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#dl5rbv 230811

from machine import Pin
import utime as time


led8 = Pin(1, Pin.OUT, value=0)
led7 = Pin(2, Pin.OUT, value=0)
led6 = Pin(4, Pin.OUT, value=0)
led5 = Pin(5, Pin.OUT, value=0)
led4 = Pin(7, Pin.OUT, value=0)
led3 = Pin(9, Pin.OUT, value=0)
led2 = Pin(11, Pin.OUT, value=0)
led1 = Pin(13, Pin.OUT, value=0)
rel1 = Pin(18, Pin.OUT, value=1)
rel2 = Pin(19, Pin.OUT, value=1)
rel3 = Pin(20, Pin.OUT, value=1)
rel4 = Pin(21, Pin.OUT, value=1)
rel5 = Pin(22, Pin.OUT, value=1)
rel6 = Pin(26, Pin.OUT, value=1)
rel7 = Pin(27, Pin.OUT, value=1)
rel8 = Pin(28, Pin.OUT, value=1)

laden = Pin(17, Pin.IN, Pin.PULL_UP)

led_pin = [led1, led2, led3, led4, led5, led6, led7, led8]
rel_pin = [rel1, rel2, rel3, rel4, rel5, rel6, rel7, rel8]

#Testlauf
for i in range(len(led_pin)):
    print(i, led_pin[i].value(), rel_pin[i].value(), laden)

    led_pin[i].value(1)
    rel_pin[i].value(0)
    time.sleep(0.5)
    led_pin[i].off()
    rel_pin[i].on()
    time.sleep(0.5)

while True:
    for i in range(len(led_pin)):
        #Relais einschalten und LED aus
        led_pin[i].value(0)
        rel_pin[i].value(0)
        #warten
        time.sleep(3)

        print("Akku", i+1, "Relais-Wert",rel_pin[i].value(),"Abfrage Akku",
laden.value())
        # Testen, ob Akku angeschlossen ist
        if laden.value() == 0:
            print("Akku", i+1 ,"Timer start")
            #Timer starten
            start = time.ticks_ms()
            laufzeit = 0

            #Schleife starten für toggle
            while laufzeit < 3600000 and laden.value() == 0:
                led_pin[i].value(1)
                time.sleep(1)
                stop = time.ticks_ms()
                laufzeit =time.ticks_diff(stop, start)
                print("Akku", i+1,"Laufzeit", laufzeit/1000, "laden",
laden.value())
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                led_pin[i].value(0)
                time.sleep(1)
            # wenn Ladezeit unter 5 min LED einschalten
            if laufzeit < 300000:
                led_pin[i].value(1)

        #Relais nach test bzw. laden ausschalten und 1s warten, bevor nächstes
Relais engeschaltet wird
        rel_pin[i].value(1)
        time.sleep(1)
```