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ESP32 RMT peripheral with 315 MHz or 433 MHz EV1527, HS1572, PT2240 and similar

Control your EV1527 and similar wireless devices with ESP32 and 433 MHz receiver and transmitter, utilizing ESP32 RMT (Remote Control Transceiver)

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Today, we will use the ESP32 to capture the signals of our remote control and later send the same signals to the device we want to control. After this tutorial, you will be able to control your wireless device, such as remote garage door, smart plug, etc., using ESP32 with 433MHz transmitter to send EV1527 signals with the help of ESP32 RMT peripheral.

Components

Before you begin, you will need these components:

- 1. **ESP32 microcontroller**: you are reading a post about ESP32, so you will surely need this. Any board should work if you can connect it to your computer with a USB cable to transfer the program. Check <u>here</u> the different types of ESP32 chips.
- 2. <u>433MHz transmitter and receiver modules</u>: There are many 433MHz transmitter modules available on the market and you should use the one that suits your project best, but if you are not sure what to choose, we will take a look at the most popular options
- 3. **Breadboard and jumper wires**: you will need breadboard and jumper wires to easily connect the ESP32 with RF modules.
- 4. <u>Power source</u>: you will need a sufficient power source for the ESP32, 433MHz transmitter and EV1527 encoder. It can be a battery or a power supply, depending on your project needs.
- 5. <u>Device using EV1527 or similar protocol</u>: If you want to use this knowledge with the