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ESP8266/ESP32 USB Programmer

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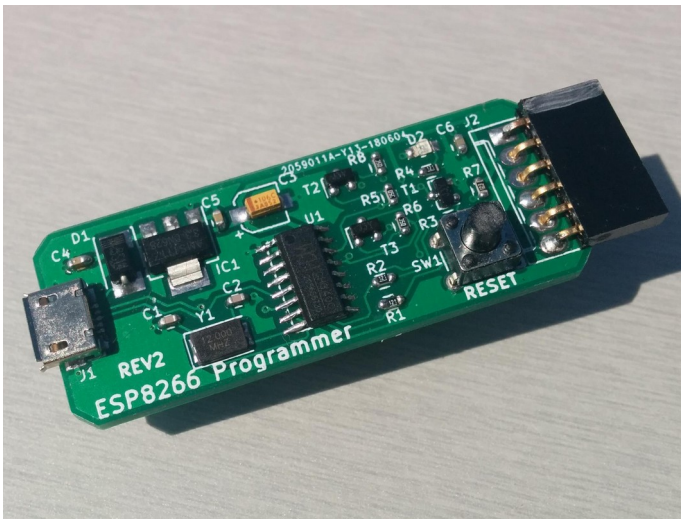
Features

- USB to serial using the CH340 chip
- Program using the Arduino IDE
- Reset button
- Simple 6 pin target connector
- Micro USB connector



Please note

Your Arduino IDE needs to be setup to program the ESP8266. There are many fine tutorials on how to do this. It consists of adding a JSON link in the preferences and then adding the ESP8266 within the boards manager.

Description

A USB programmer for the ESP8266 or ESP32 chips from Espressif Systems. This board uses the CH340 USB to serial interface to program the ESP devices. The board also uses the GPIO0 and Reset lines to aid programming, just as Wemos and NodeMCU development modules. Uses the Arduino IDE. Connection is via a micro USB socket (cable not included).

Advantages

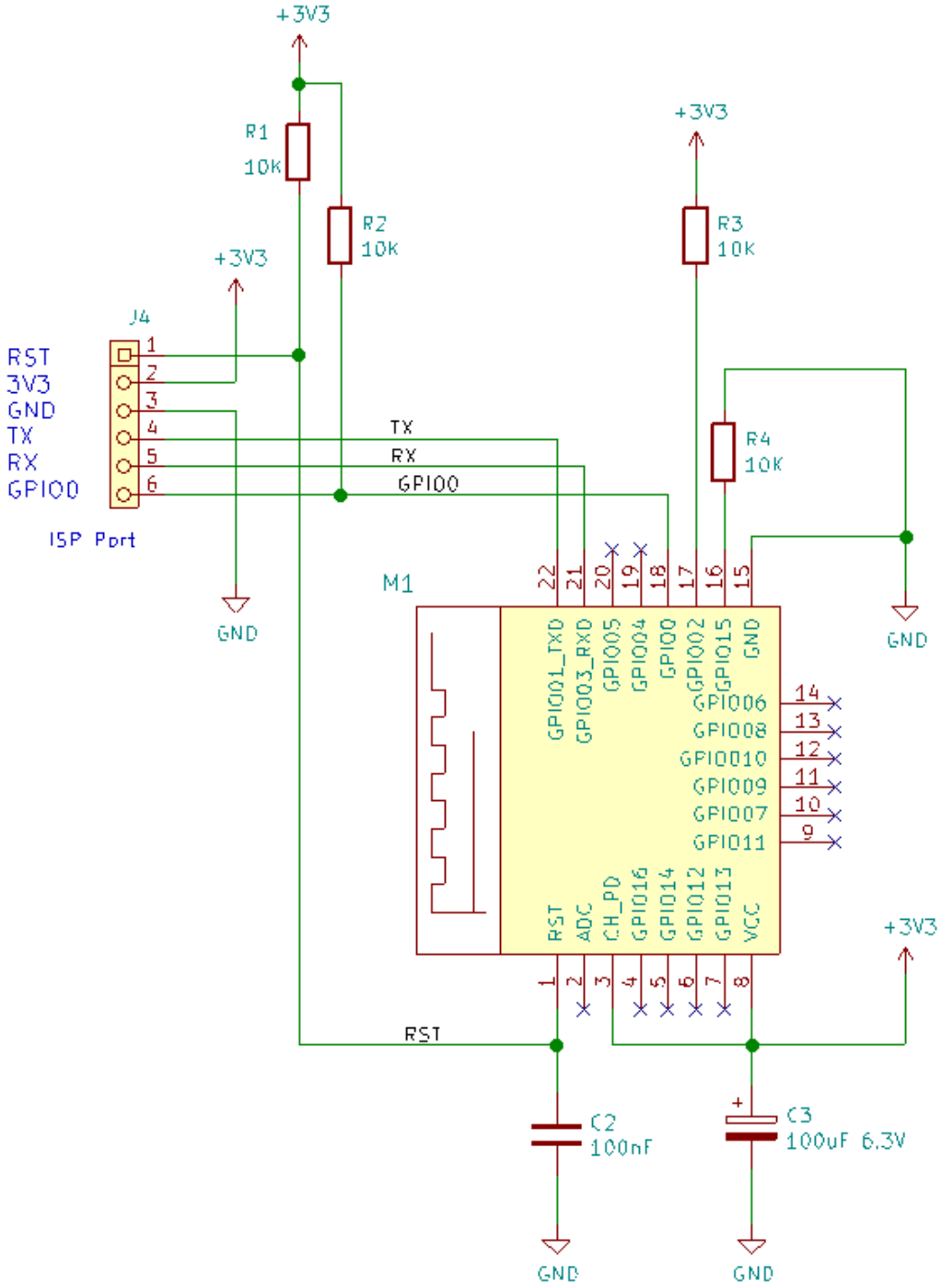
Using an external programmer makes the target board easier and cheaper to build without the USB interface, this also aids low power modes used for battery operation. Not having to power the USB interface can save precious battery power.

Drivers

For Windows a quick search for CH340-Driver will find what you need. For Linux uses just plug it in and it simply works. You will also need to have installed the Arduino IDE support for the ESP8266. Within the Arduino IDE select the correct serial Port and select the programmer as a Wemos D1 R2 Mini.

Pin	Name	Function
1	RST	Reset from Programmer
2	3V3	3V3 from programmer(optional)
3	GND	Ground common connection
4	TX	TX connection
5	RX	RX connection
6	GPIO0	Used to signal the ESP's bootloader

Typical connections



Board dimensions
Length = 51.5mm (60mm with connectors)
Width = 20.5mm
Weight = 5.5gm