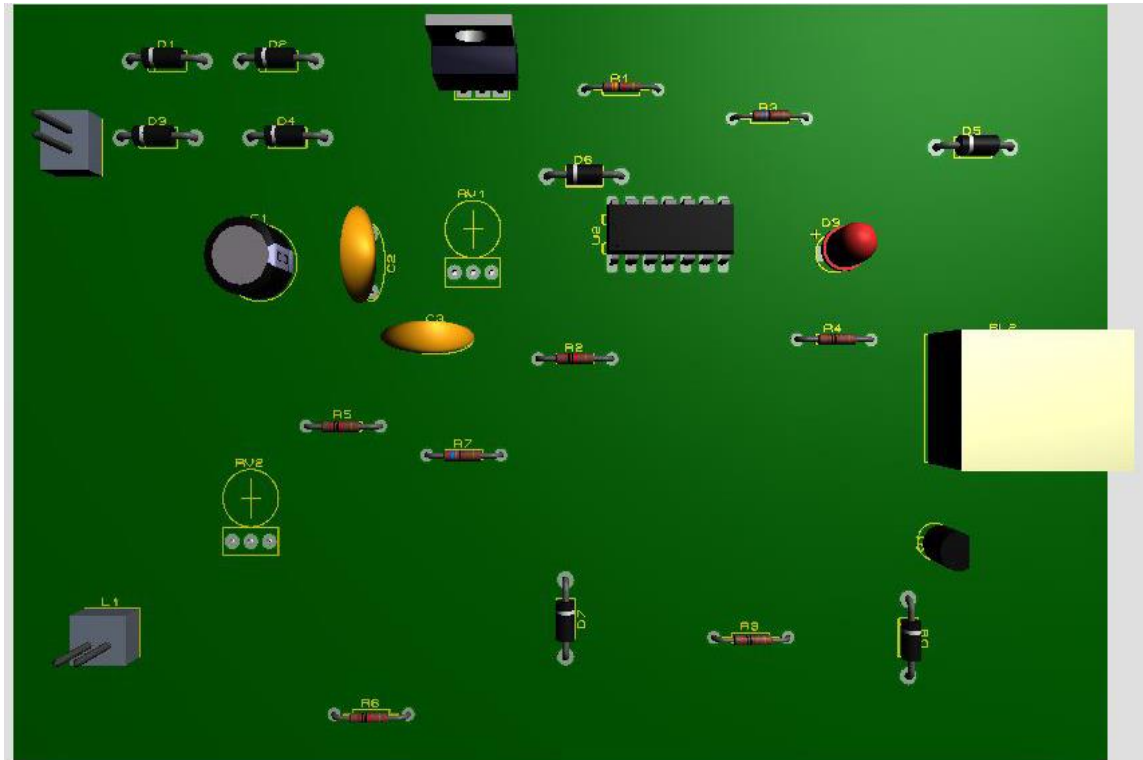
NewGen IEDC has funded two projects, each worth 2.5L.

5. Smart Info System for Bike.
6. LoRa-Based Smart Starter for Agriculture.

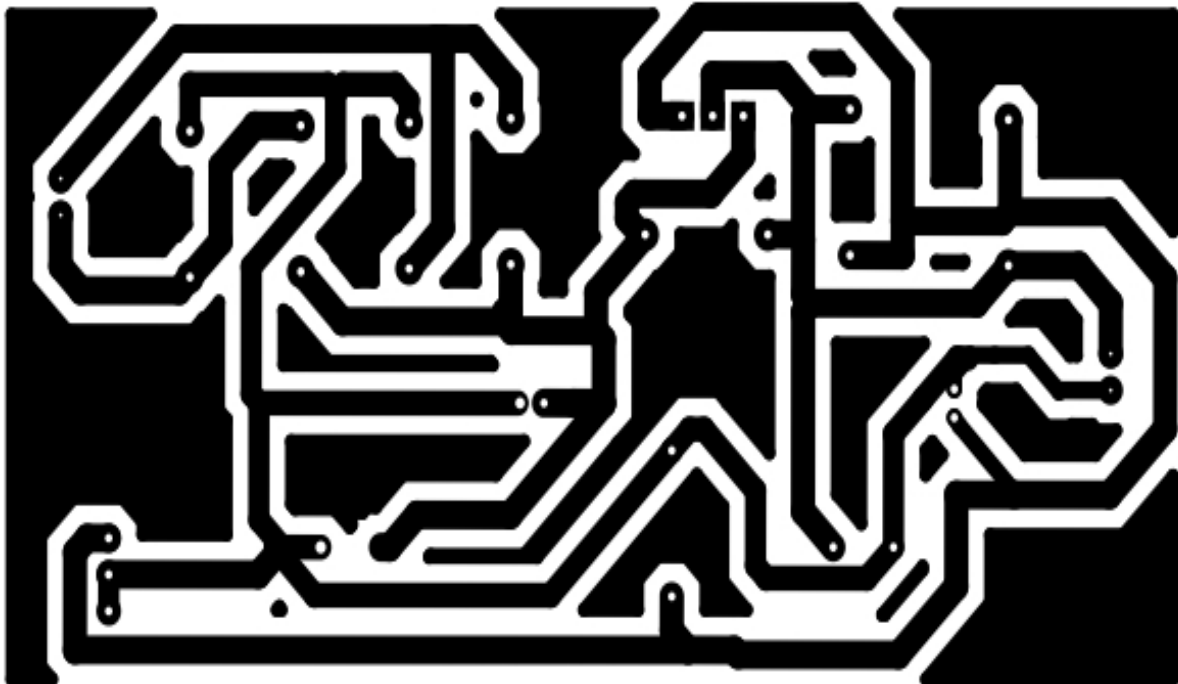
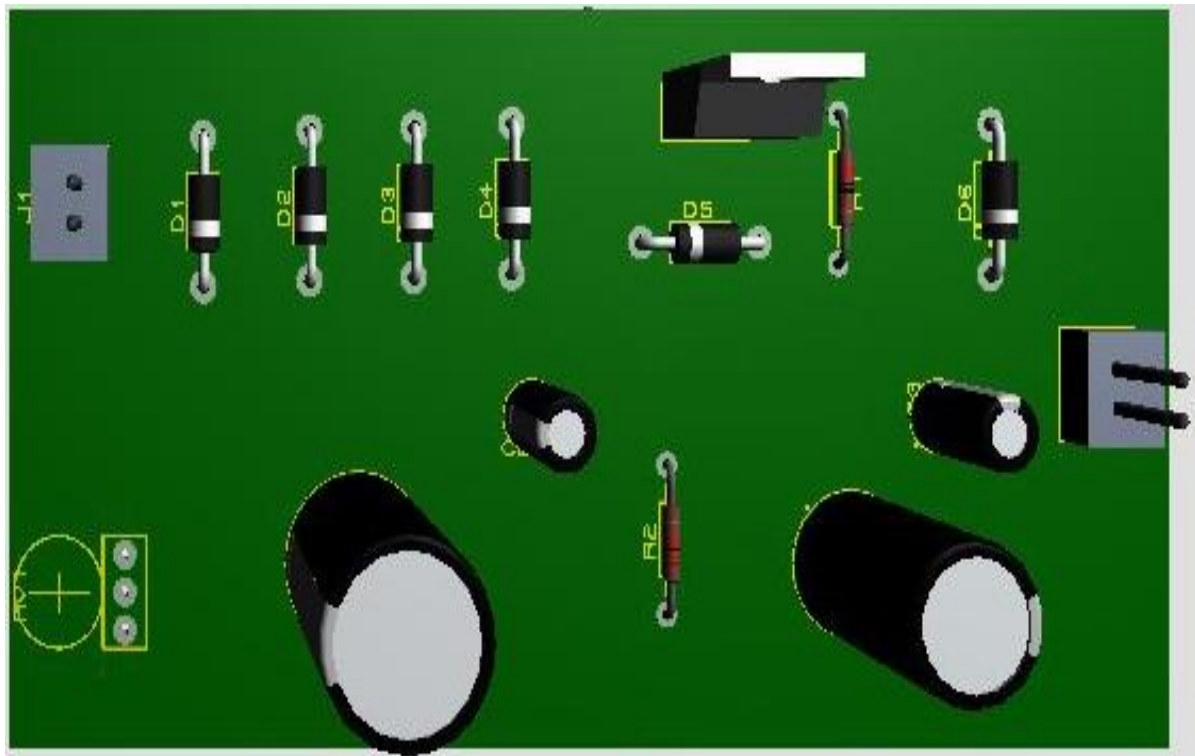
1. Dual Regulator Power Supply (+12V & -12 AND +5V & -5V) 1Amax.



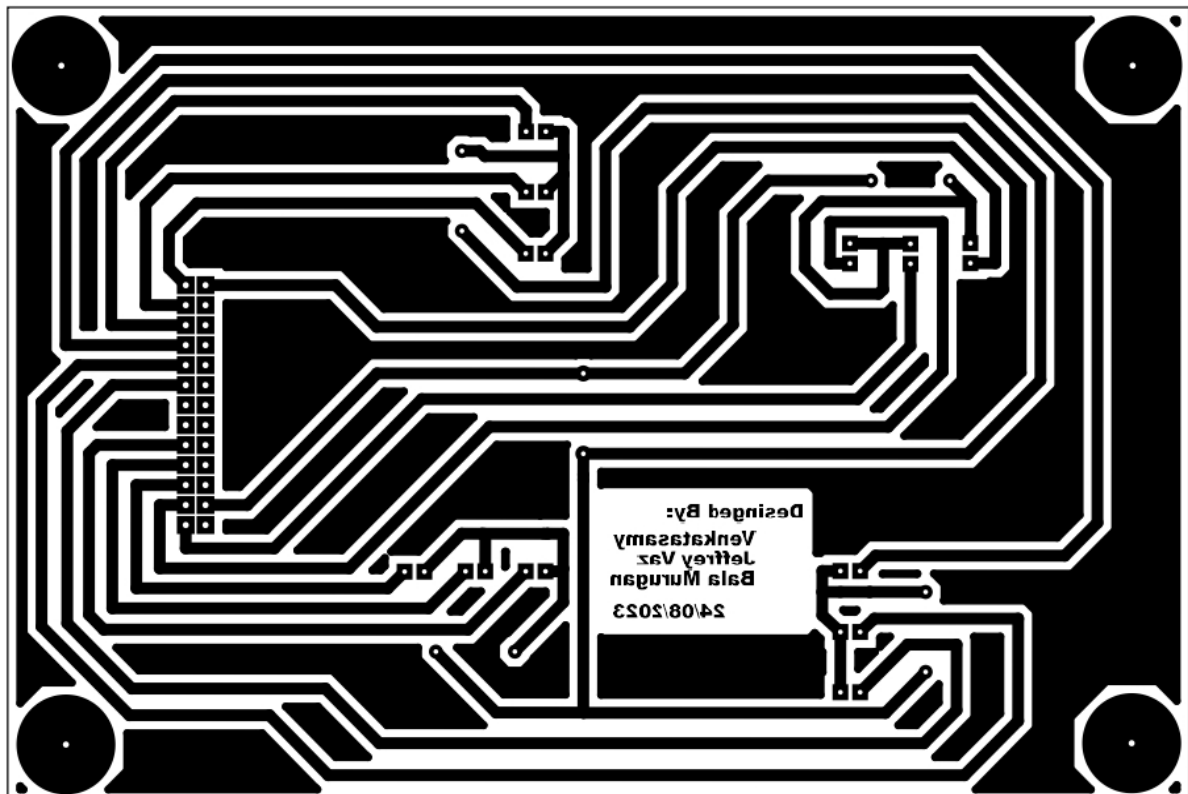
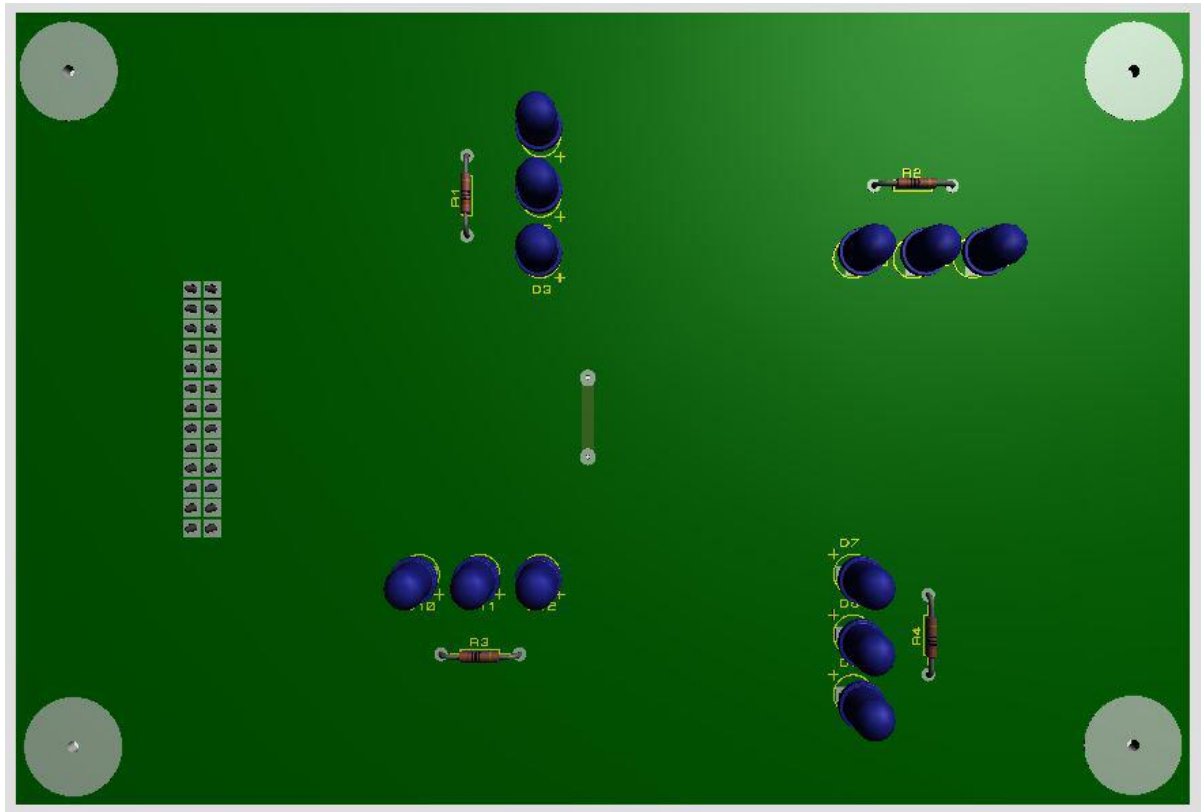
2. Over & Under Voltage Protection of Electrical Appliance.



3. Variable Power Supply Using LM317.

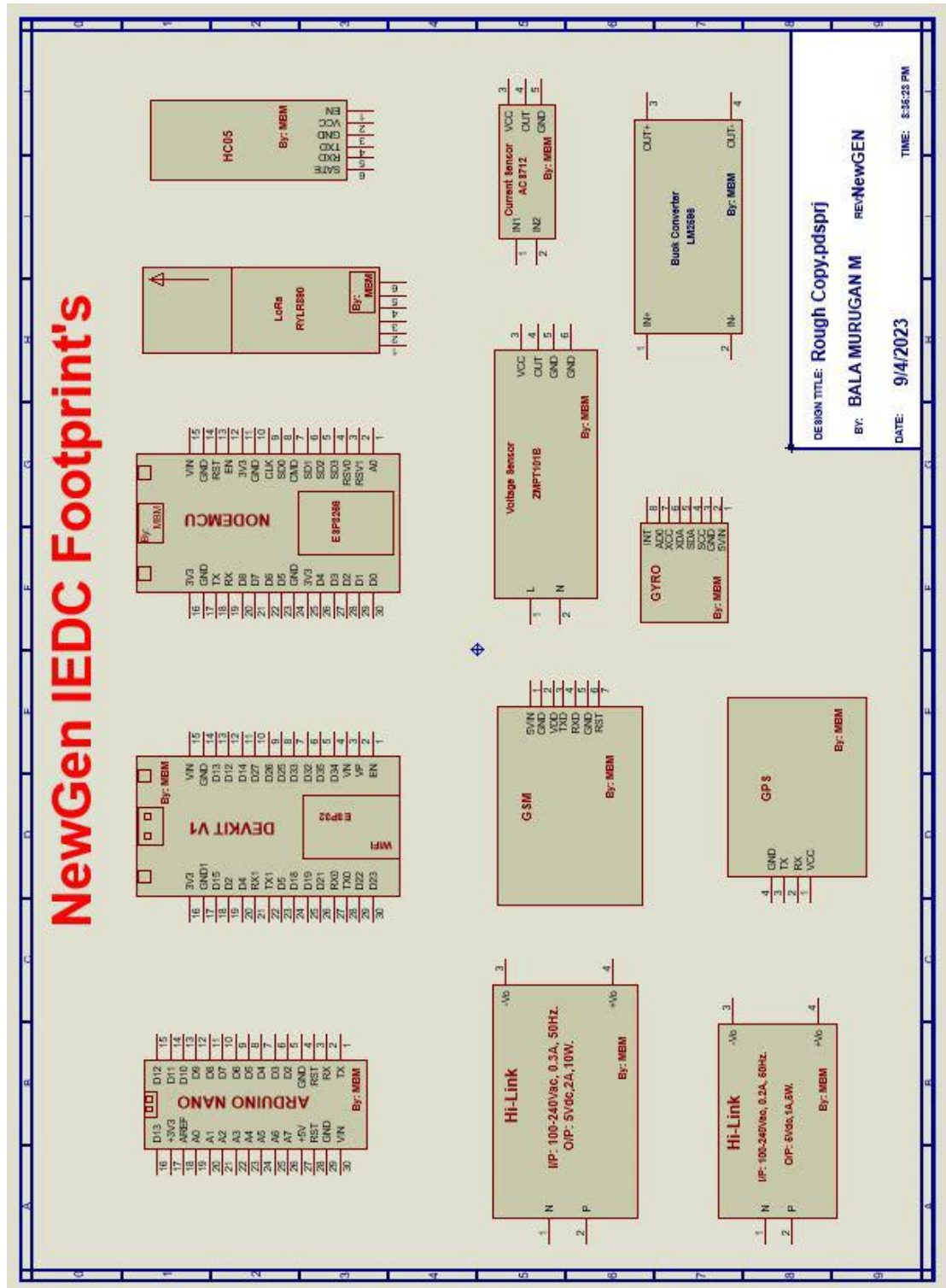


4. Traffic Light Controller Interface Card.

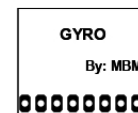
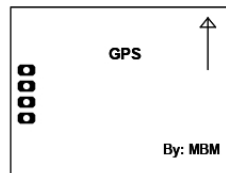
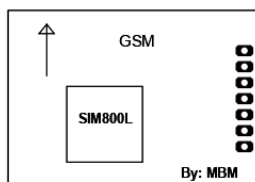
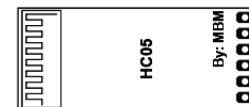
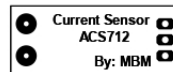
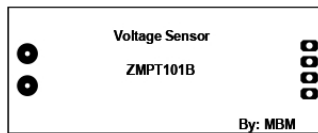
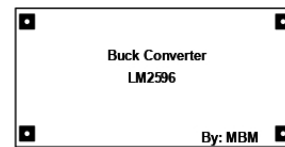
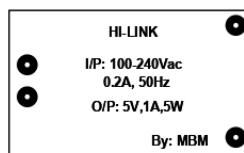
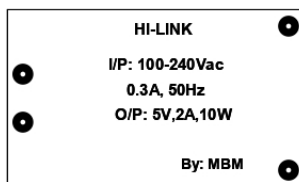
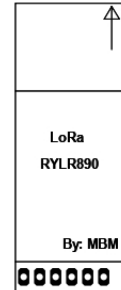
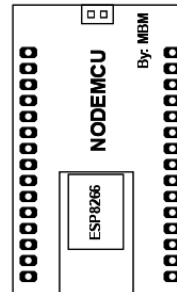
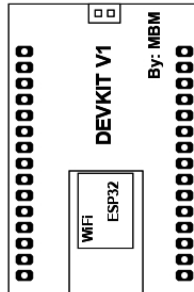
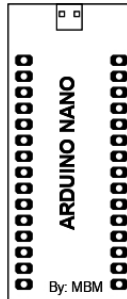


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I methodically built the essential components of Schematics and the footprints it is, exhibiting precision and attention to detail in my project's development.

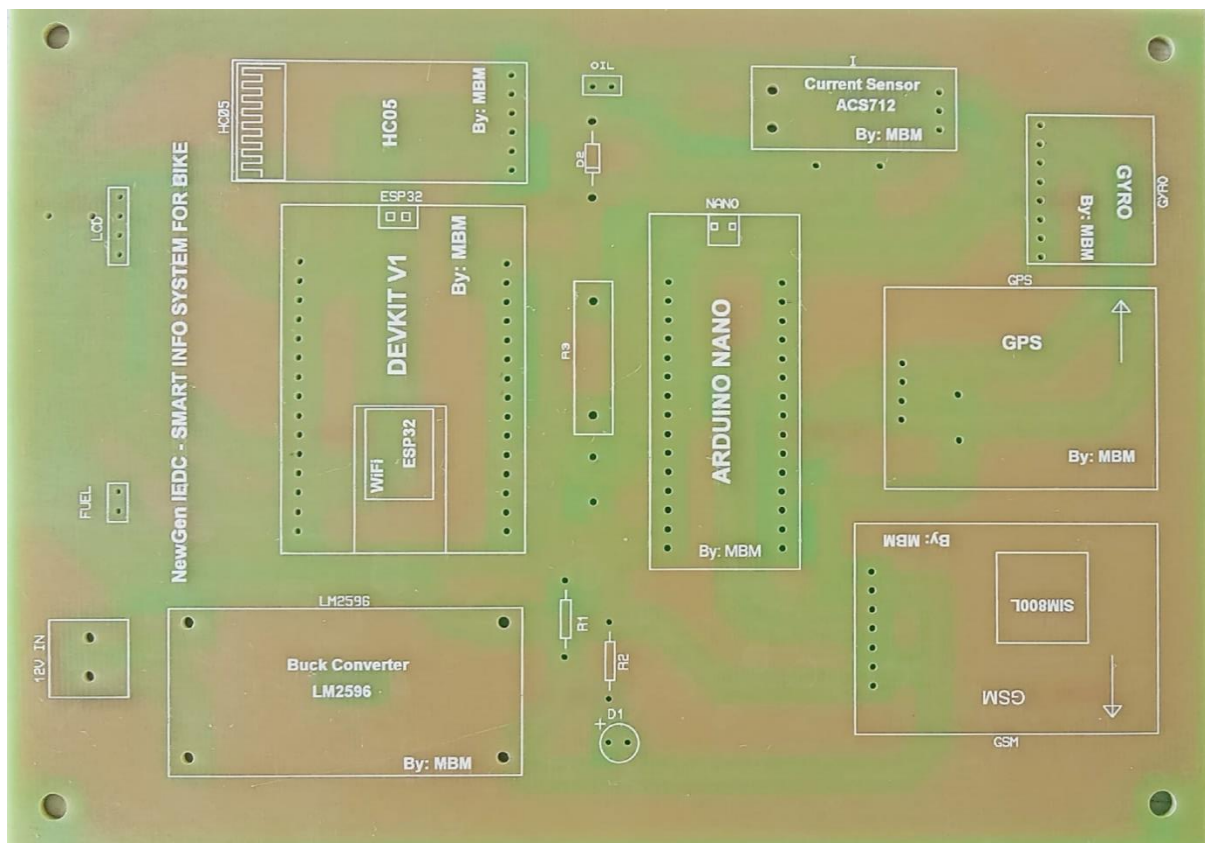


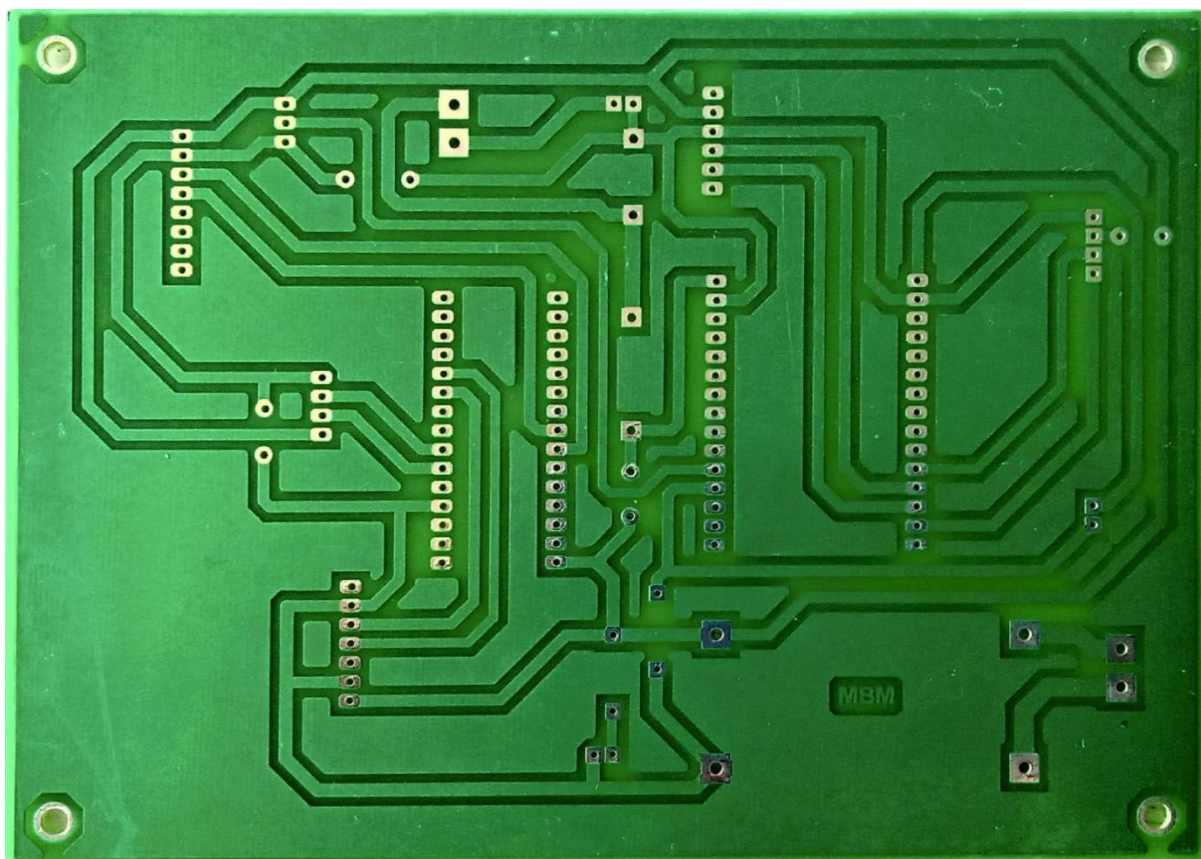
NewGEN FootPrint's



5. Smart Info System for Bike.

Our Smart Info System for Bike is a Bluetooth-enabled program that measures important parameters and alerts users to issues such as low tire pressure and poor engine oil quality, thereby lowering accident risks, increasing mileage, and boosting bike performance. When an accident occurs, the accident information system instantly alerts specified contacts. This entire PCB control board measures 6.2 by 4.5 inches.



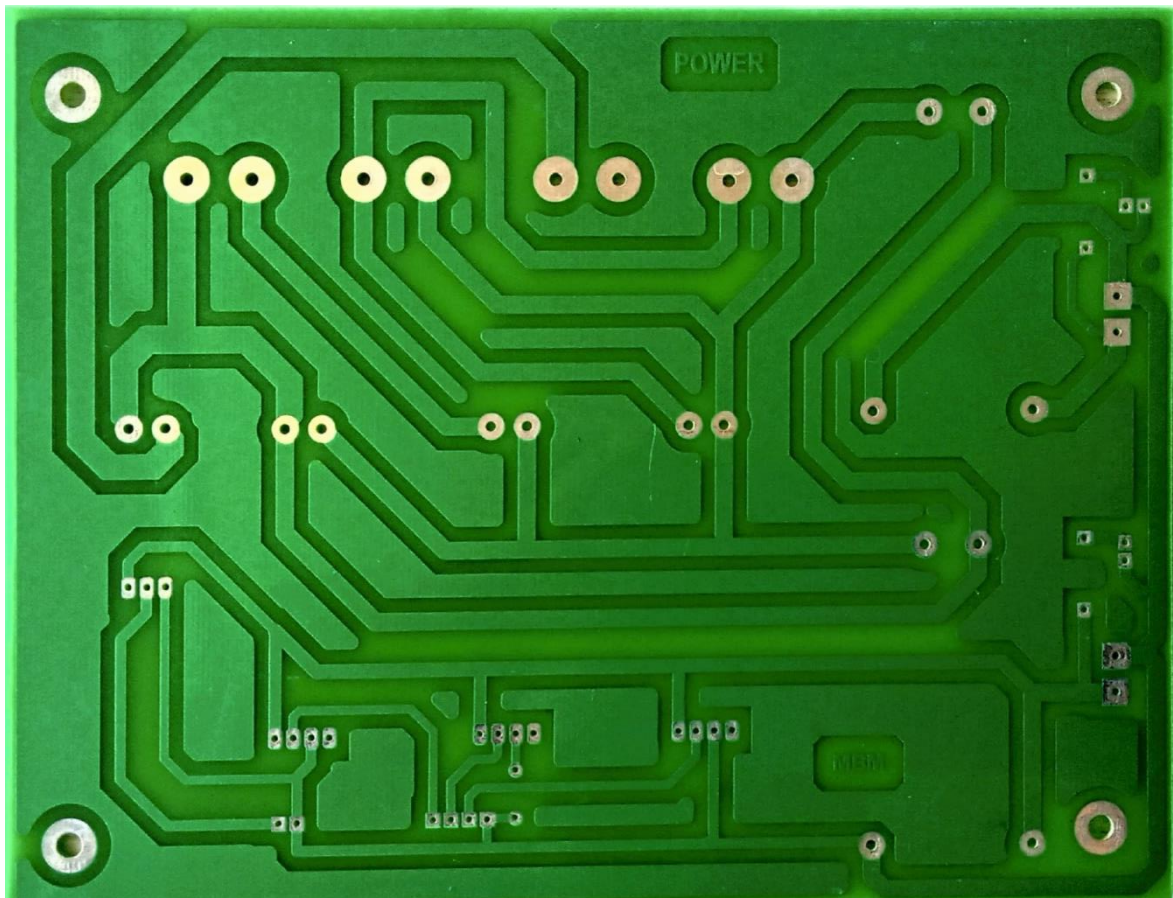
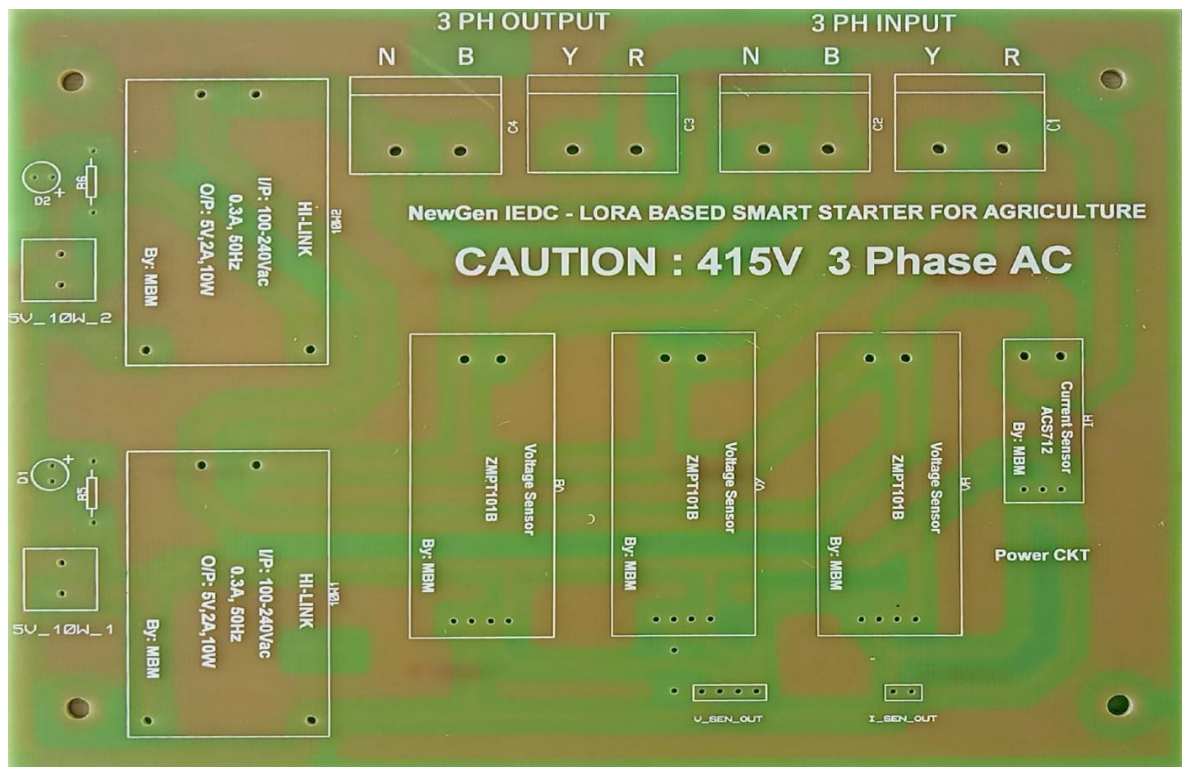


6. LoRa-Based Smart Starter for Agriculture.

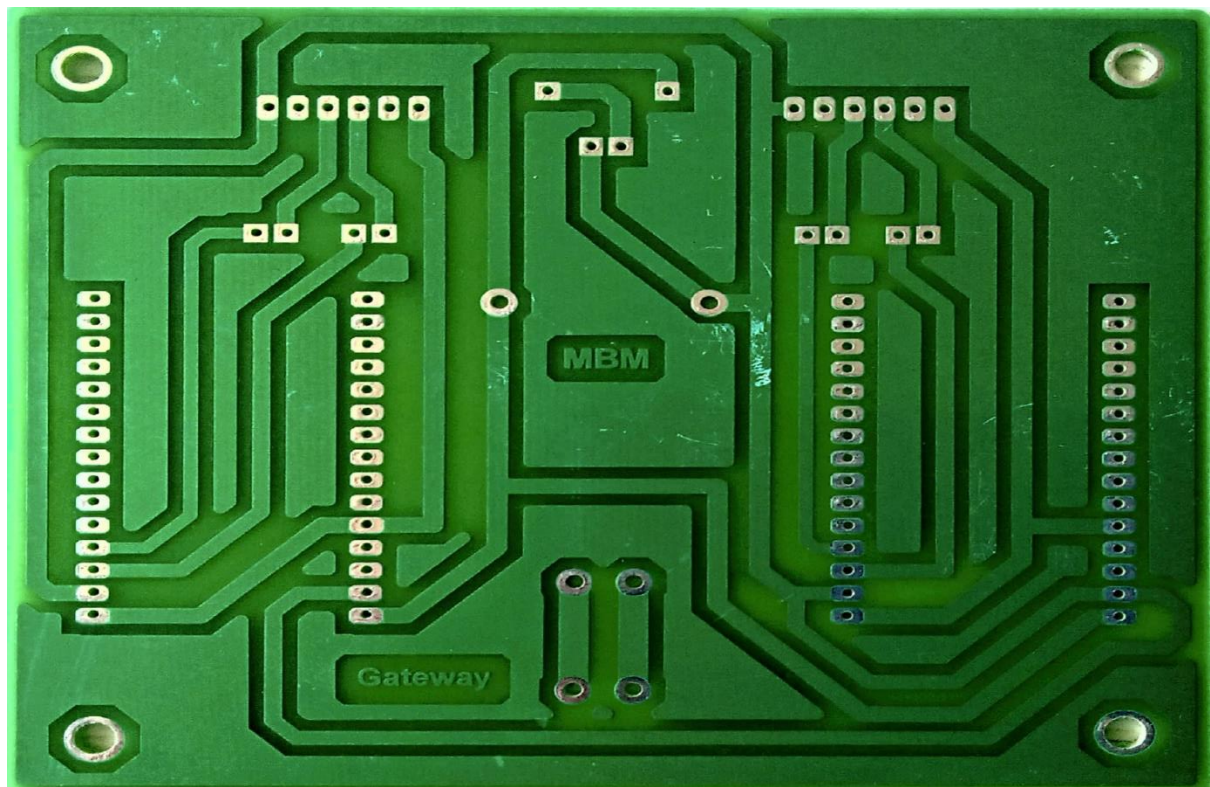
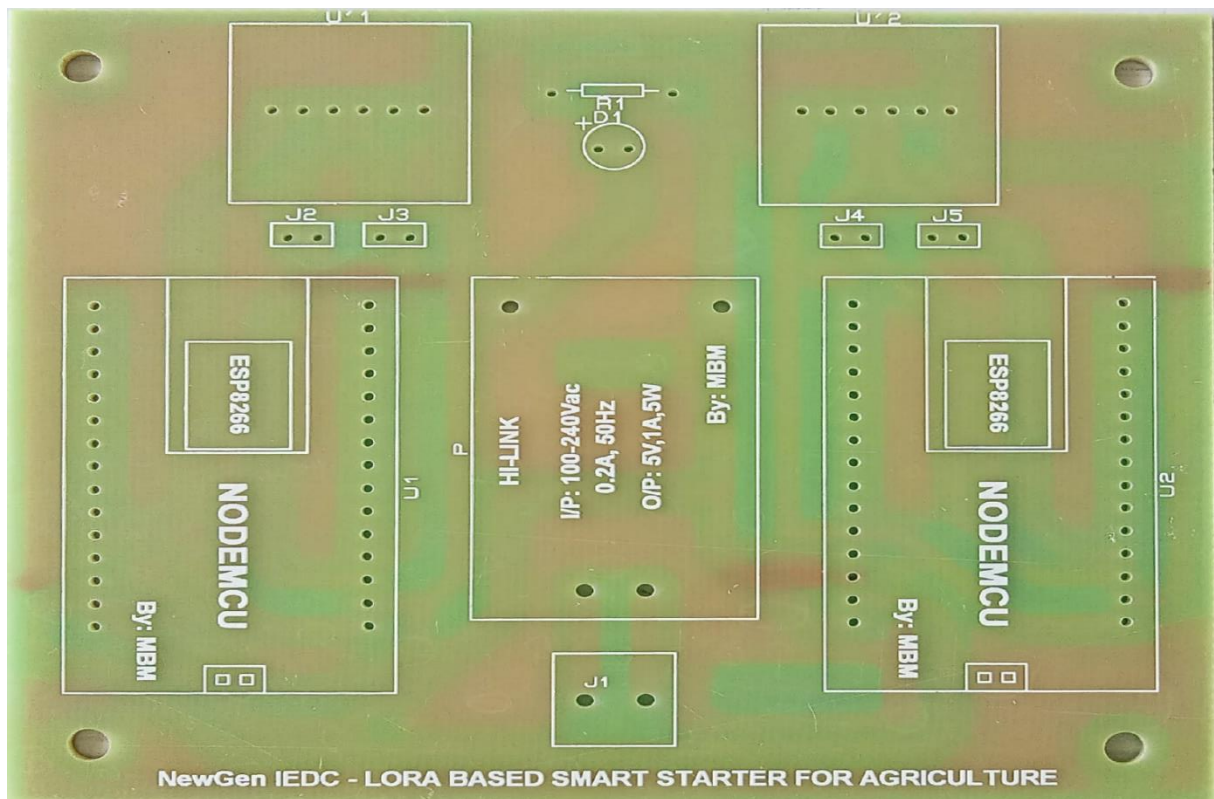
The LoRa-based Smart Starter for Agriculture allows farmers to remotely control pumps and sub-valves within a 5-7 kilometer range. The ESP8266 microcontroller serves as a gateway for LoRa technology, transmitting data to the cloud. The gateway, which is located within 1-5 kilometers, requires internet access, unlike the agriculture facility. This idea improves agricultural efficiency and control. This entire PCB control board is divided into three types:

- I. Power supply module (6.5*5 inches),
- II. Gateway Module (4*3.5 inches),
- III. Main control module (4*5 inches).

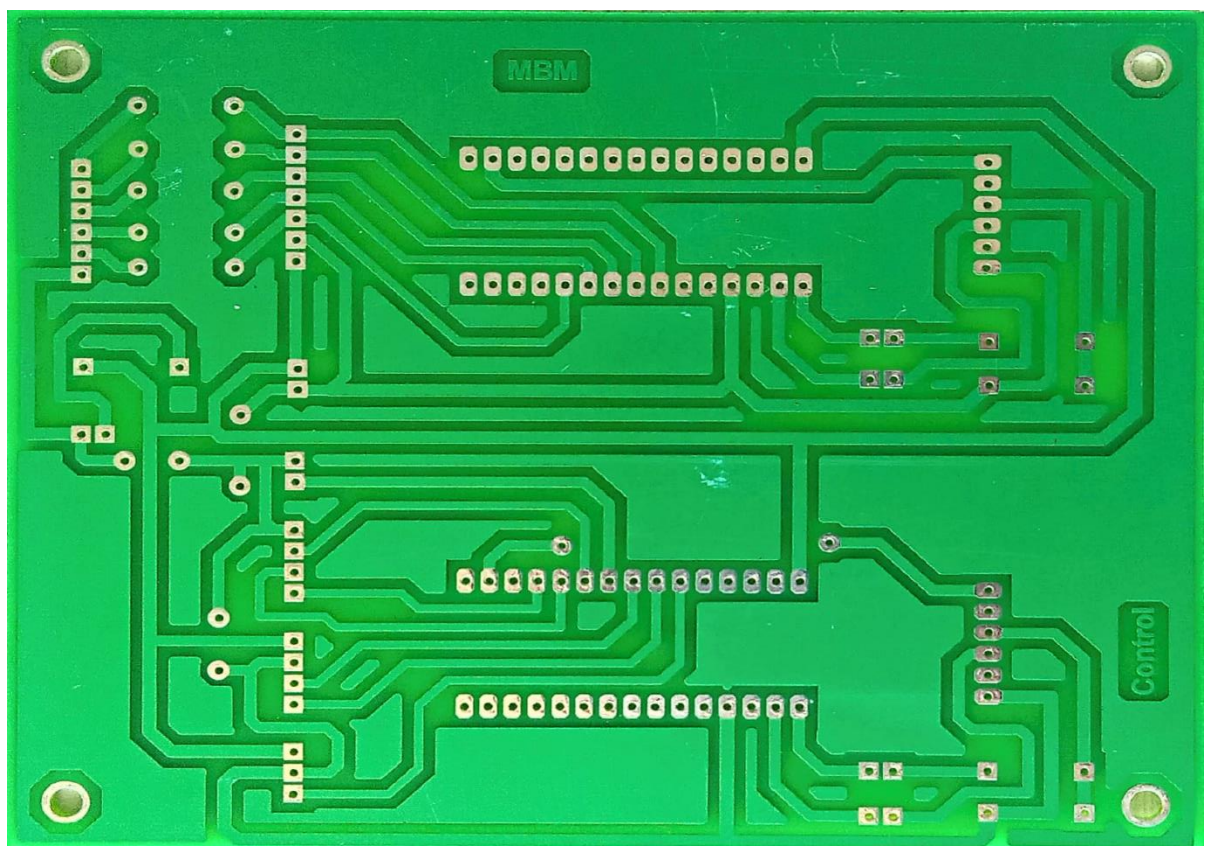
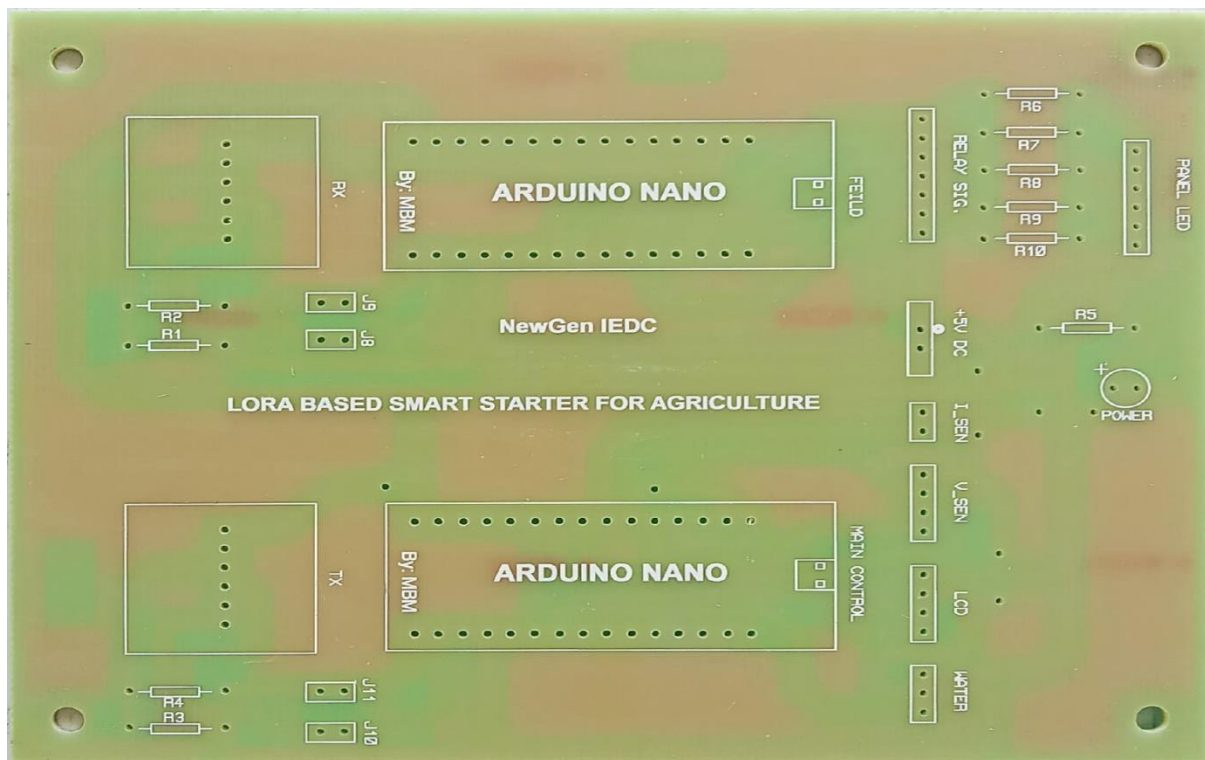
I. Power supply module (6.5*5 inches)



II. Gateway Module (4*3.5 inches)



III. Main control module (4*5 inches).



**Thank
You.**