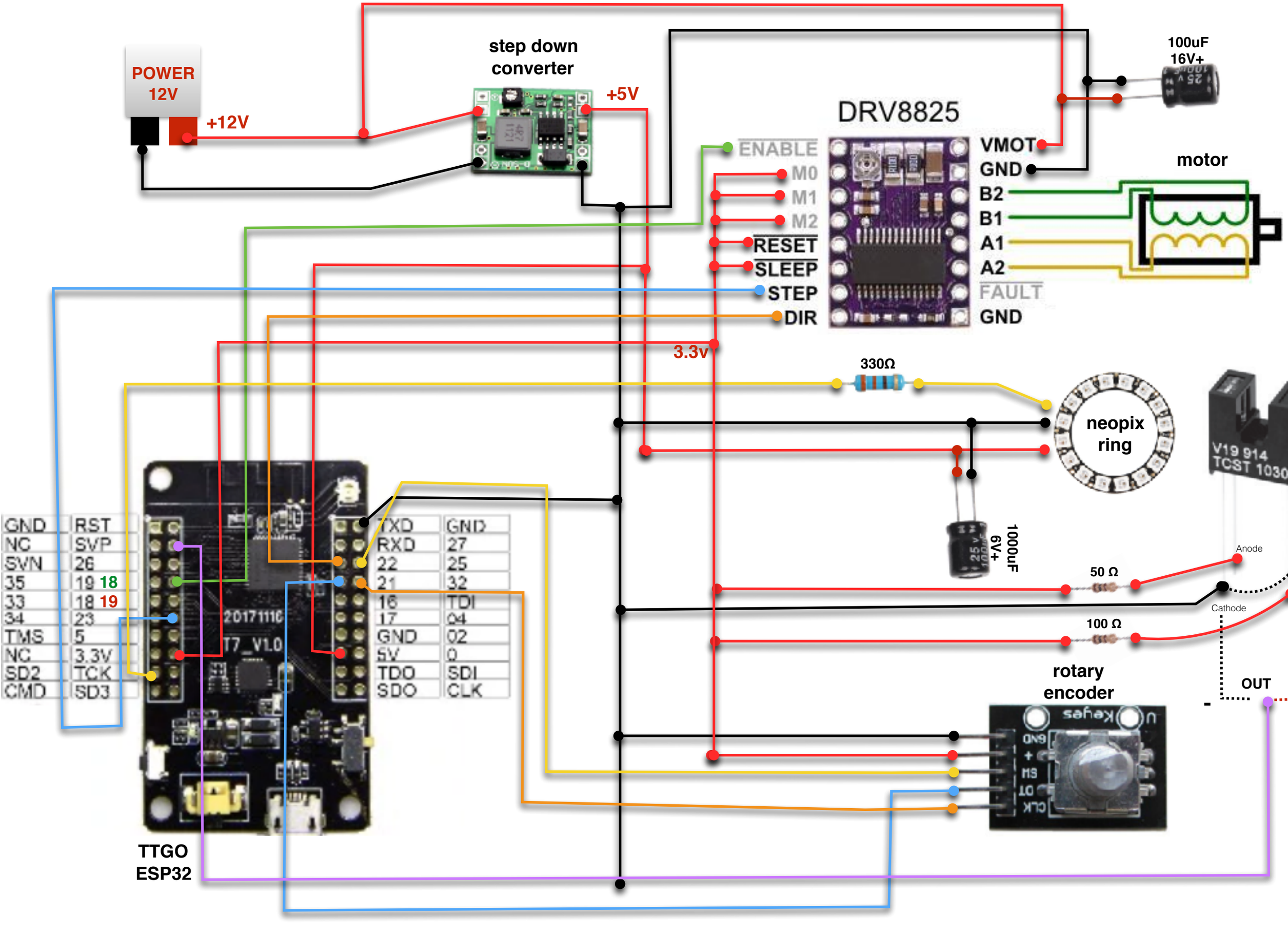
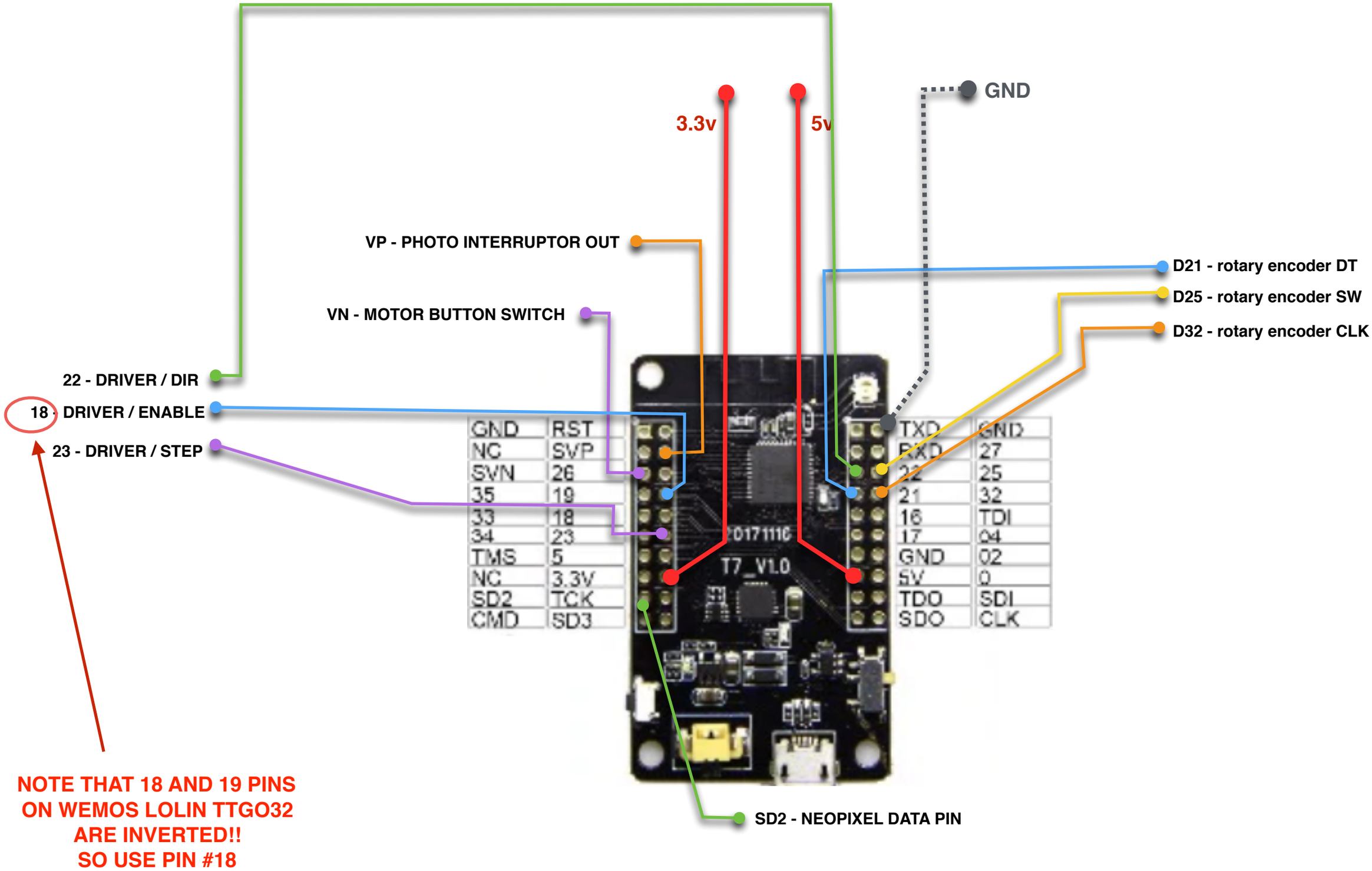
MoW circuit V 1.0 - TeZ / August 2019

POWER
12V
+12V
step down
converter
+5V
100uF
16V+
DRV8825
ENABLE
M0
M1
M2
RESET
SLEEP
STEP
DIR
VMOT
GND
B2
B1
A1
A2
FAULT
GND
motor
3.3v
330Ω
neopix
ring
V19 914
TCST 1030
1000uF
6V+
50 Ω
100 Ω
Anode
E
Cathode
C
OUT
-
+
rotary
encoder
BOOT
EN
3V3 GND D15 D2 D4 RX2 TX2 D5 D18 D19 D21 RX0 TX0 D22 D23
VIN GND D13 D12 D14 D27 D26 D25 D33 D32 D35 D34 VN VP EN
ESP-WROOM-32
GND
+
SW
DT
CLK
Keyes

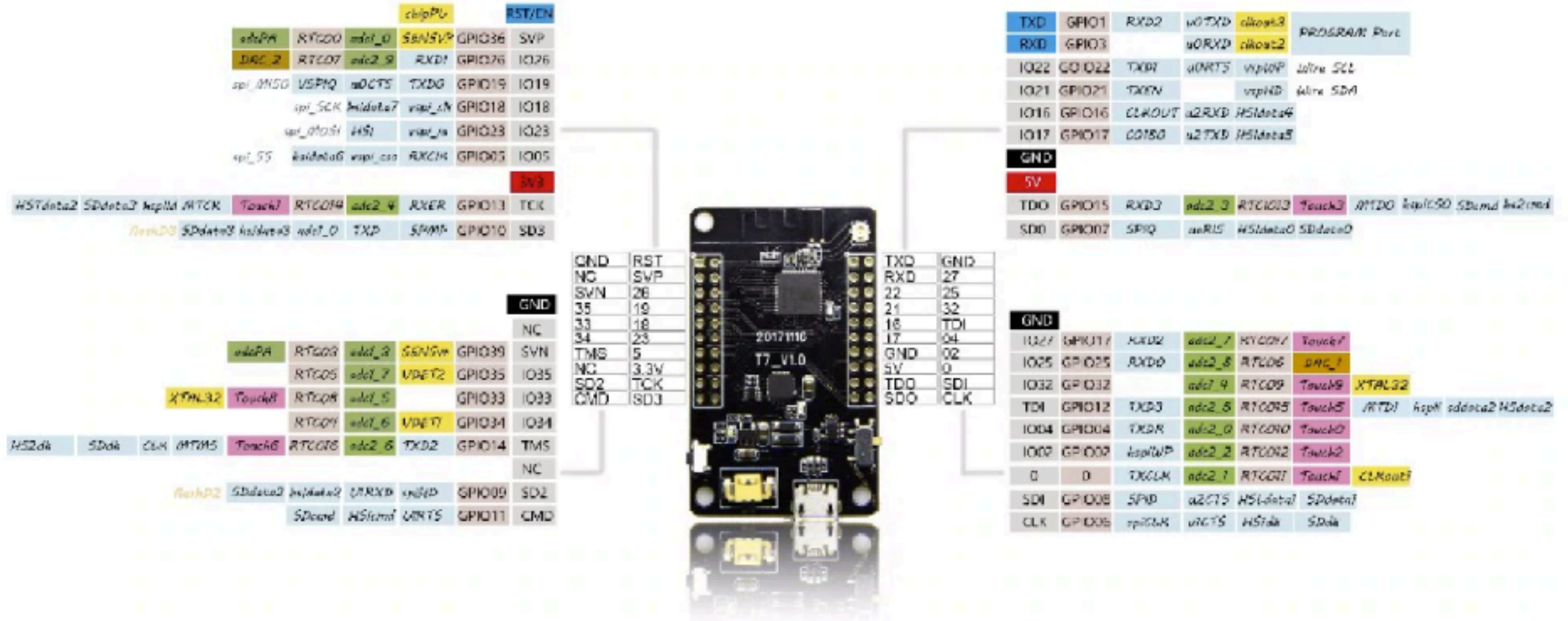
MoW circuit V 1.0 - TeZ / August 2019



ESP32 PIN	TTGO PIN	device pin
Vin	5V	step down converter +5V
Gnd	Gnd	GND line // step down converter GND
D25	D25	rotary encoder SW
D32	D32	rotary encoder CLK
D21	D21	rotary encoder DT
VP (GPIO36)	SVP (GPIO36)	TCST Photo Interruptor OUT
VN (GPIO39)	- - -	SWITCH BUTTON
TX2 (GPIO17)	SD2(GPIO9)	NEOPIXEL RING data pin
D19	D18	DRV8825 ENABLE pin
D22	D22	DRV8825 DIR pin
D23	D23	DRV8825 STEP pin



NOTE THAT 18 AND 19 PINS ON WEMOS LOLIN TTGO32 ARE INVERTED!! SO USE PIN #18



WiFi + Bluetooth Board

4MB Flash TTGO T7 v1.0

Power

ESP32 VCC range: 2.2V-3.6V
VBAT: direct to battery (and charger)
VUSB: direct to USB (5V)
VCC: Output of regulator 3.3V/600mA
Up to 250mA during RF transmissions

Wireless

Wifi: 802.11 b/g/n/e/i
WPA/WPA2/WPA2-Enterprise/SPS
Bluetooth: Bluetooth 4.2/BLE

ESP32

Dual-core Xtensa 32-bit LX6
Up to 240MHz
520kB internal SRAM
4MB external flash

Multiplexed I/Os allow up to

- 18 ADC channels
- 3 SPI interfaces
- 3 UART interfaces
- 2 I2C interfaces
- 2 I2S interfaces
- 16 LED PWM outputs
- 2 DACs
- 10 Capacitive Touch Inputs

ADC Preamp

GPIO pins 36,37,38, and 39 are able to be used as a low noise analog pre-amplifier

Other*

Hall Sensor
Temp sensor (-40C to 125C)
SD/SDIO/MMC Host Controller
CAN Bus

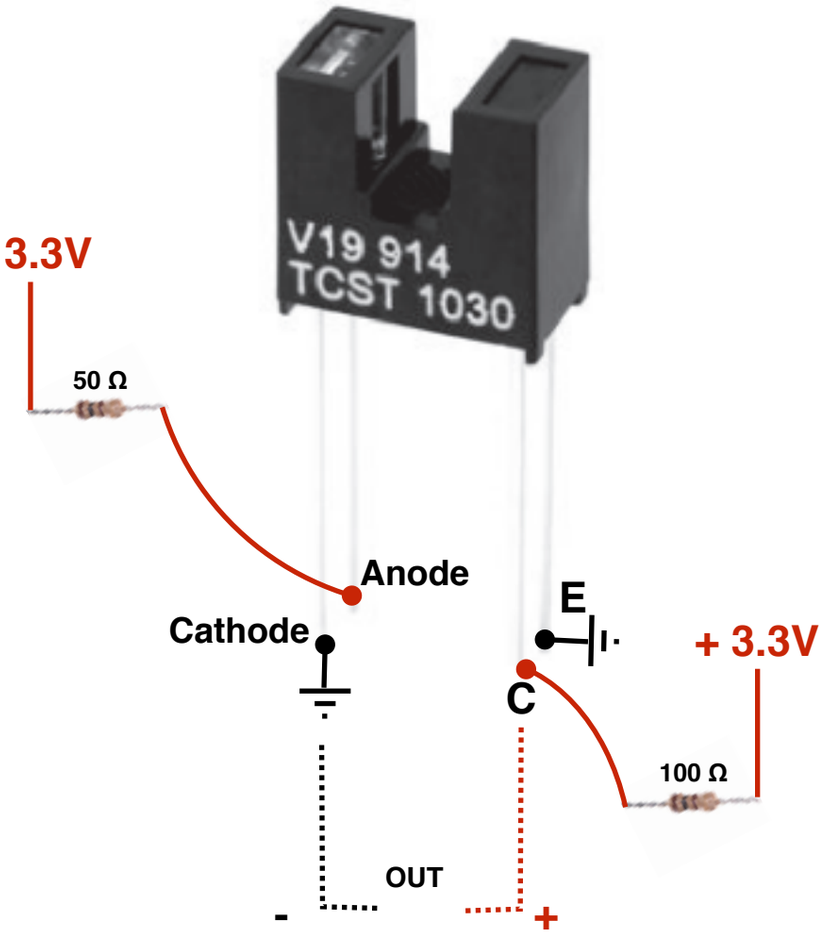
*Can announced, but may not be supported yet

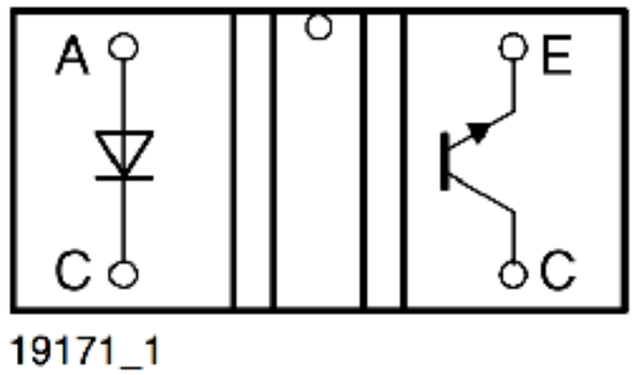
Name
Power
GND
Control
Arduino
GPIO
ADC
DAC
SPI
UART
Touch
Misc

*GPIO: Port Input Only
*ADC: Preamplifier ADC
GPIO 3.3V tolerant only

Voor meer product informatie, in GitHub:Https://github.com/LilyGO/TTGO-T7-Demo

TCST1030 PHOTO INTERRUPTOR





19171_1