# **Interfacing of Ethernet with ESP32**

#### **Hardware components:**

1. ESP32 DOIT-DEVKIT-v1

2. ENC28J60 module

3. Jumper wires

4. LAN cable

### **Software components:**

**Environment:** Platformio

Framework: Arduino Framework

### **Pin Mapping:**

ENC28J60	ESP32
VCC	Vin(5v)
GND	GND
SCLK (SCK)	GPIO18
MISO (SO)	GPIO19
MOSI (ST)	GPIO23
CS	GPIO5

#### **Libraries Used:**

1- UIPEthernet (<a href="https://github.com/UIPEthernet/UIPEthernet">https://github.com/UIPEthernet</a>/UIPEthernet)

2- PubSubClient

## **Testing:**

MQTT Broker: test.mosquitto.org (public broker), broker.hivemq.com (public broker)

MQTT Port: 1883