Using DAC & Nodemcu get desired Analog Voltage

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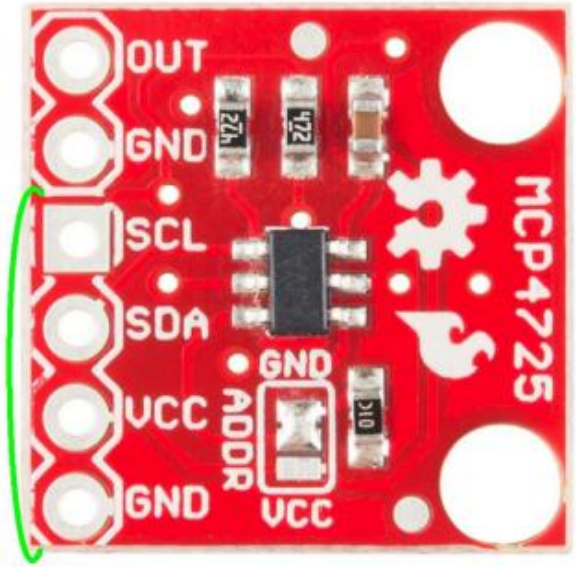
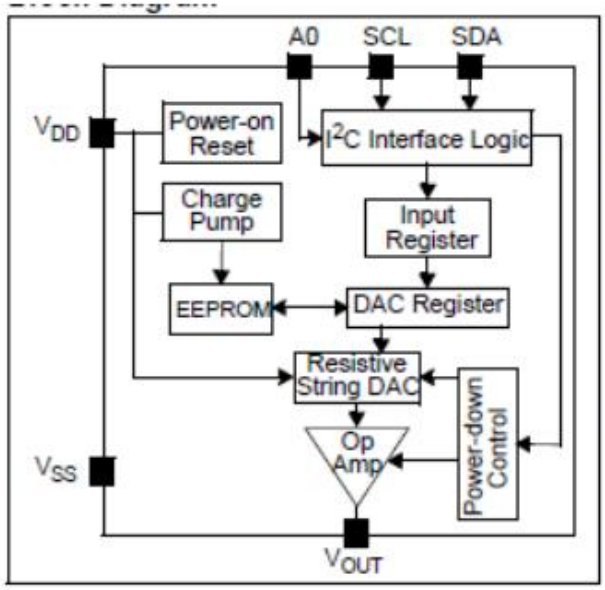
DAC MCP 4725

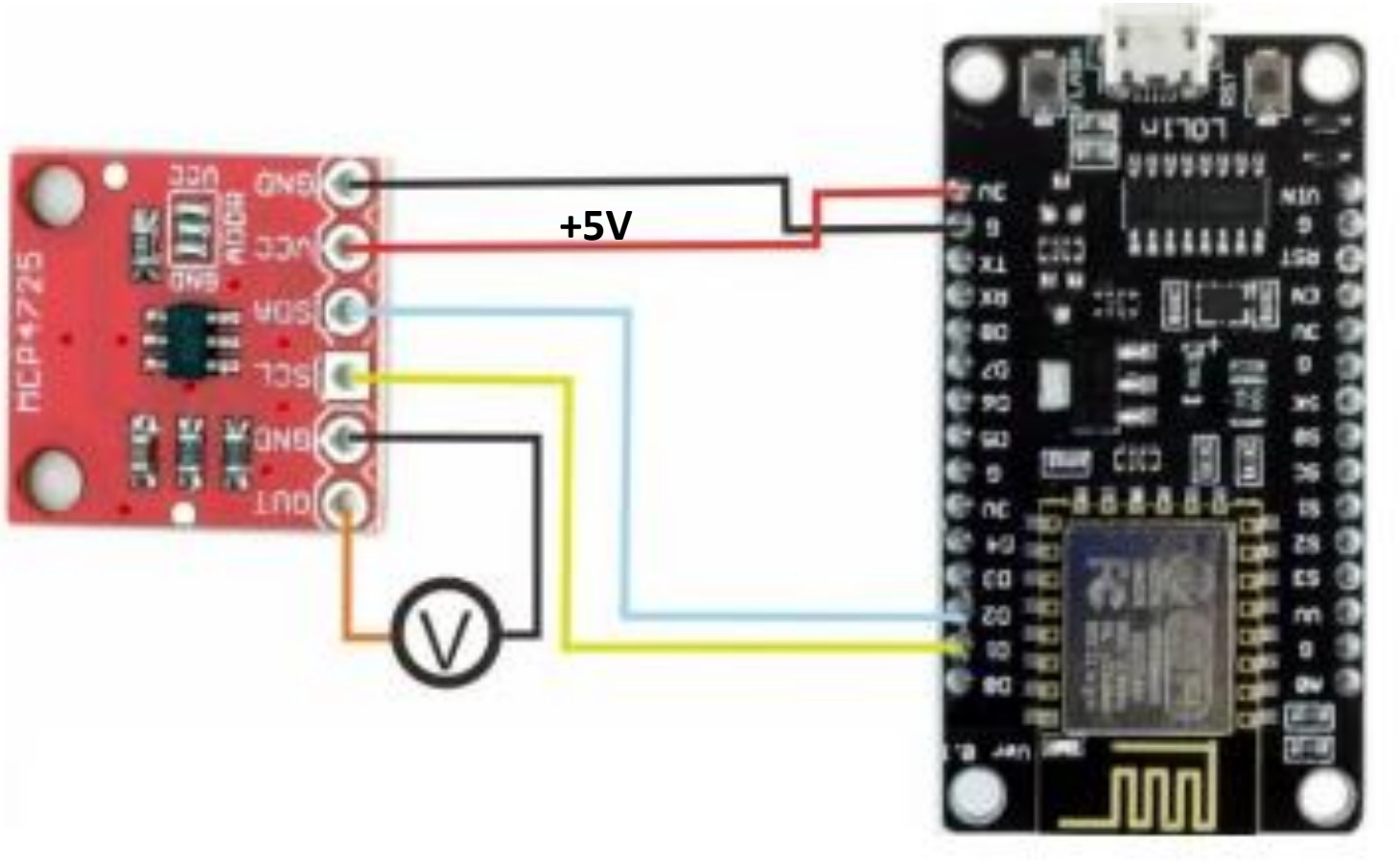




- 12-Bit Resolution
- On-Board Nonvolatile Memory (EEPROM)
- ±0.2 LSB DNL (typical)
- External A0 Address Pin
- Normal or Power-Down Mode
- Fast Settling Time: 6 µs (typical)
- External Voltage Reference (V_{DD})
- Rail-to-Rail Output
- Low Power Consumption
- Single-Supply Operation: 2.7V to 5.5V
- I^2C Interface:
  - Eight Available Addresses
  - Standard (100 kbps), Fast (400 kbps), and High-Speed (3.4 Mbps) Modes
- Small 6-Lead SOT-23 and DFN Package Options
- Extended Temperature Range: -40°C to +125°C

Applications

- Set Point or Offset Trimming
- Sensor Calibration
- Closed-Loop Servo Control
- Low Power Portable Instrumentation
- PC Peripherals



Circuit - Nodemcu with MCP 4725

```
#include <Wire.h>
#include <Adafruit_MCP4725.h>
Adafruit_MCP4725 dac;
// Set this value to 9, 8, 7, 6 or 5 to adjust the resolution
#define DAC_RESOLUTION    (9);
void setup() {
  Serial.begin(9600);
  Serial.println("Hello!");
  dac.begin(0x60);
}
void loop() {
  float vol;
Serial.println("Enter required voltage (0-3.3V): ");
while (!Serial.available()) {
// Wait for user input
}
vol = Serial.parseFloat();

if (vol >= 0 && vol <= 3.3) {

dac.setVoltage(vol * 4096 / 3.3, false);
delay(3000);
} else {
Serial.println("Invalid Voltage. Please enter a value between 0 and3.3.");
delay(2000);
}
// Clear the Serial Monitor input buffer
while (Serial.available()) {
Serial.read();
}
  delay(3000);
}
```