

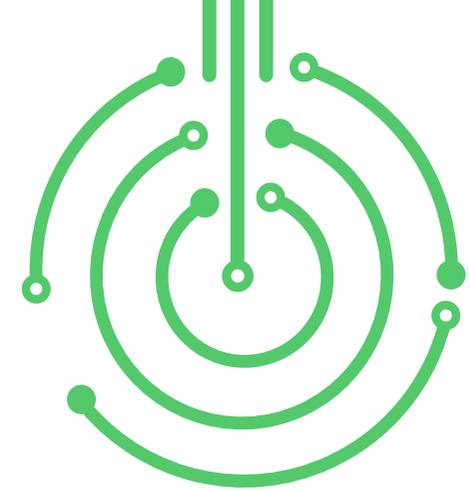
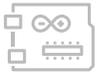
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Single Channel PS3 Wireless Remote On/Off Switch



SKU: EL140686

Single Channel PS3 Wireless Remote On/Off Switch



The board presented here is multipurpose hardware which includes the ESP32-Wroom module, 3.3V regulator, 5V relay, Power LED, Relay LED, and connector to program the ESP-32 Module. The project requires 5VDC and consumes 60mA current when the relay is ON. The project can be used in IoT applications and the relay can be controlled using Bluetooth or WiFi. The hardware helps users develop single-channel relay-based projects. The relay can be controlled over Wi-Fi, and Bluetooth wireless communication using appropriate code. The relay is connected to the GPIO4 pin of the ESP32 module.

FEATURES

- Supply 5V DC
- Load Current 60mA (When Relay is on)
- Relay Contacts Normally Open and Normally Closed
- Relay Contacts Load Current Up to 10Amps
- On Board Power LED
- On Board Function LED
- Screw Terminal for Power Supply Input
- Screw Terminal for Relay Contacts
- On Board Connector to Upload the Code
- PCB Dimensions 62.87X36.20MM
- 4 X 3MM Mounting Holes



RELAY ON/OFF SWITCH USING PS3 WIRELESS REMOTE

We have tested a simple on/off switch using this hardware and a PS3 wireless remote controller. The PS3 wireless remote works with Bluetooth thus it is easy to pair this board with PS3. Example code is available as a download. This code can be uploaded using Arduino IDE, follow the links below for more info about pairing the PS3 remote, and ESP32 programming.

Code Credits: This is modified code. The original author of the code is DroneWorkShop: <https://dronebotworkshop.com/ps3-esp32/>

Programming ESP-32 / ESP32S with USB – TTL / UART and Integration with Arduino IDE

<https://mischianti.org/2021/05/30/esp32-wroom-32-esp32-s-flash-pinout-specs-and-ide-configuration-1/><https://www.studiopieters.nl/esp32-program-a-esp32/><https://www.14core.com/wiring-and-flashing-programming-esp-32-esp32s-with-usb-ttl-uart/><https://techtutorialsx.com/2017/06/05/esp-wroom-32-uploading-a-program-with-arduino-ide/>

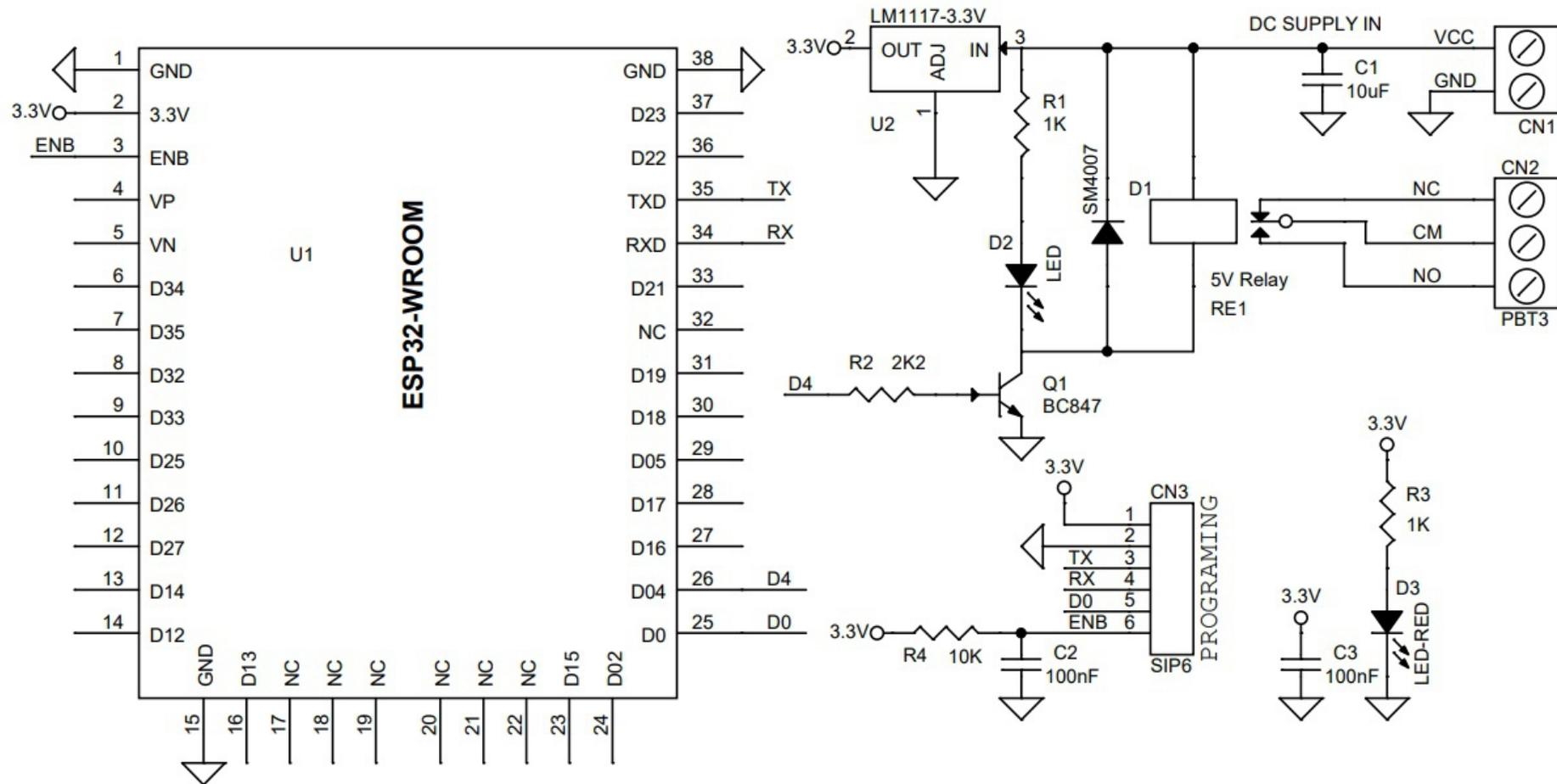
Getting Started with ESP32

<https://randomnerdtutorials.com/getting-started-with-esp32/>

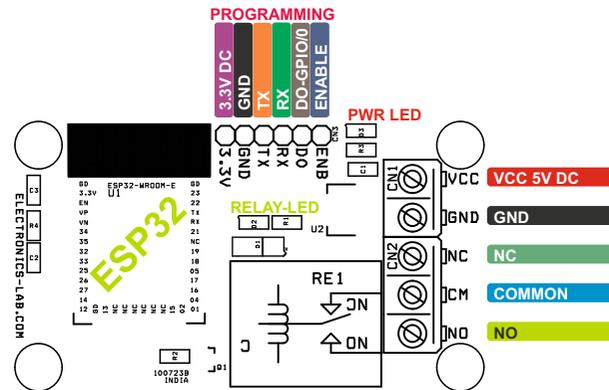
Pairing PS3 Remote with ESP32 Module

<https://dronebotworkshop.com/ps3-esp32/>

Schematic



Connections



Connections and Other Details

- CN1 Power Supply: Pin 1 = VCC 5V DC, Pin 2 = GND
- CN2 Relay Contacts: Pin 1 = Normally Open, Pin 2 = Common, Pin 3 = Normally Closed (Relay Contacts)
- CN3 Programming Connector: Pin 1 = 3.3V, Pin 2 = GND, Pin 3 = TX, Pin 4 = RX, Pin 5 = GPIO-0 (DO) , Pin 6 = Enable
- D1: Power LED
- D2: Relay LED
- Relay: ESP32 GPIO4

Parts List

BOM						
NO	QNTY.	REF	DESC.	MANUFACTURER	SUPPLIER	SUPPLIER PART NO
1	1	CN1	2 PIN SCREW TERMINAL PITCH 5.08MM	PHOENIX	DIGIKEY	277-1247-ND
2	1	CN2	3 PIN SCREW TERMINAL PITCH 5.08MM	PHOENIX	DIGIKEY	277-1248-ND
3	1	CN3	6 PIN MALE HEADER PITCH 2.54MM	WURTH	DIGIKEY	732-5319-ND
4	1	C1	10uF/10V CERMAIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
5	2	C2,C3	100nF/50V CERAMIC SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
6	1	D1	SM4007	DIODE INC	DIGIKEY	S1MBDITR-ND
7	1	D2	LED RED SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
8	1	D3	LED RED SMD SIZE 0805	OSRAM	DIGIKEY	475-1278-1-ND
9	1	Q1	BC847	DIODE INC	DIGIKEY	BC847BT-FDICT-ND
10	1	RE1	5V Relay	AMERICAN ZETTLER	DIGIKEY	3385-AZ943-1CH-5DE-ND
11	2	R1,R3	1K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
12	1	R2	2K2 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
13	1	R4	10K 5% SMD SIZE 0805	YAGEO/MURATA	DIGIKEY	
14	1	U1	ESP32-WROOM	ESP	DIGIKEY	ALIEXPRESS/EBAY/AMAZON
15	1	U2	LM1117-3.3V	TI	DIGIKEY	488-LM1117MPX-25NOPBCT-ND



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