

#### 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: caramonpiChannel id: 75139

Address: https://thingspeak.com/channels/75139/

Write API Key: xxxxxxxxRead API Key: yyyyyyyy

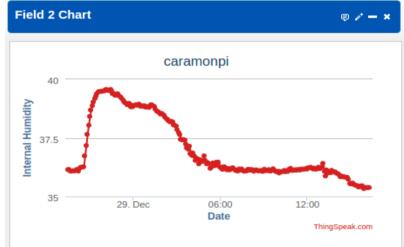
- Field 1: Internal Temperature
- Field 2: Internal Humidity
- Field 3: External Temperature

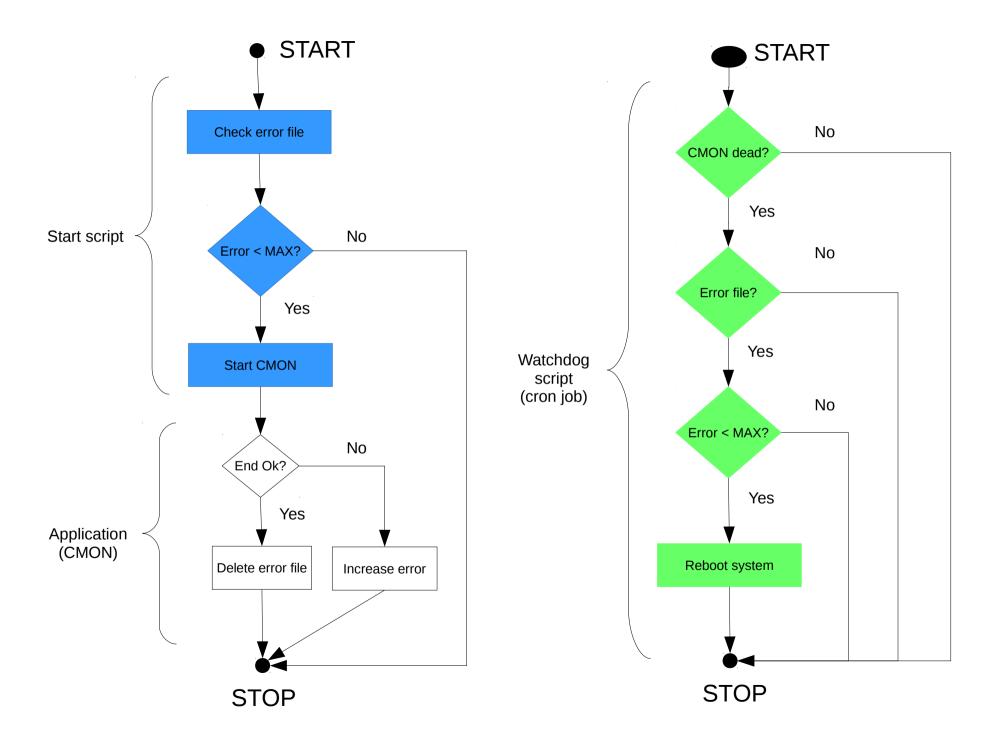
## **Update channel:**

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

Check return code: echo \$?







#### **List active cron jobs**

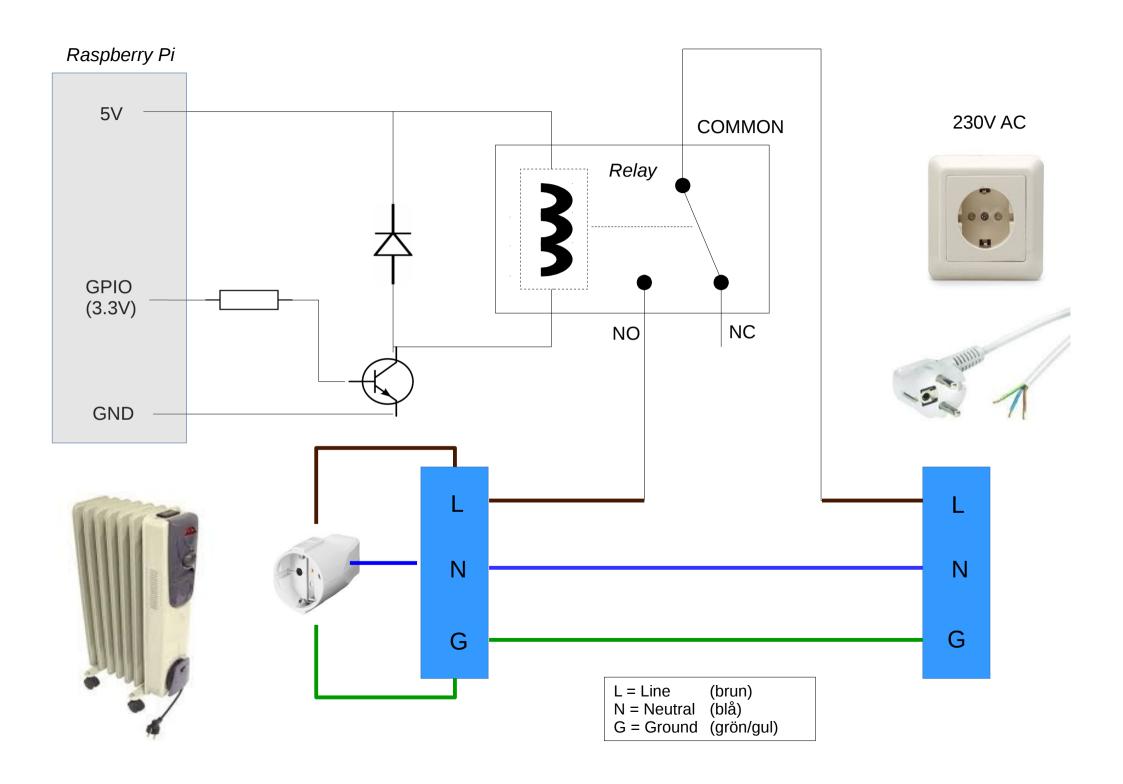
#### **Disable cron job**

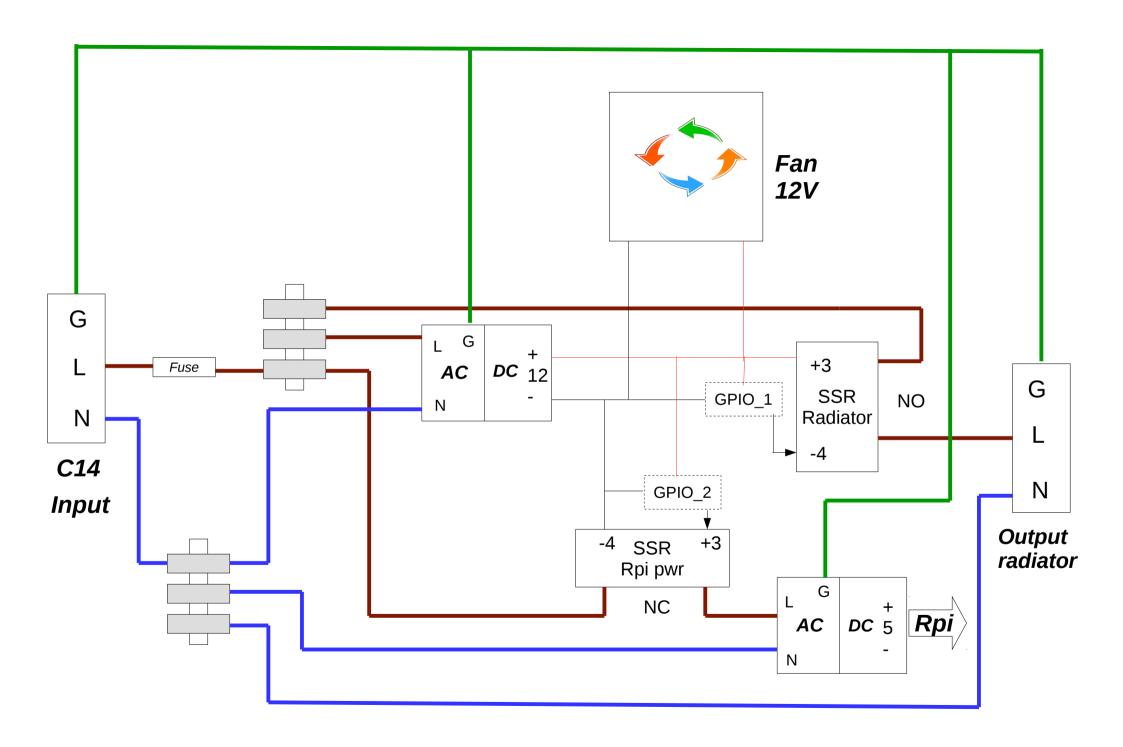
## Raspberry Pi2 , Connector P1

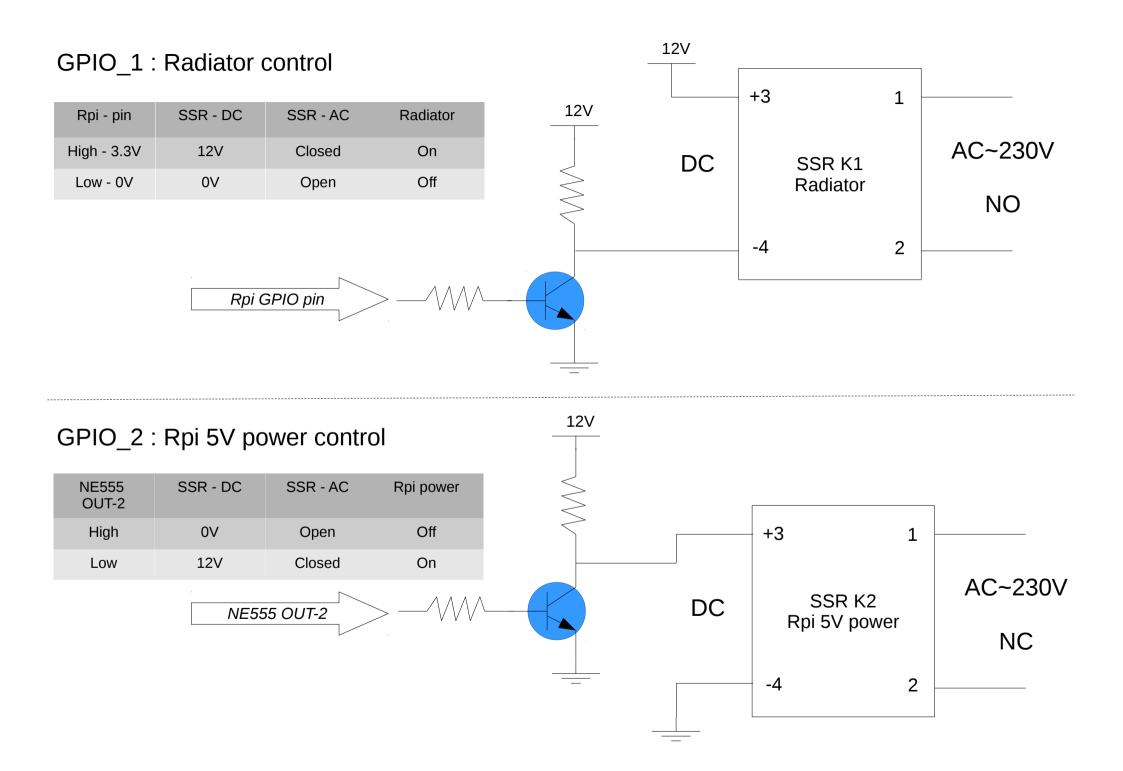
	<b>5V</b> Power	<b>5V</b> Power	Ground	GPIO14 UARTO_TXD	GPIO15 UARTO_RXD	GPIO18 PCM_CLK	Ground	GP1023	GP1024	Ground	GP1025	GPIO8 SPIO_CEO_N	GPIO7 SPIO_CE1_N	ID_SC I2C ID EEPROM	Ground	GP1012	Ground	GP1016	GPI020	GP1021		/.co.uk
Pi Model B/B+	1 2	8	(2)	7 8	<b>6 10</b>	11 12	13 41 41	15 16	17 18	(a) (b)	21 22	23 24	<b>S</b>	27 28	<b>8</b> 9 <b>8</b> 0	31 32	33 34	35 36	37 38	<b>39</b> 40	Pi Model B+	aspberrypi-sp <sub>y</sub>
	<b>3V3</b> Power	<b>GPIO2</b> SDA112C	<b>GPIO3</b> SCL112C	GP104	Ground	GPI017	GP1027	GPI022	3V3 Power	GPIO10 SPI0_MOSI	GPIO9 SPI0_MISO	GPIO11 SPI0_SCLK	Ground	ID_SD I2C ID EEPROM	GPIO5	GP106	GPI013	GPI019	GP1026	Ground		WWW.F

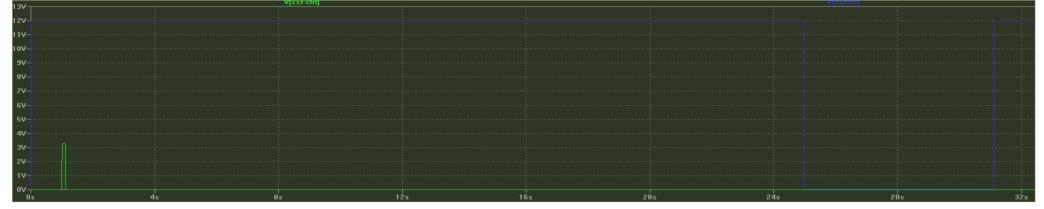
CMON, GPIO

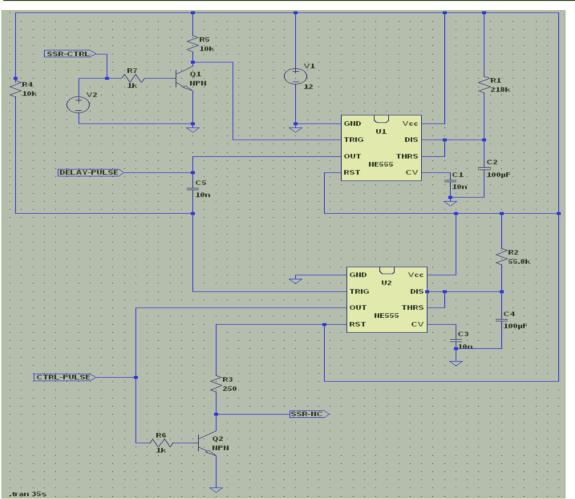
Pin (P1)	GPIO (BCM)	Direction	Description
03	2	-	I2C - SDA
05	3	-	I2C - SCL
08	14	-	RS232 - Tx
10	15	-	RS232 - Rx
11	17	OUT	LED (green) - Alive
12	18	OUT	LED (red) - Sysfail
13	27	IN	Normal (0), Inhibit (1)
15	22	OUT	Radiator control, SSR K1
16	23	OUT	WDI - Watchdog keep alive
18	24	OUT	WDE - Watchdog enable
22	25	IN	1-Wire











555 Timer IC Mono-stable mode

 $T = 1.1 \times R \times C$ 

Delay pulse (OUT-1):  $T = 1.1 \times 218K \times 100u = 23.98s$ 

Control pulse (OUT-2):

 $T = 1.1 \times 55.8K \times 100u = 6.138s$ 

