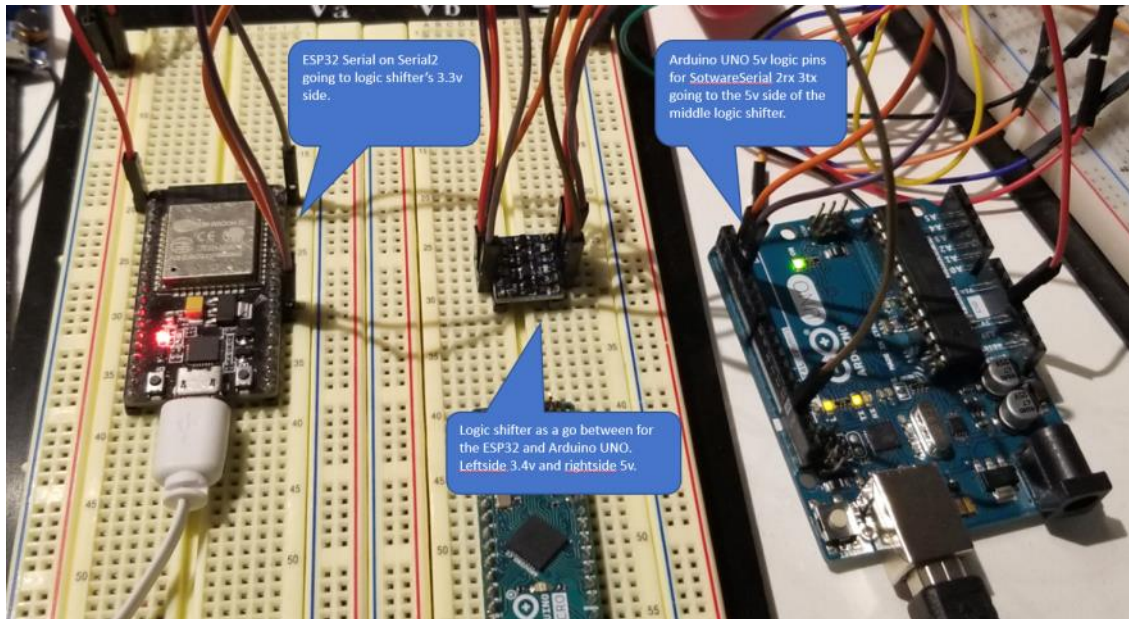


Arduino and ESP32 serial communication with logic level shifter



Code for the Arduino

```
#include <Arduino.h>
#include <SoftwareSerial.h>
SoftwareSerial mySerial(2, 3); // RX, TX
int number = 0;
void setup() {
  Serial.begin(115200);
  mySerial.begin(115200);
}
void loop() {
  while(Serial.available()){
    String info = Serial.readStringUntil('\n');
    mySerial.println(info);
  }
  while(mySerial.available()){
    String info = mySerial.readStringUntil('\n');
    Serial.println(info);
  }
  mySerial.print("from Arduino count = ");
  mySerial.println(number);
  ++number;
  delay(1000);
}
```

Code for the ESP32

```
#include <Arduino.h>
#include <String.h>
int num = 0;
void setup() {
  Serial.begin(115200);
  Serial2.begin(115200);
}
void loop() {
  while(Serial.available()){
    String input = Serial.readStringUntil('\n');
    Serial2.println(input);
  }
  while(Serial2.available()){
    String input = Serial2.readStringUntil('\n');
    Serial.println(input);
  }
  ++num;
  /* Serial.print("from ESP32 num = ");
  Serial.println(num);*/
  Serial2.print("from ESP32 num = ");
  Serial2.println(num);
  vTaskDelay(500);
}
```

ESP32 Serial output

Arduino Serial output

ESP32 Serial output

Arduino Serial output

```
COM3 - PuTTY
from Arduino count = 1220
from Arduino count = 1221
from Arduino count = 1222
from Arduino count = 1223
from Arduino count = 1224
from Arduino count = 1225
from Arduino count = 1226
from Arduino count = 1227
from Arduino count = 1228
from Arduino count = 1229
from Arduino count = 1230
from Arduino count = 1231
from Arduino count = 0
from Arduino count = 1
from Arduino count = 2
from Arduino count = 3
from Arduino count = 4
from Arduino count = 5
from Arduino count = 6
from Arduino count = 7
from Arduino count = 8
from Arduino count = 9
```

```
COM20 - PuTTY
from ESP32 num = 2527
from ESP32 num = 2528
from ESP32 num = 2529
from ESP32 num = 2530
from ESP32 num = 2531
from ESP32 num > 2532
from ESP32 num = 2533
from ESP32 num = 3534
```