SRA DEVELOPMENT BOARD

What is a Microcontroller?

- A microcontroller is a single Integrated Circuit (IC) that is typically used for a specific application and designed to implement certain tasks.
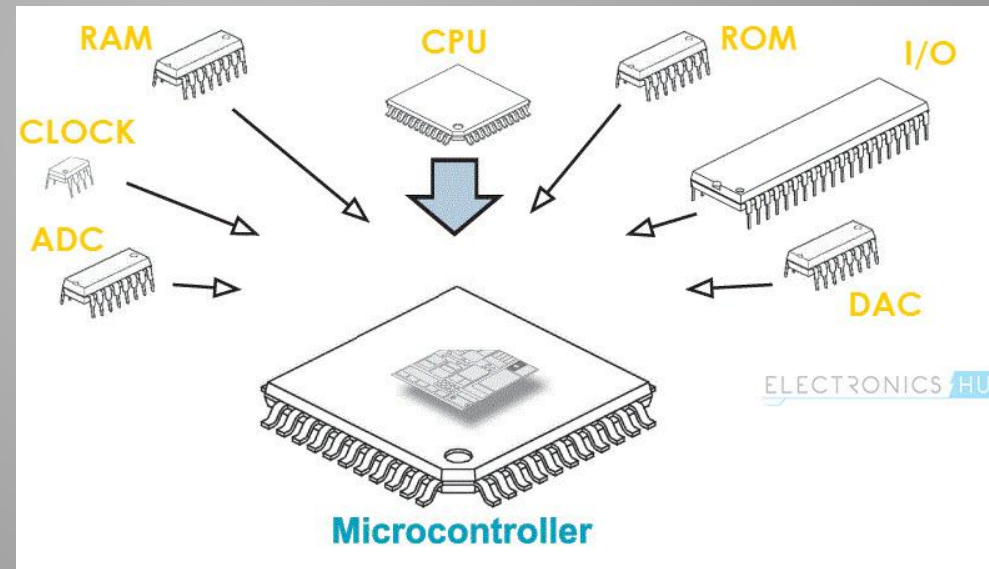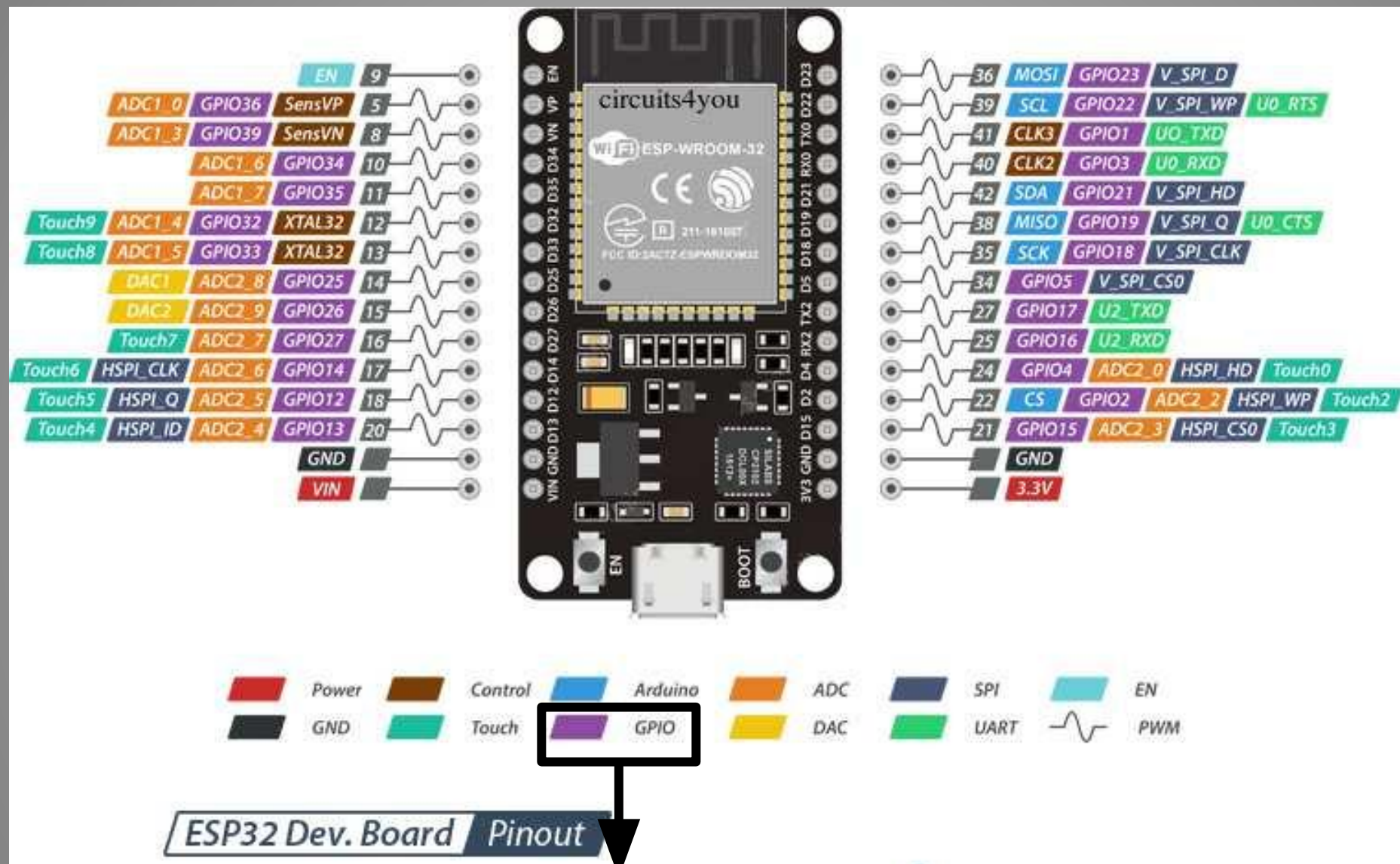
ESP 32:

ESP32 is a system on a chip that integrates the following features:
- Wi-Fi (2.4 GHz band)
- Bluetooth 4.2
- Dual high performance cores
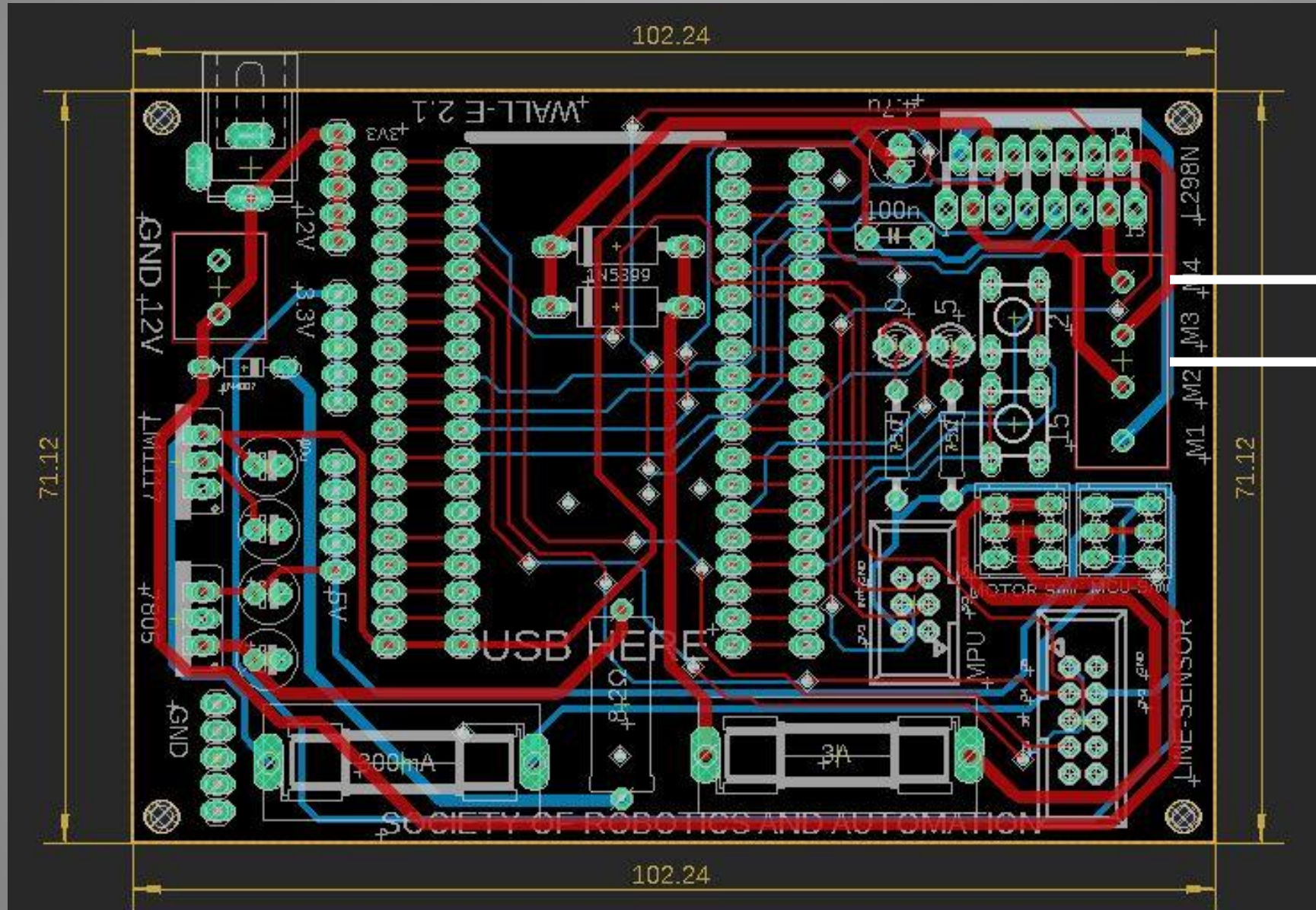- Temperature Sensor
- Hall Sensor
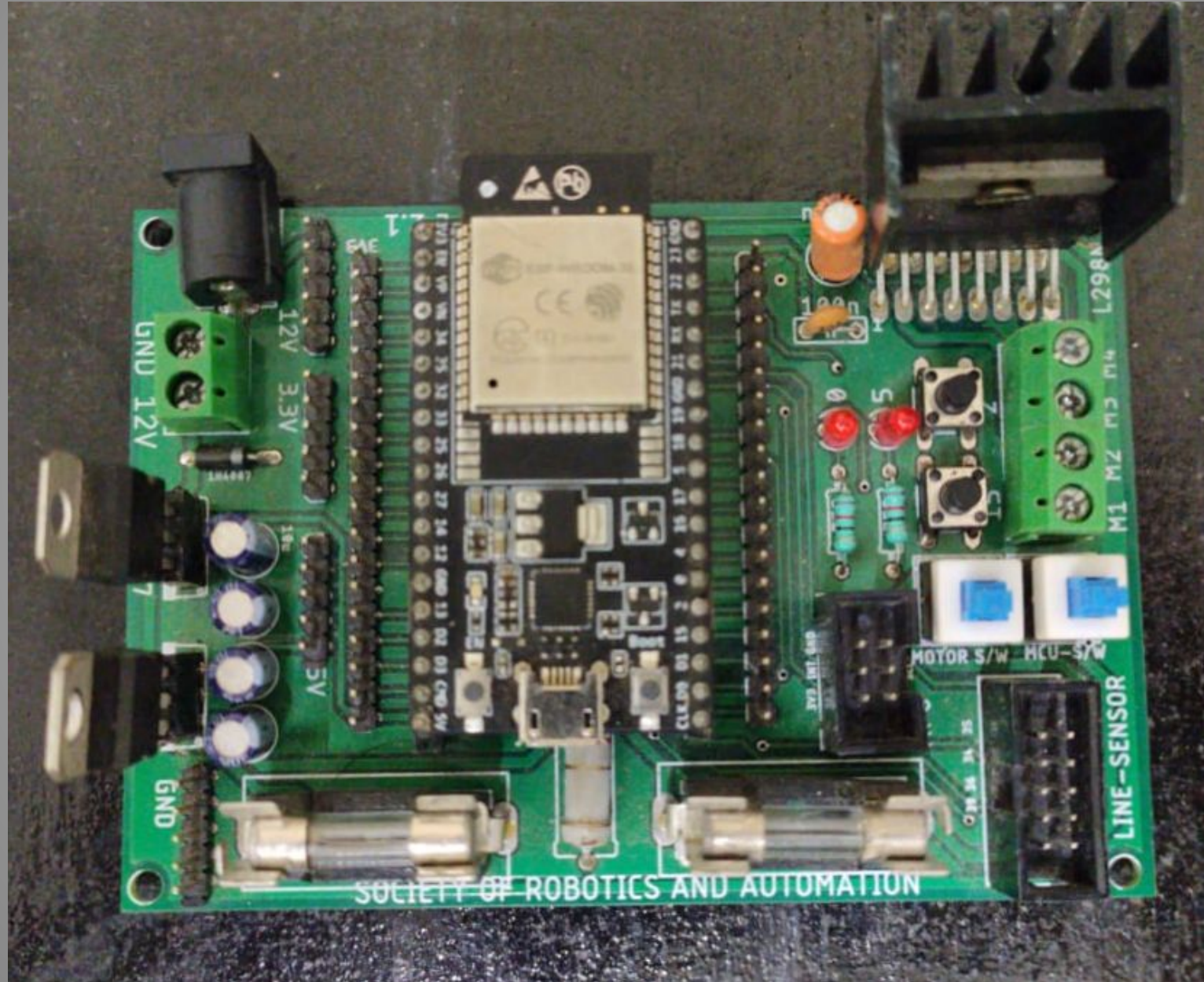- Touch Sensor

GPIO : General Purpose Input Output pins

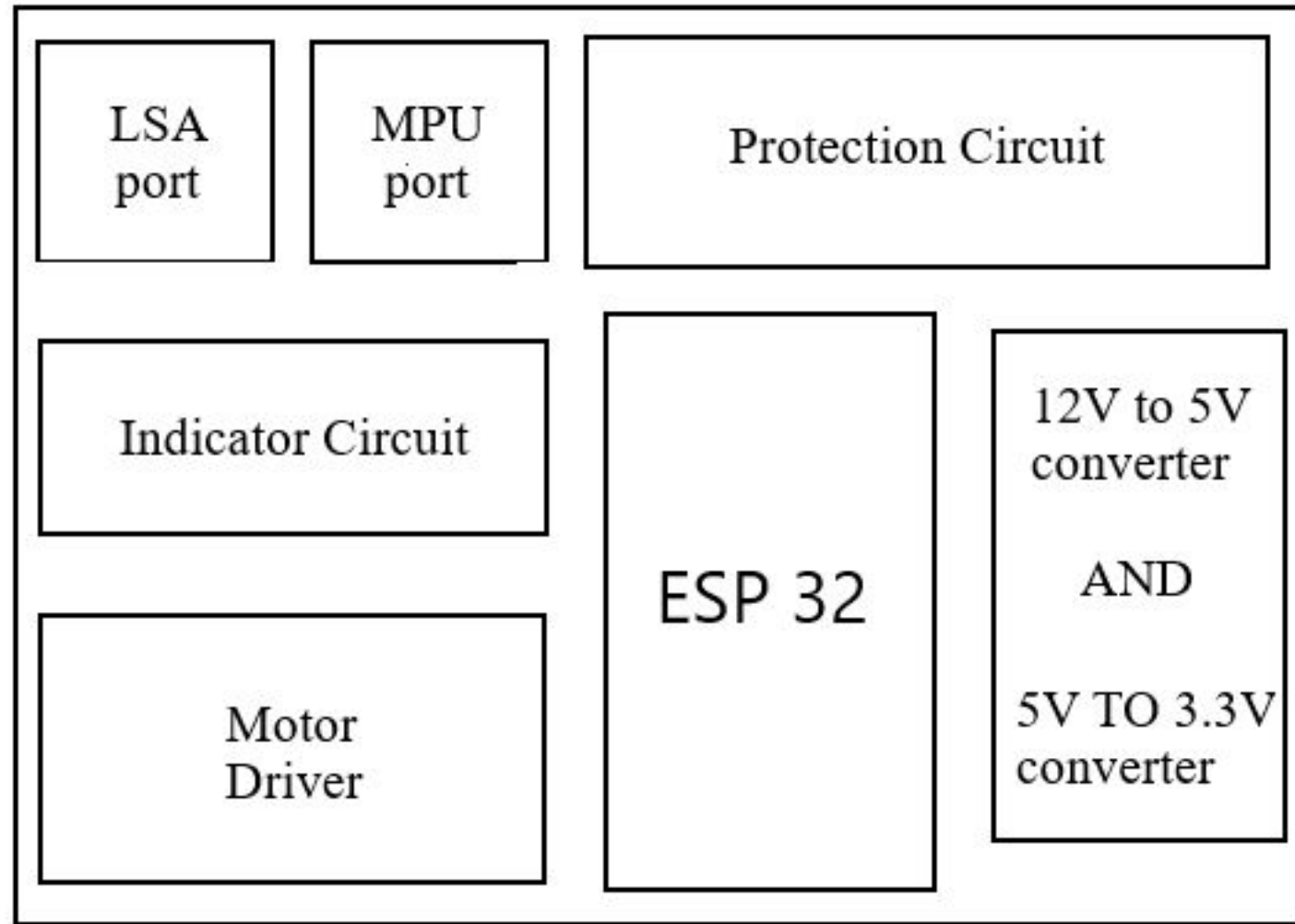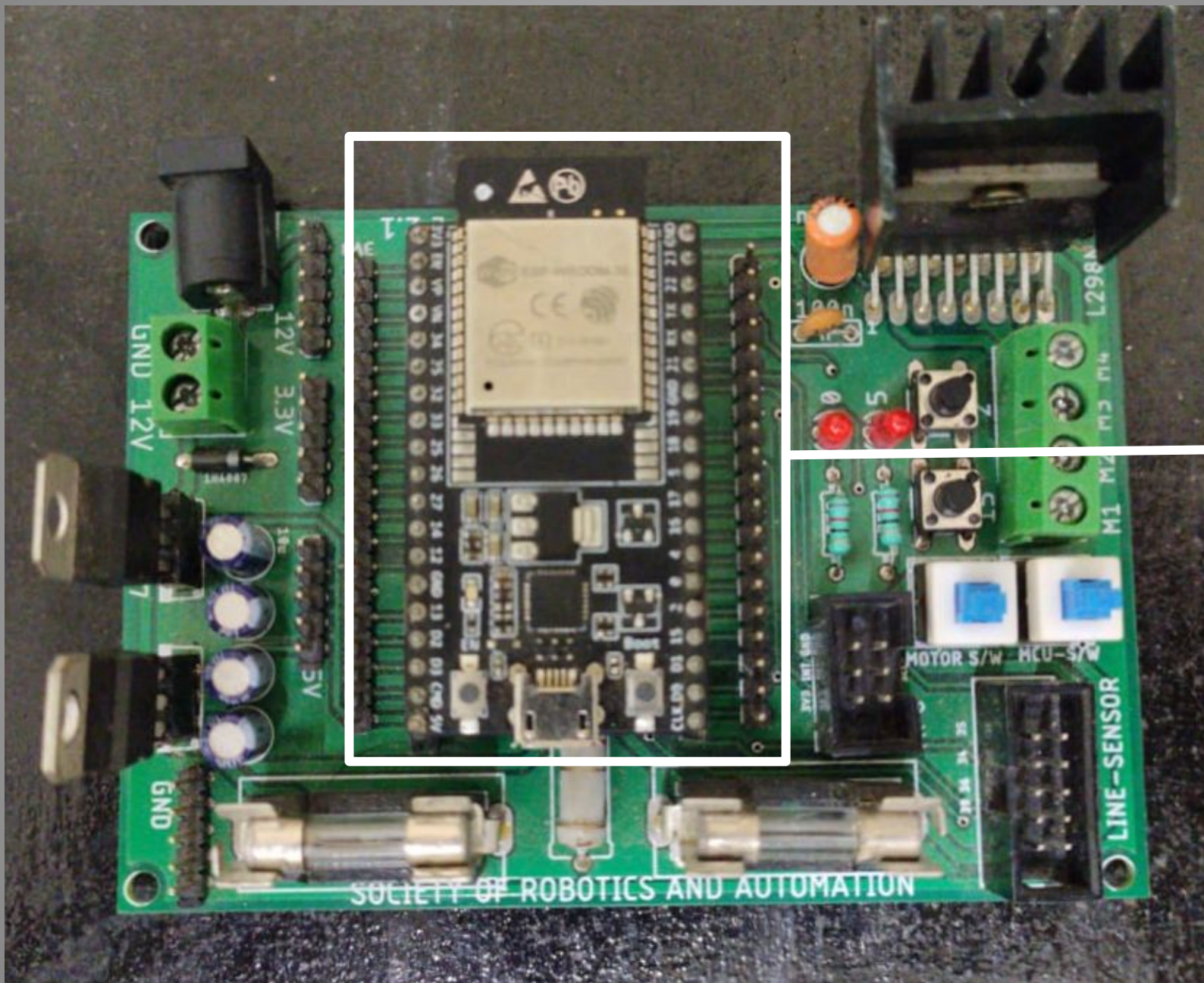Normal Way of Connection

Printed Circuit Board (PCB) :

COPPER TRACES

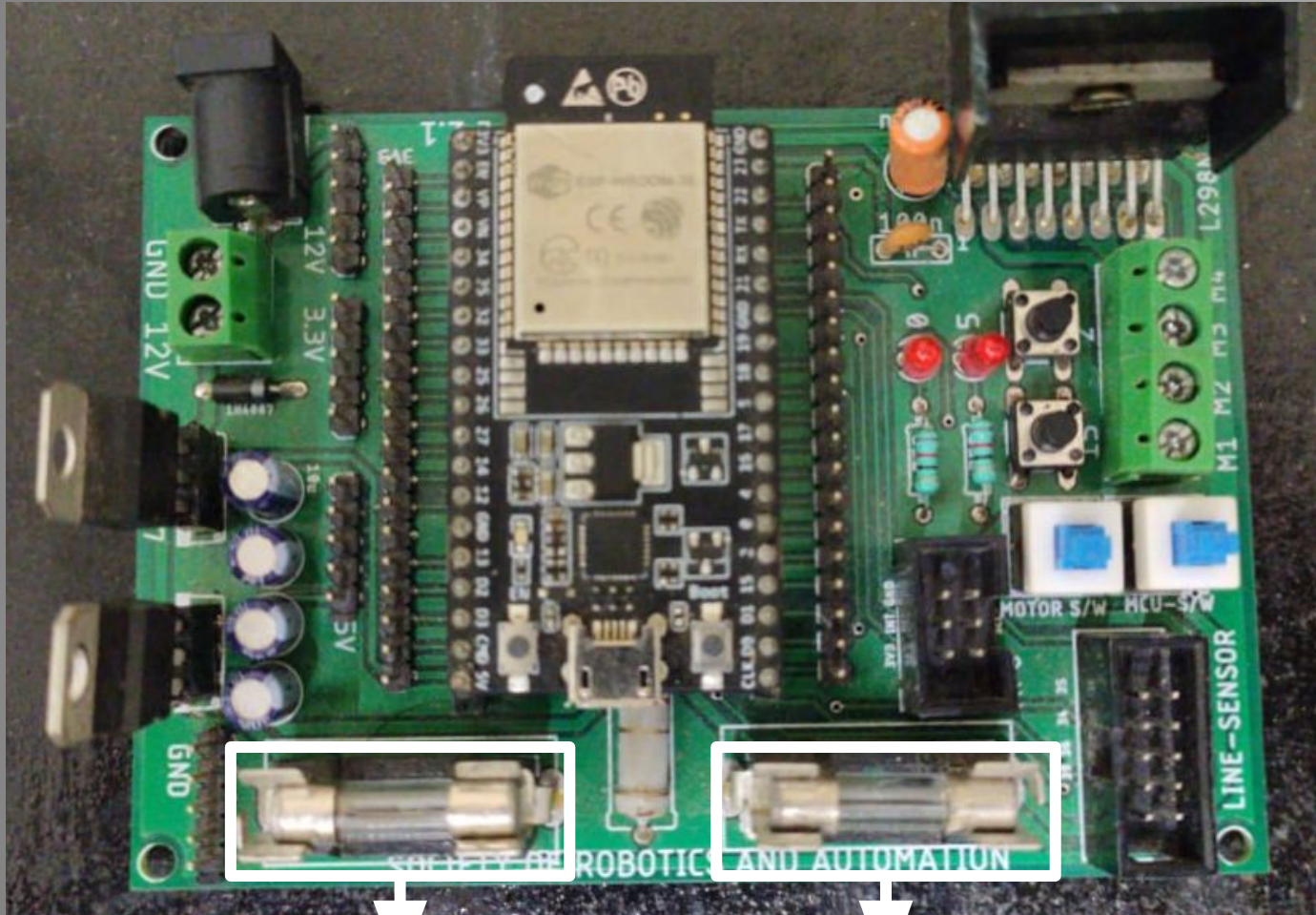# SRA BOARD:

Block Diagram:

SRA BOARD

ESP 32

Input
Voltage
(WHY 12V?)
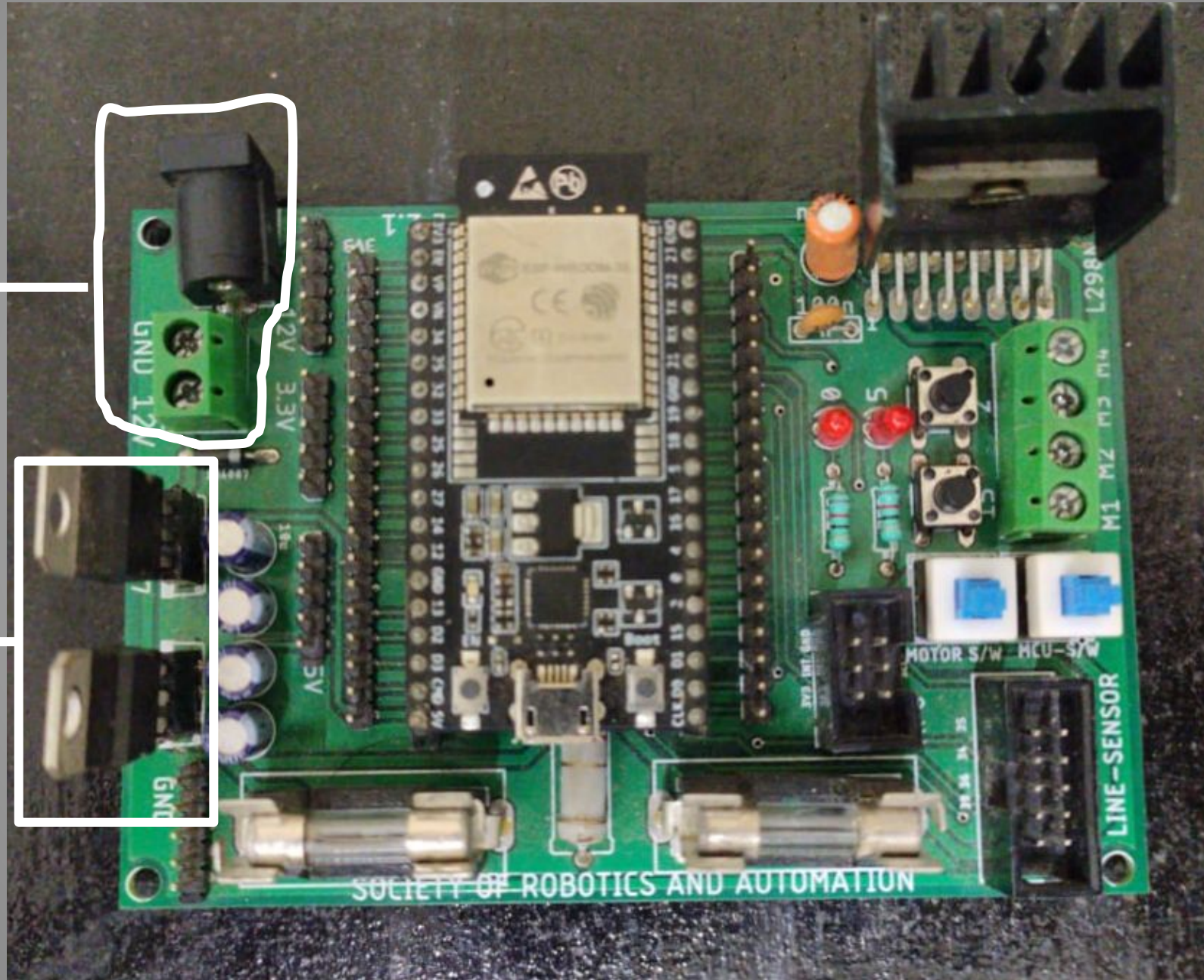
Voltage
Regulators

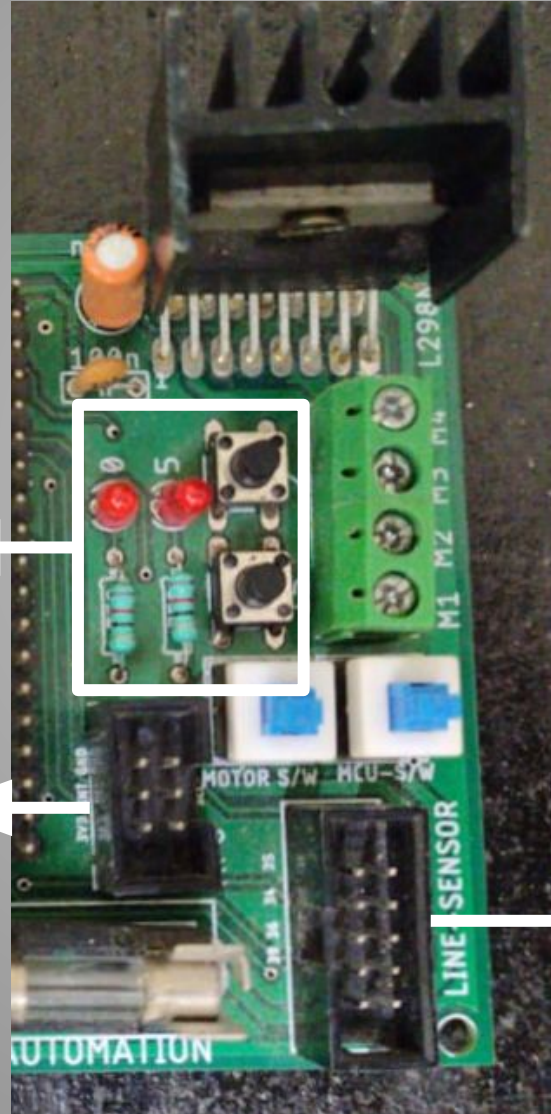# Fuses:

Working
Fuse

Blown
Fuse

300mA
For 5V

3A
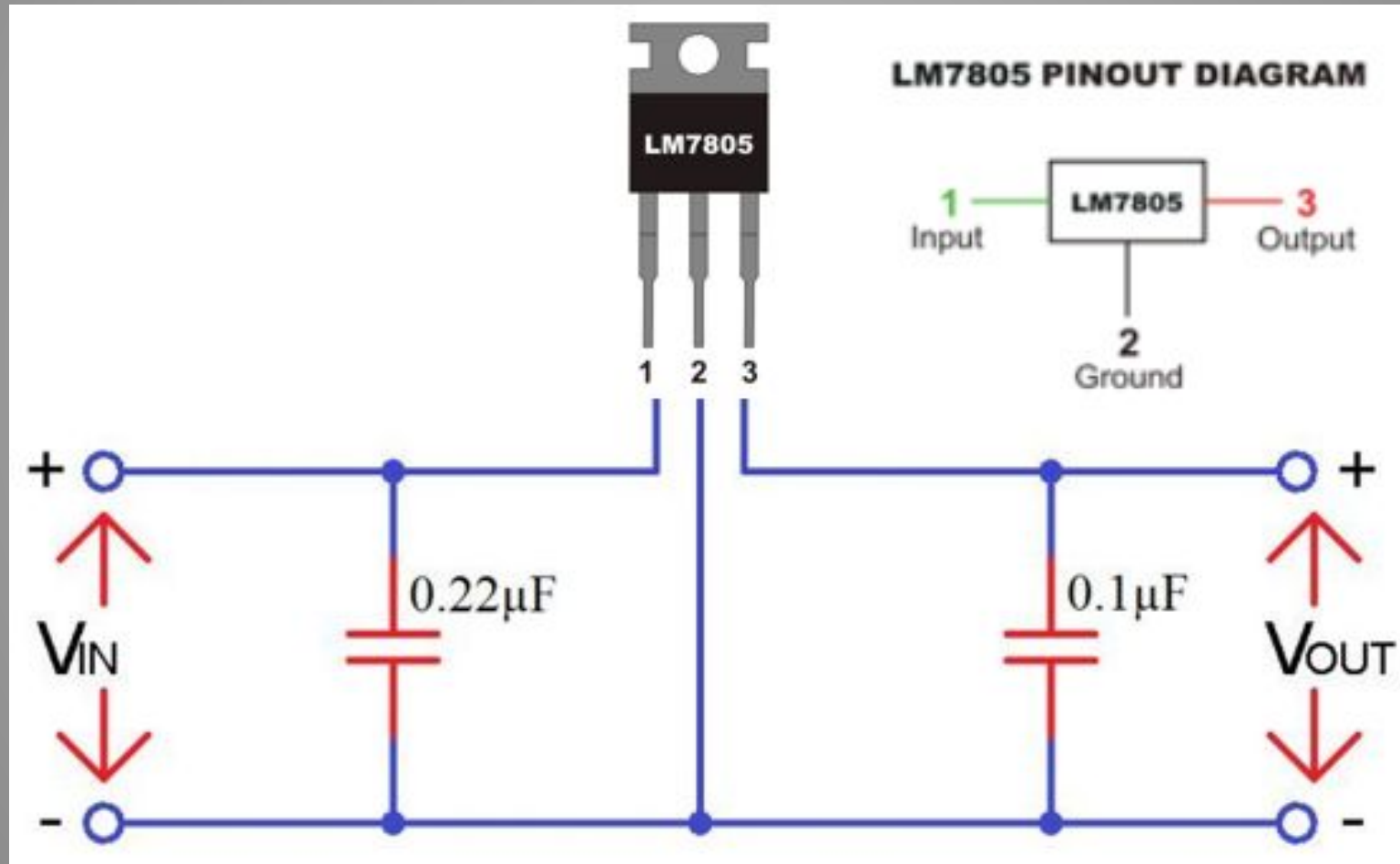For 12V

Sensor port and Indicator Circuits

Switches and Leds
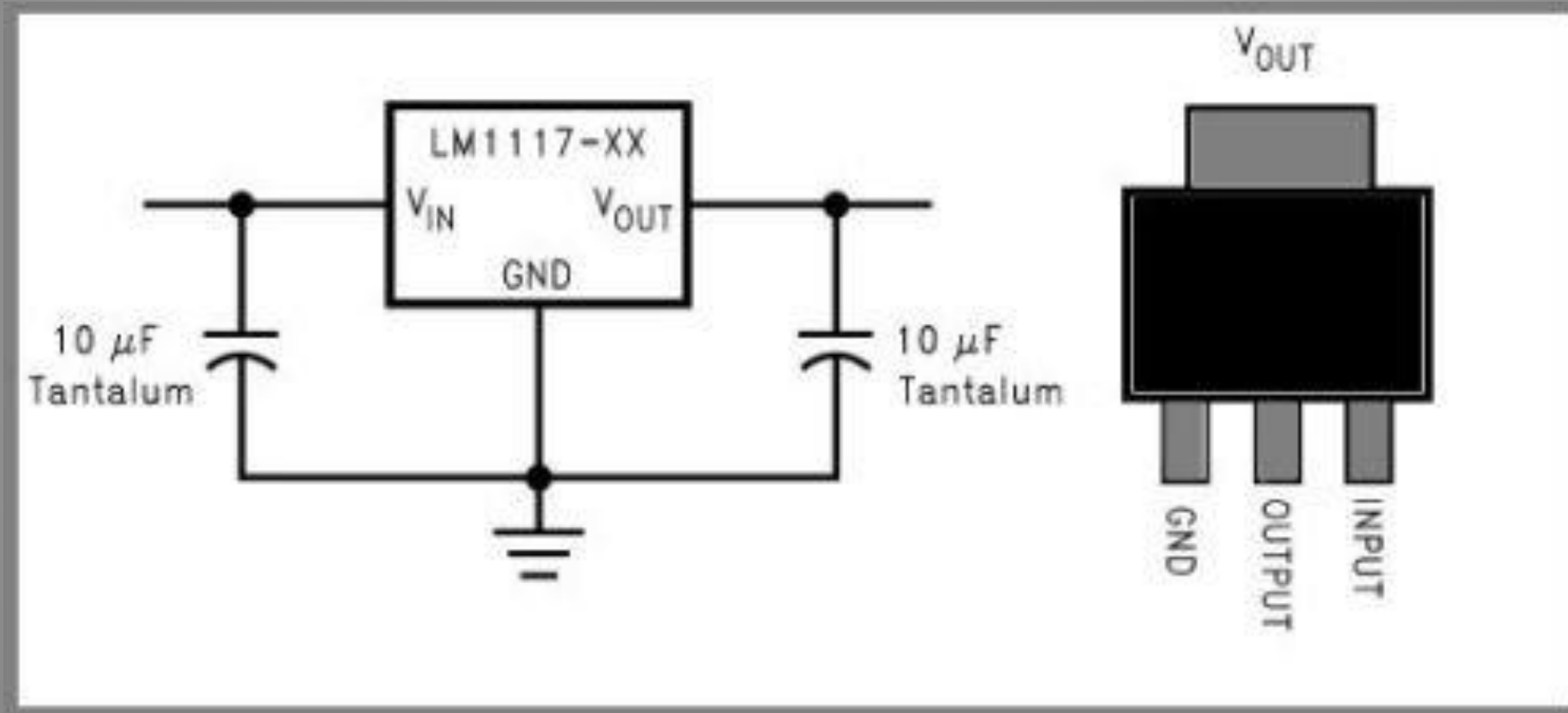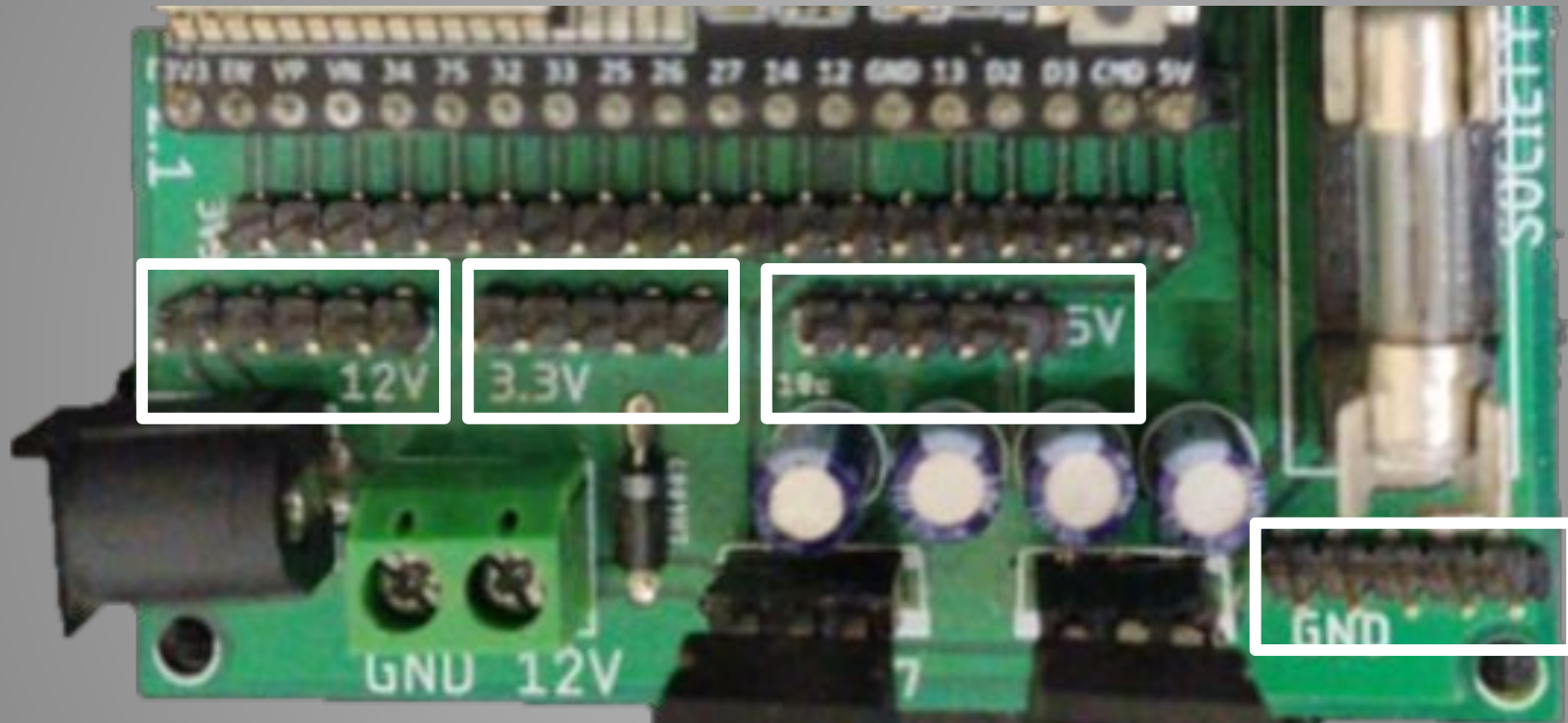
MPU PORT

LSA PORT

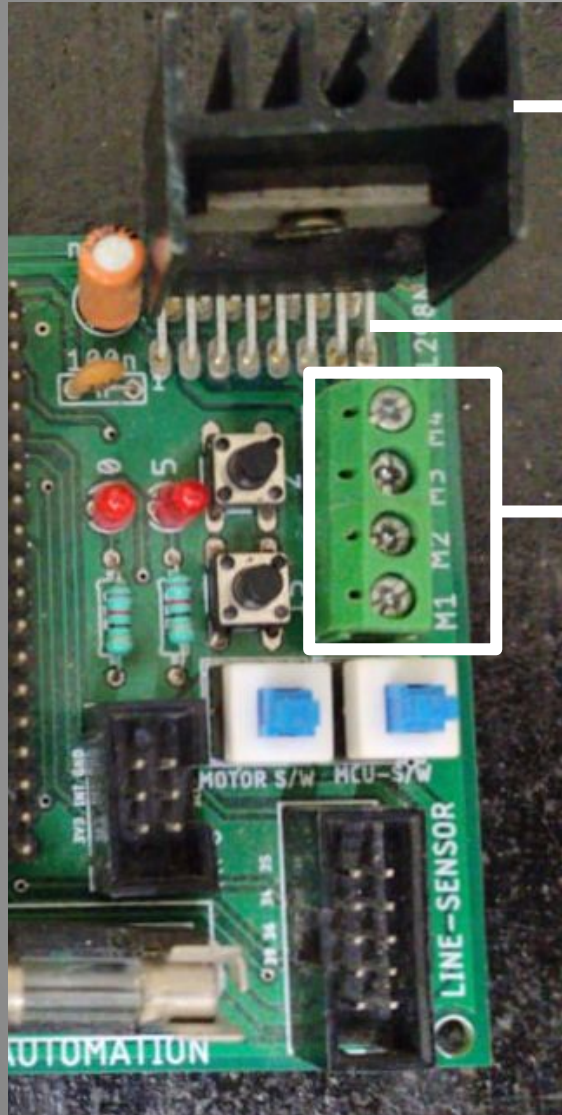# 7805 : Converts Input Voltage to 5V

LM1117 : Converts Input Voltage to 3.3V

Standard Voltages position on board.

Motor Driver

Heatsink

Motor Driver

Motor Connections

Heatsink