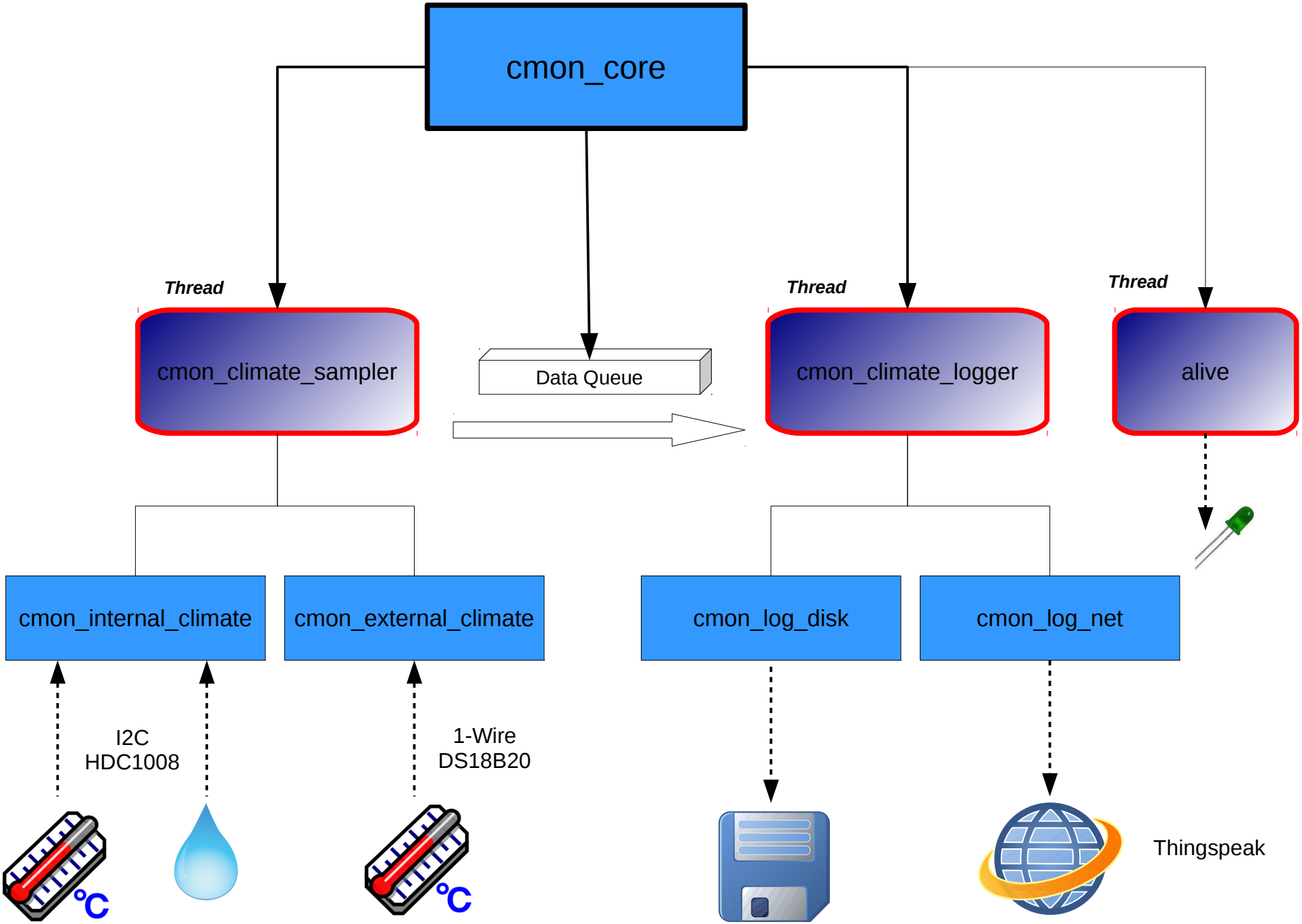
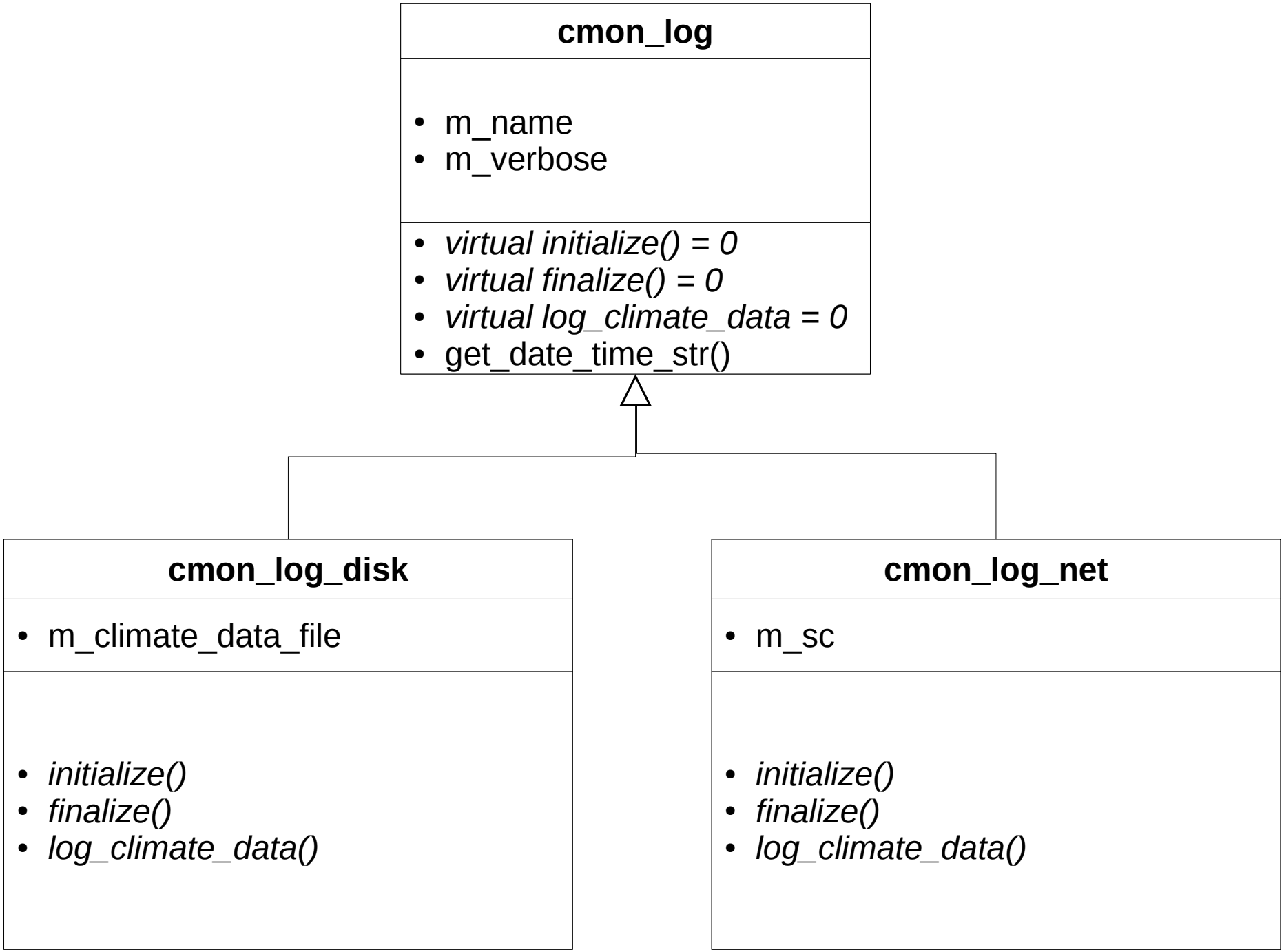

cmon_core
Thread
cmon_climate_sampler
Data Queue
Thread
cmon_climate_logger
Thread
alive
cmon_internal_climate
cmon_external_climate
cmon_log_disk
cmon_log_net
I2C
HDC1008
1-Wire
DS18B20
°C
°C
Thingspeak


cmon_log
• m_name
• m_verbose
• virtual initialize() = 0
• virtual finalize() = 0
• virtual log_climate_data = 0
• get_date_time_str()
cmon_log_disk
• m_climate_data_file
• initialize()
• finalize()
• log_climate_data()
cmon_log_net
• m_sc
• initialize()
• finalize()
• log_climate_data()

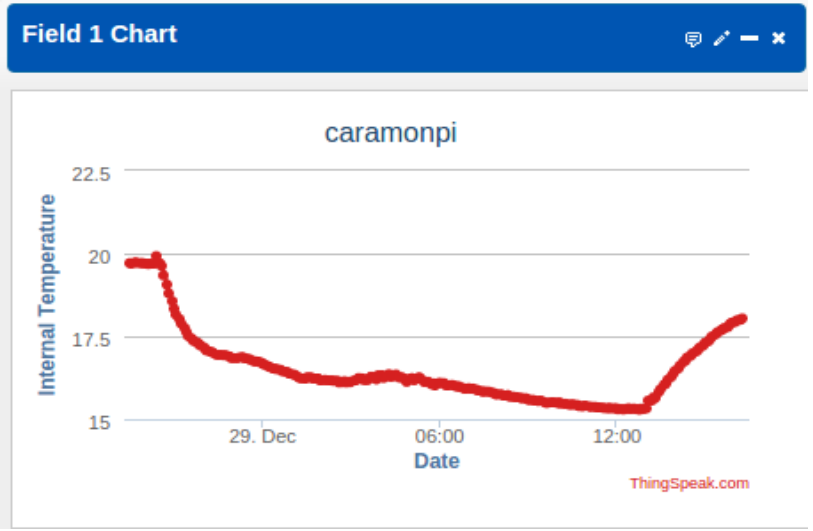
Thingspeak

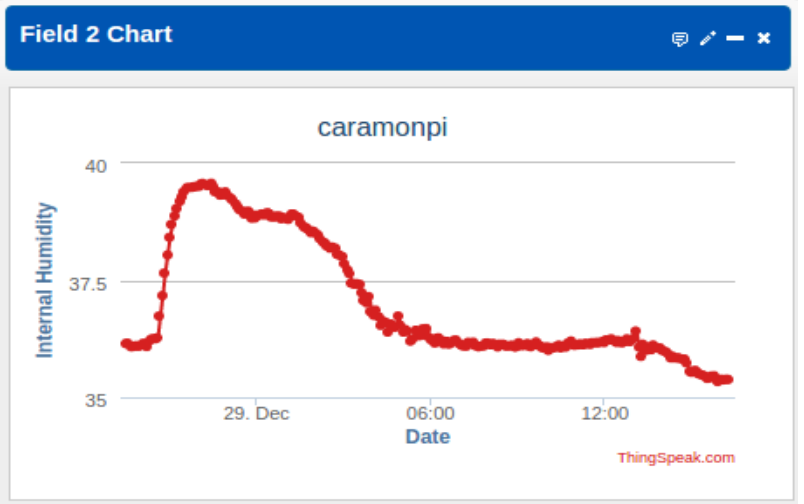
Channel info:

- Channel name: caramonpi
- Channel id: 75139
- Address: https://thingspeak.com/channels/75139/

- Write API Key: xxxxxxxx
- Read API Key: yyyyyyyy

- Field 1: Internal Temperature
- Field 2: Internal Humidity
- Field 3: External Temperature

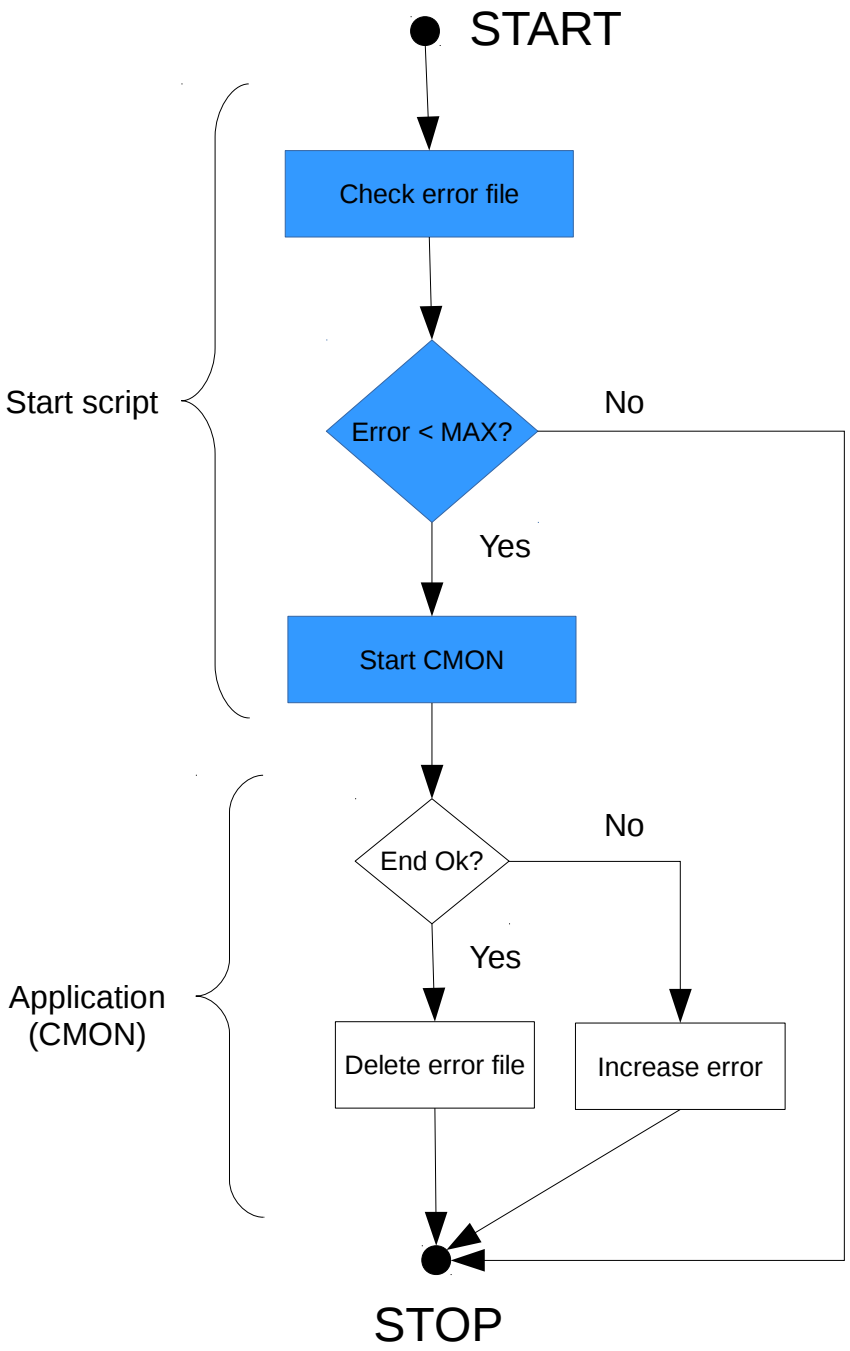


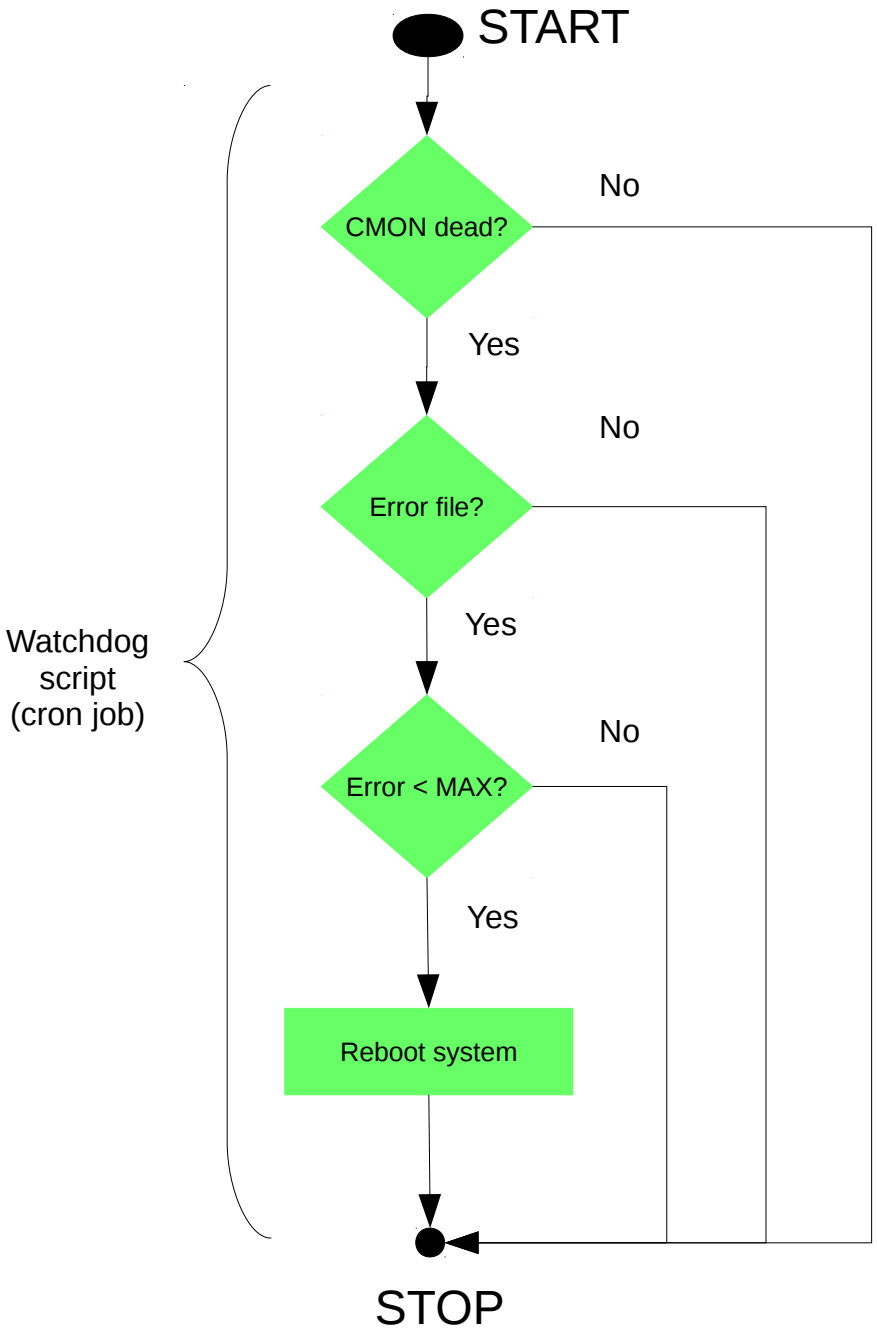


Update channel:

```
curl --fail --silent --data \
     "key=<WRITEKEY>&field1=<VAL1>&field2=<VAL2>&field3=<VAL3>" https://api.thingspeak.com/update
```

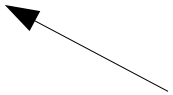
Check return code: `echo $?`


START
Check error file
Error < MAX?
No
Yes
Start CMON
End Ok?
No
Yes
Delete error file
Increase error
STOP
Start script
Application
(CMON)


START
CMON dead?
No
Yes
Error file?
No
Yes
Error < MAX?
No
Yes
Reboot system
STOP
Watchdog
script
(cron job)

List active cron jobs

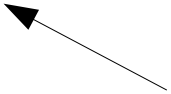
```
crontab -l

@reboot /usr/bin/weavedstart.sh
*/5 * * * * /caramon/cmon_watchdog.sh
```



Script executed every 5 minutes

Disable cron job

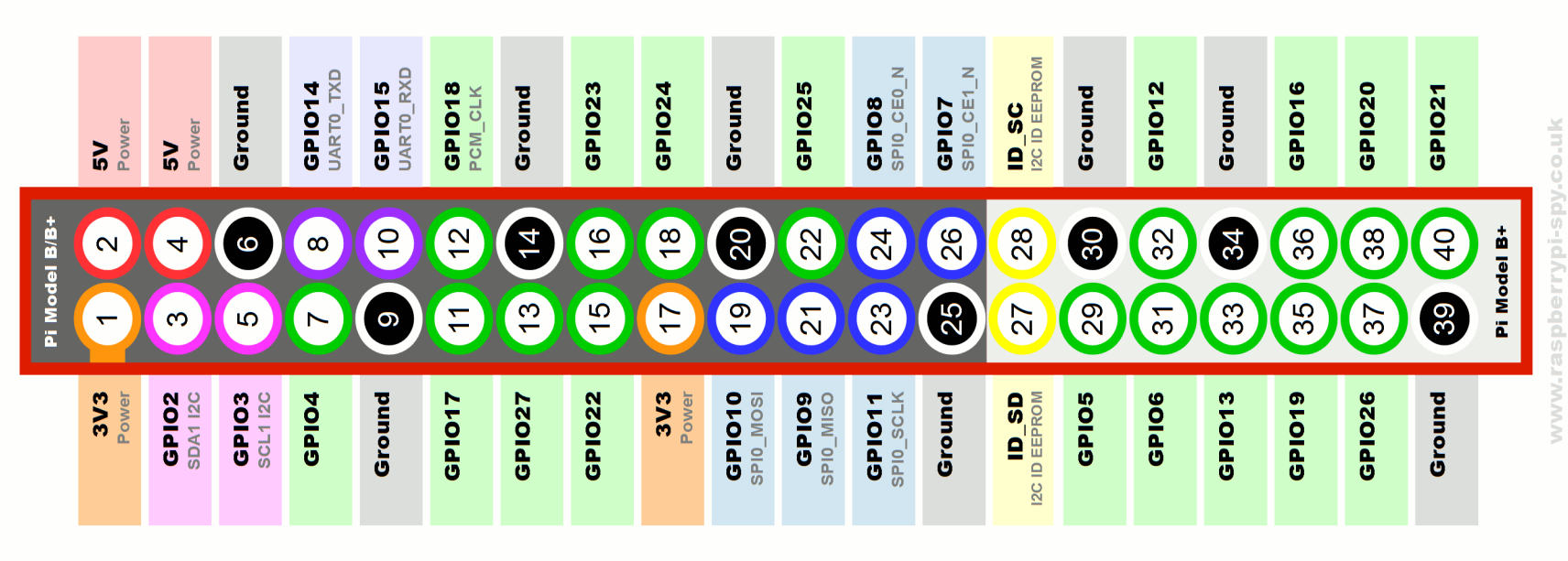
```
crontab -e

#*/5 * * * * /caramon/cmon_watchdog.sh
```



Commented out, script disabled

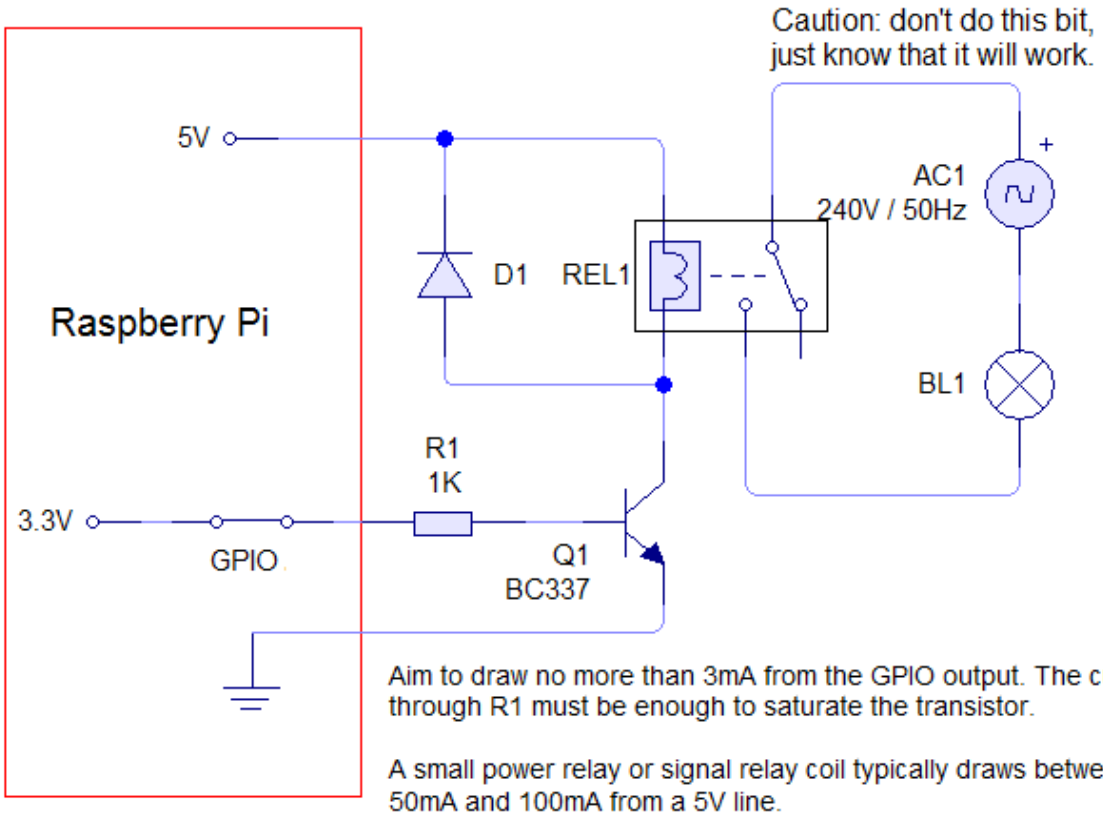
```
/etc/init.d/cron restart
/etc/init.d/cron status
```

Raspberry Pi2 , Connector P1



CMON, GPIO

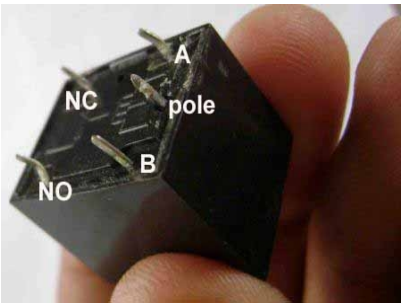
Pin	GPIO	Direction	Description
7	4	-	1-Wire
11	17	Out	LED - Alive
12	18	Out	LED - Sysfail
13	27		
15	22	In	Start disabled
16	23		
18	24		
22	25		

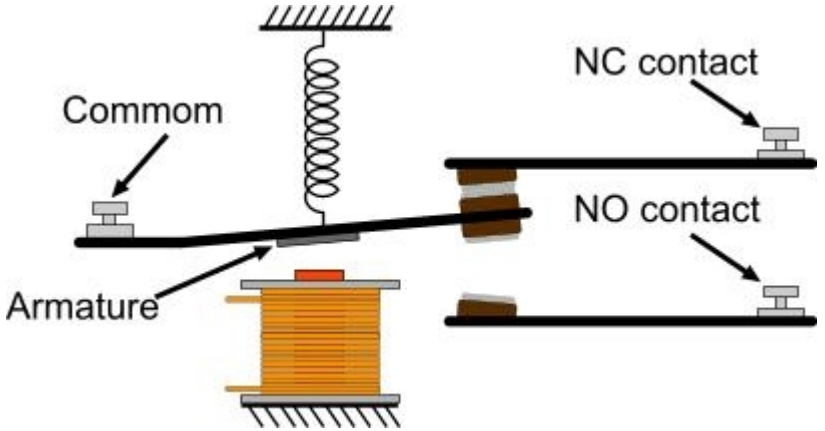


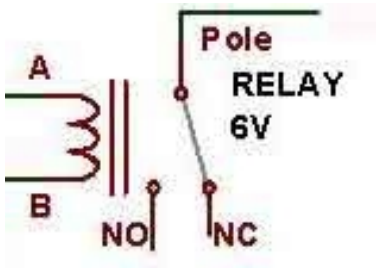
Aim to draw no more than 3mA from the GPIO output. The current through R1 must be enough to saturate the transistor.

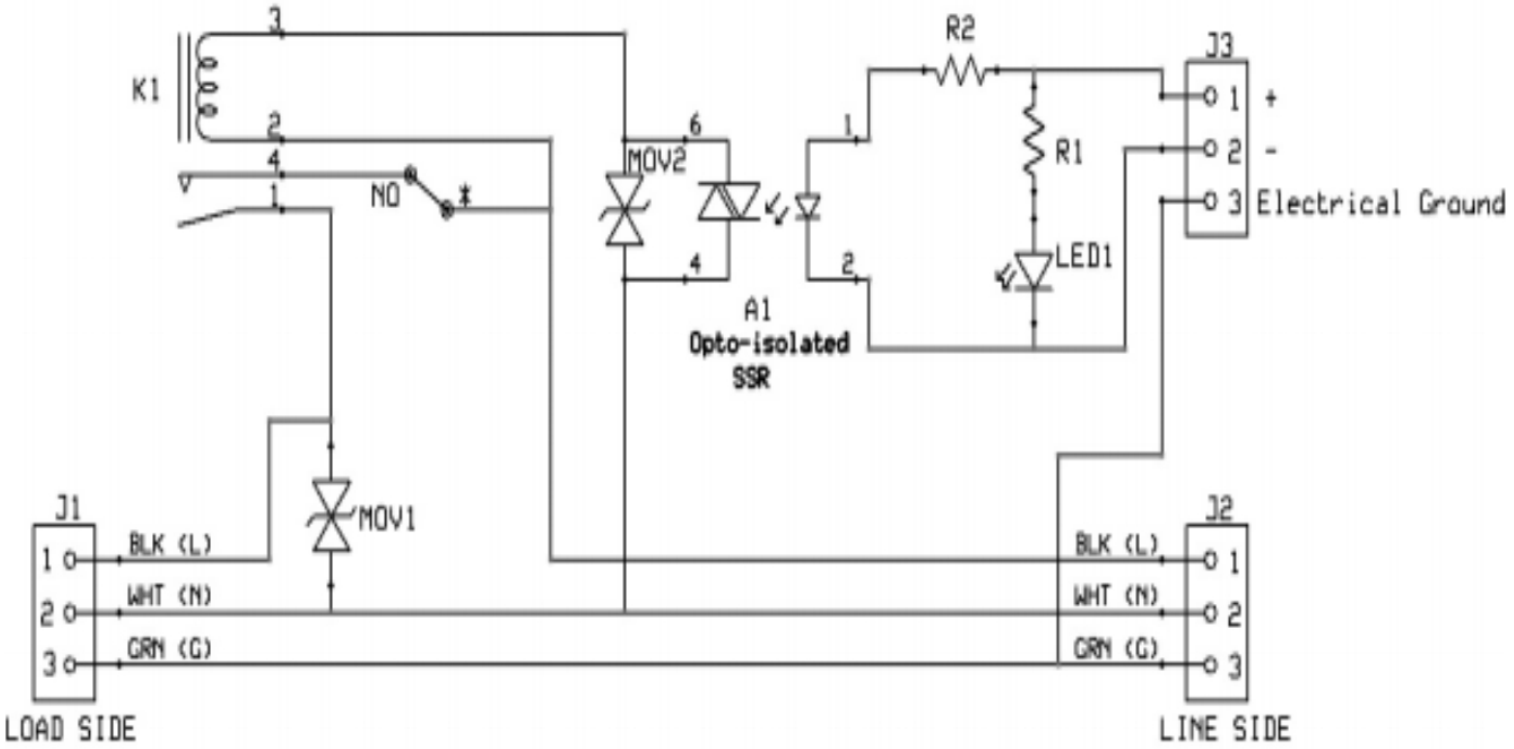
A small power relay or signal relay coil typically draws between 50mA and 100mA from a 5V line.

NC = Normal Closed
NO = Normal Open



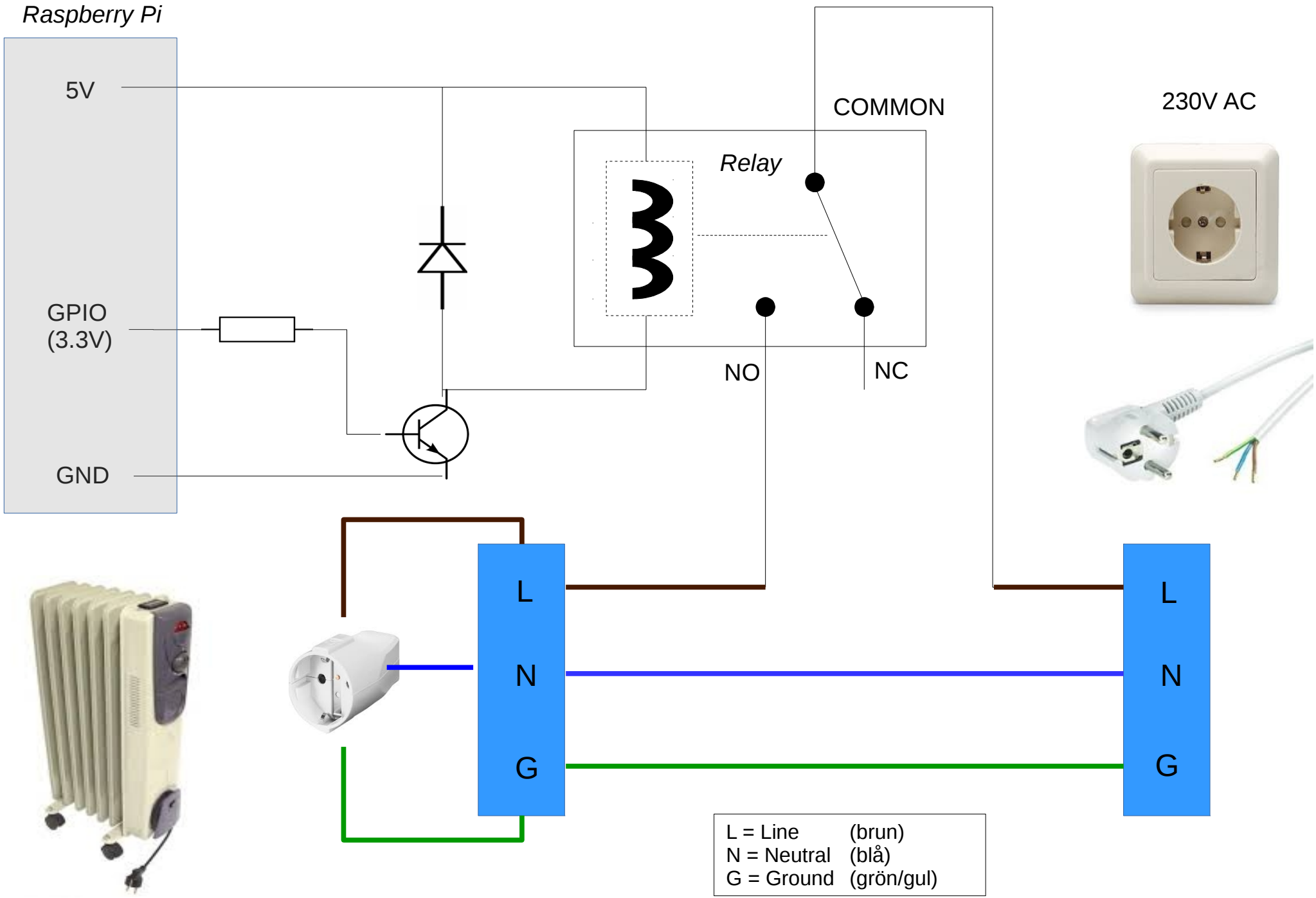






http://www.powerswitchtail.com/

PowerSwitch Tail Kit
for 200-240vac mains
PN PSTK-240


Raspberry Pi
5V
GPIO
(3.3V)
GND
COMMON
Relay
NO
NC
230V AC
L
N
G
L
N
G
L = Line (brun)
N = Neutral (blå)
G = Ground (grön/gul)