Project Title: Wi-Fi Controlled Dual-Channel Rely Module Design Using Altium Designer Software

Introduction:

This project allows you to control two electrical switches remotely. You can turn devices on or off using your phone. The heart of this project is an ESP32 microcontroller, a tiny computer that connects to your Wi-Fi network. By sending simple commands to the ESP32, you can control the switches wirelessly. The microcontroller ensures precise control over the switching operations, providing reliable and efficient performance. This project is perfect for home automation, industrial control, or any application where remote control is desired.

Design Procedure:

I have used Altium Designer, a vast used software in industries, to make its schematic diagram and printed circuit board design (PCB) layout.
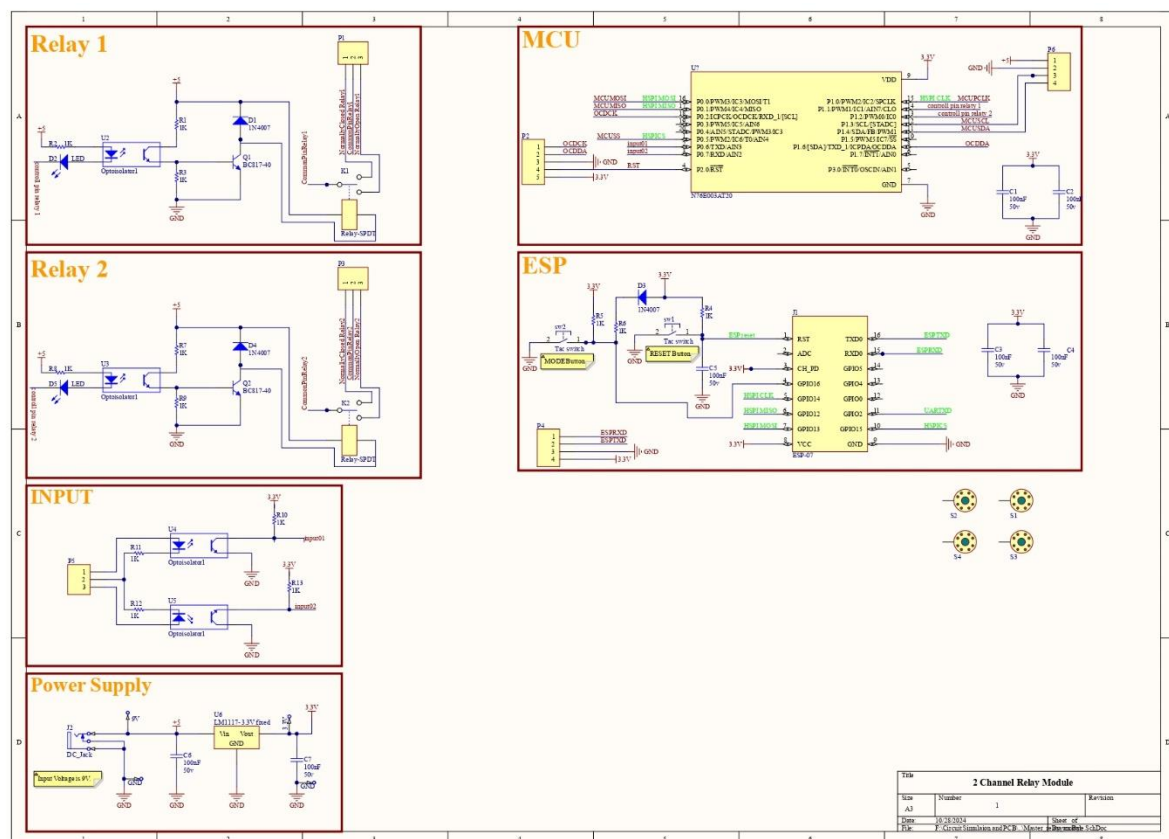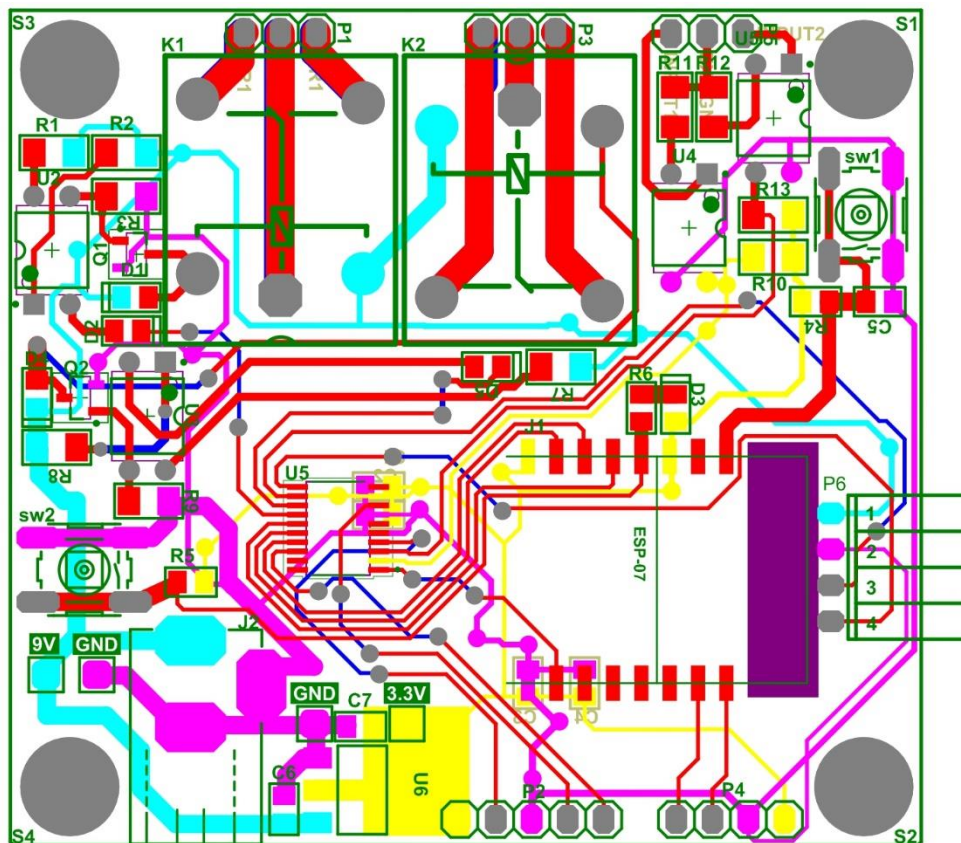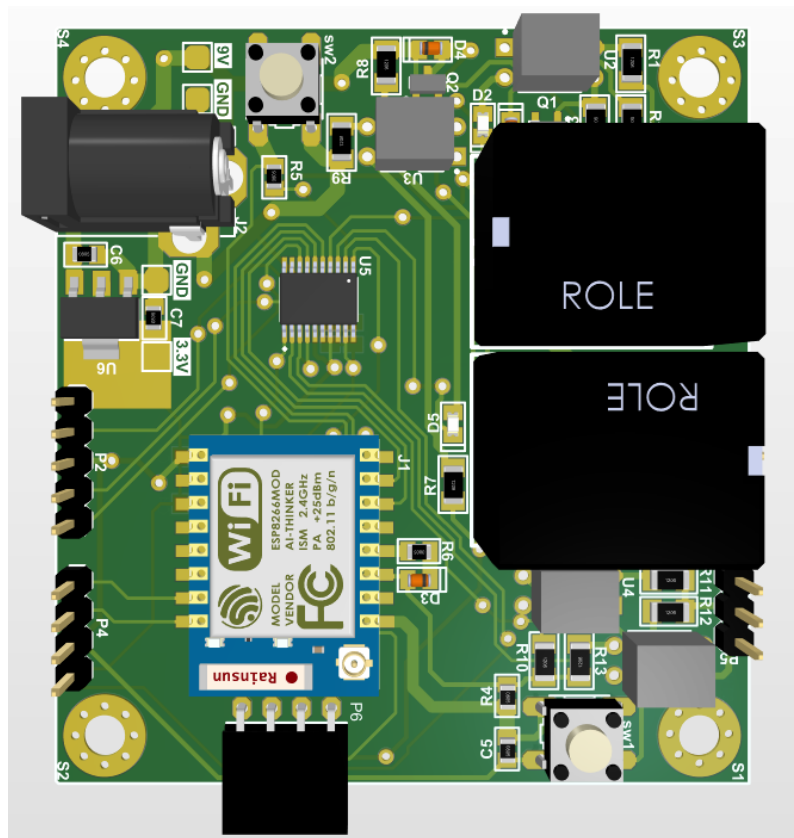

Figure 1: Schematic Diagram

Figure 2: Component Routing

Figure 3: 3D Design