

# HOPE Sessions

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## **9am to 10am**

- **Introduction and Context:** Technology, Art, Media

## **10am to 1pm**

- **Linux and RaspberryPi**
  - Command Line
  - Installing and Running programs
- **Python**
  - LEDs
  - Camera
  - Video

All media work us over completely. They are so pervasive in their personal, political, economic, aesthetic, psychological, moral, ethical, and social consequences that they leave no part of us untouched, unaffected, unaltered. The medium is the message. Any understanding of social and cultural change is impossible without a knowledge of the way media work as environments.

**All  
media  
are  
extensions  
of  
some  
human  
faculty—  
psychic  
or  
physical.**

**The Medium is The Message (1967)**  
**Marshall McLuhan**

The wheel ...is an extension of the foot

the book  
is an extension of the eye...

clothing, an extension of the skin.

electric circuitry,  
an extension of  
the  
central  
nervous  
system



The Medium is The Massage (1967)  
Marshall McLuhan



# 3D Printing... is an extension of (our desire for) **Apportion**

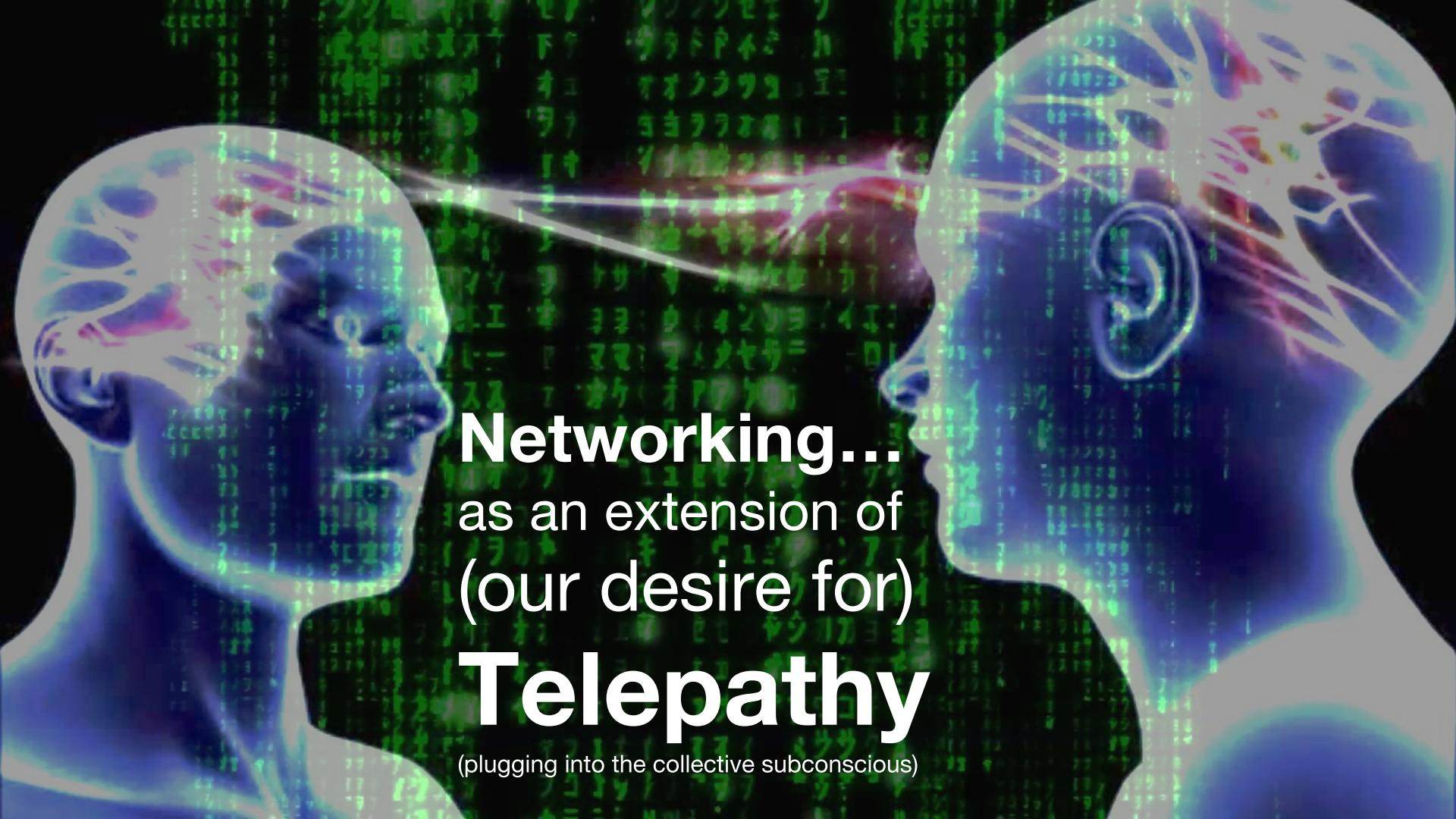
(materialization/teleportation of objects)

## **9am to 10am**

- **Introduction and Context:** Technology, Art, Media

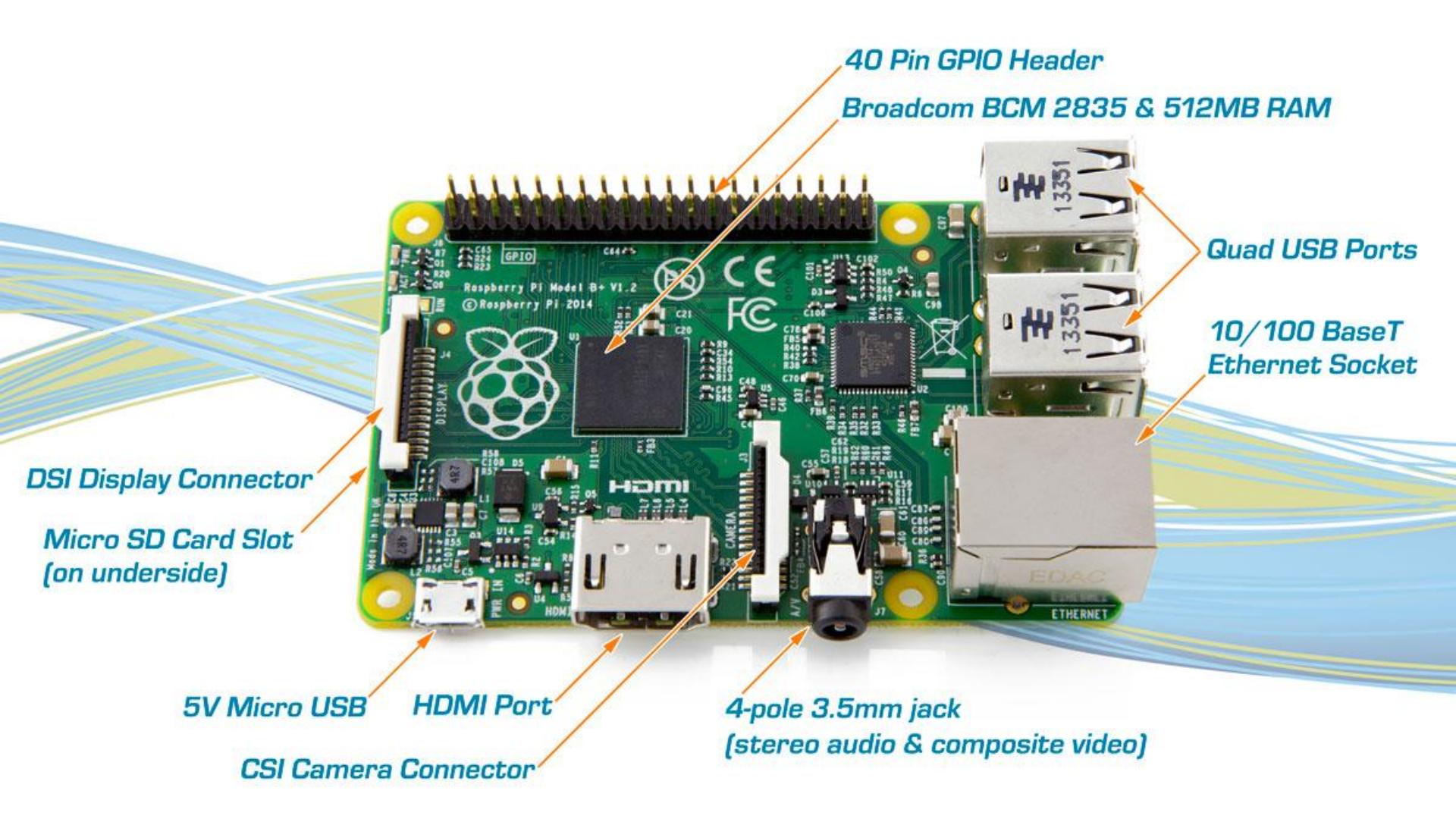
## **10am to 1pm**

- **~~Linux and Raspberry Pi~~**
  - ~~Command Line~~
  - ~~Installing and Running programs~~
- **Telepathy**
- **Python**
  - **LEDs Telekinesis**
  - **Camera Clairvoyance**
  - **Video Divination**

A graphic featuring two stylized human profiles facing each other. The profile on the left is a white silhouette with a glowing blue and purple brain interior. The profile on the right is a white silhouette with a glowing pink and purple brain interior. They are positioned in front of a dark green background that is filled with a grid of glowing green and blue binary code and Japanese characters.

# Networking... as an extension of (our desire for) **Telepathy**

(plugging into the collective subconscious)



A close-up photograph of a shiny, metallic spoon. The spoon is angled upwards and to the right. Its reflective surface shows a distorted reflection of a person's face, which appears to be a woman with blonde hair. The background is a plain, light color.

# **Physical Computing as an extension of (our desire for) Telekinesis**

(controlling objects at a distance)



Motion	Control
Looks	Sensing
Sound	Operators
Pen	Variables

```

move 10 steps
turn ↘ 15 degrees
turn ↙ 15 degrees
point in direction 90°
point towards
go to x: -43 y: -20
go to
glide 1 secs to x: -43 y: -20
change x by 10
set x to 0
change y by 10
set y to 0
if on edge, bounce
  
```

x position  
y position  
direction

**yellow** costume

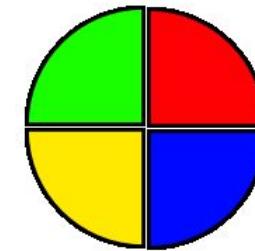
**Scripts**   **Costumes**   **Sounds**

```

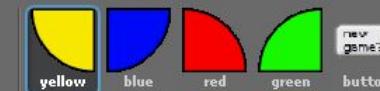
when I receive [play v]
switch to costume [unlit v]
set [lives v] to 3
set [score v] to 0
set [length v] to 4
set [time v] to 0.75
set [human_time v] to 0.5
forever
  delete [all v] of [CPU_tones v]
  set [human_player v] to false
repeat [length v]
  set [tone v] to pick random [1 to 4]
  add [tone v] to [CPU_tones v]
  broadcast [tone v] and wait
  delete [all v] of [player_tones v]
  set [human_player v] to true
  wait until [length of [player_tones v]] = [length of [CPU_tones v]]
  set [human_player v] to false
  if [CPU_tones v] = [player_tones v]
    change [score v] by 1
    change [length v] by 1
    set [time v] to [time v] * 0.9
  else
    say [you made a mistake for 1 secs]
    change [lives v] by -1
    if [lives v] = 0
      broadcast [new_game v]
  end
end
when yellow clicked
if [human_player v] = [true]
  switch to costume [lit v]
  play note [60 v] for [human_time v] beats
  add 1 to [player_tones v]
  switch to costume [unlit v]
when I receive [1 v]
switch to costume [lit v]
play note [60 v] for [time v] beats
switch to costume [unlit v]
when green flag clicked
switch to costume [unlit v]
  
```

## simple simon

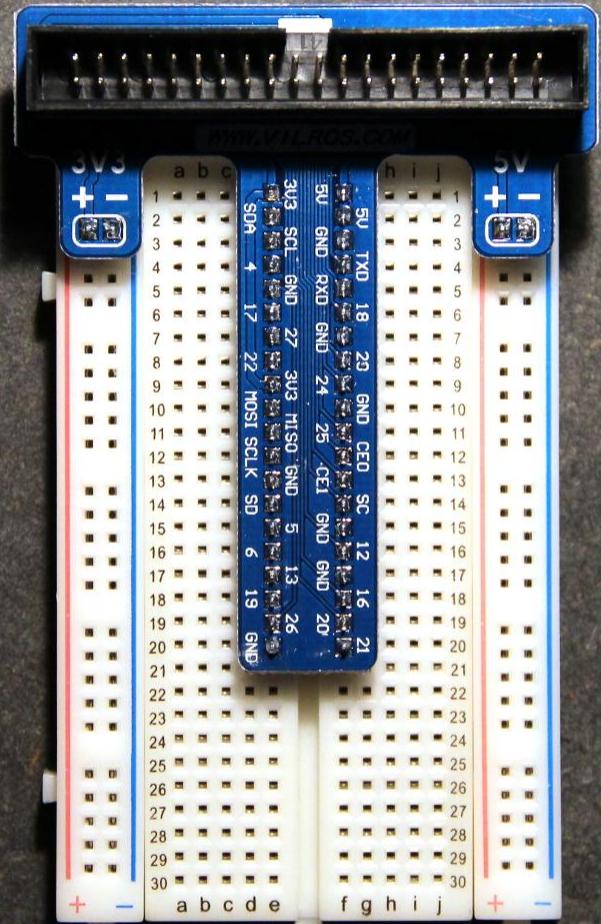
score 1  
lives 3

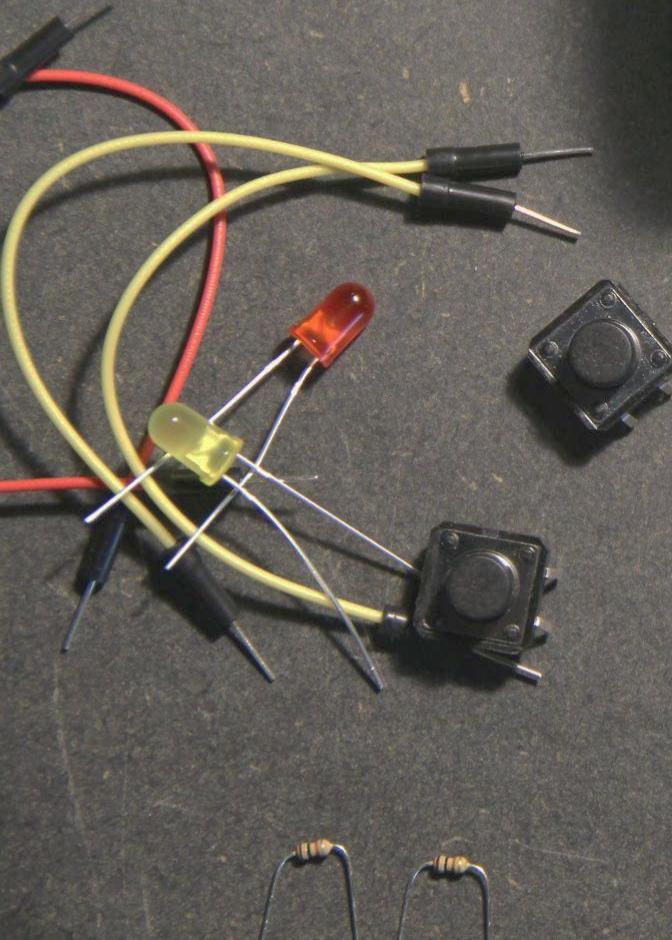
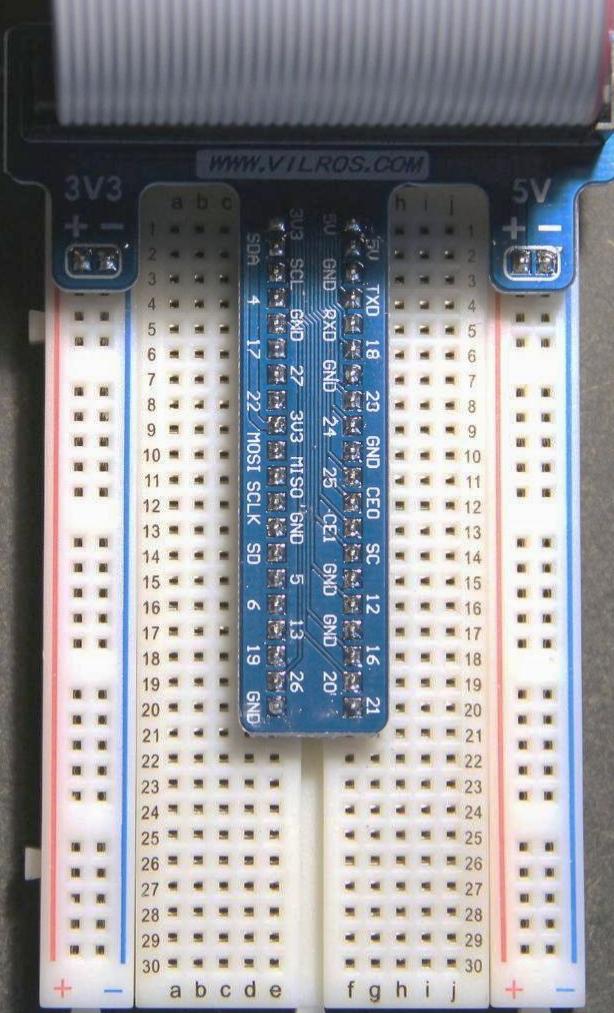


## New sprite:

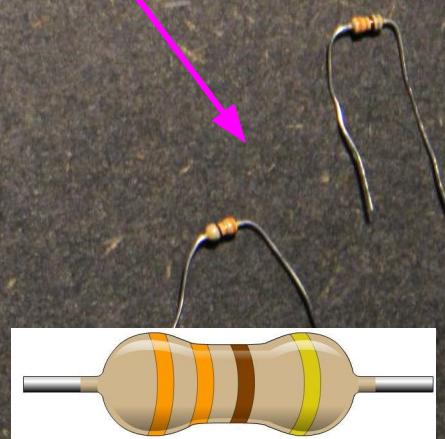
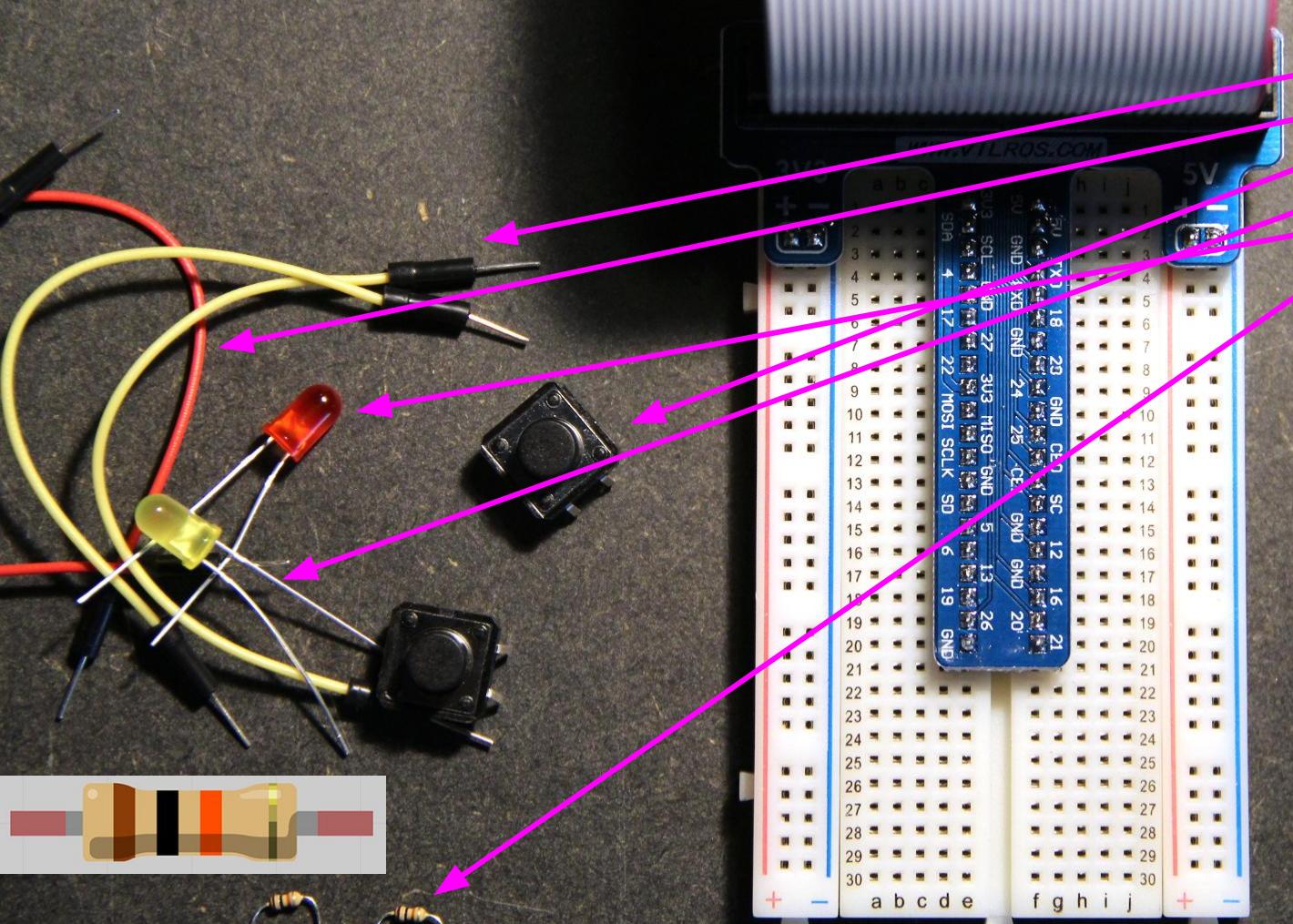


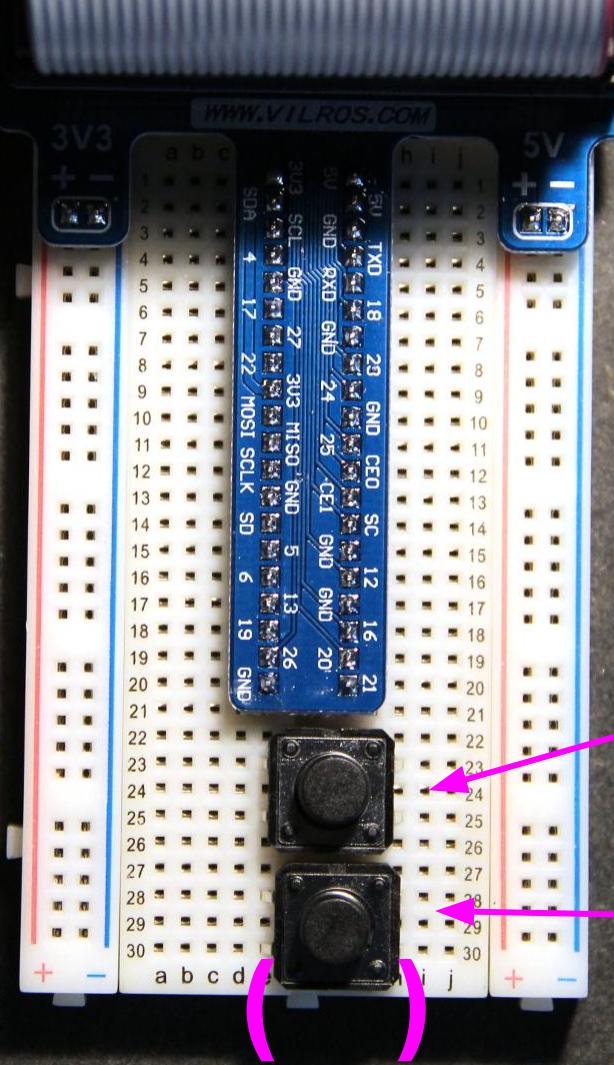
## Stage





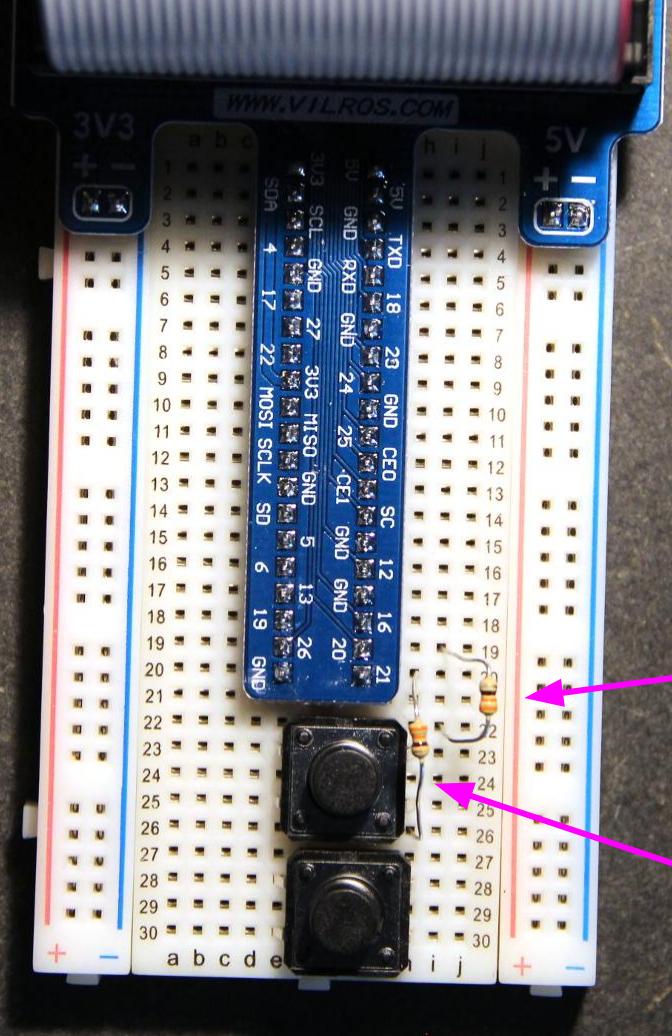
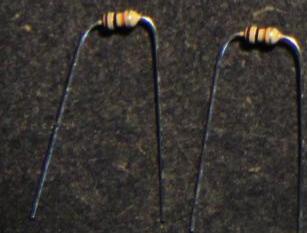
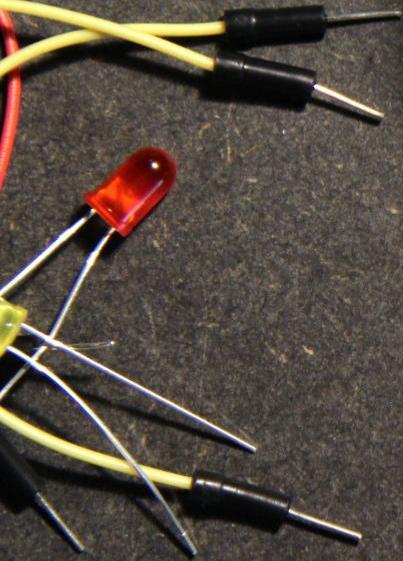
2x yellow cables  
2x red cables  
2x buttons  
1x yellow LED  
1x red LED  
2x 10-kohm resistors  
2x 330-ohm resistors





23  
25

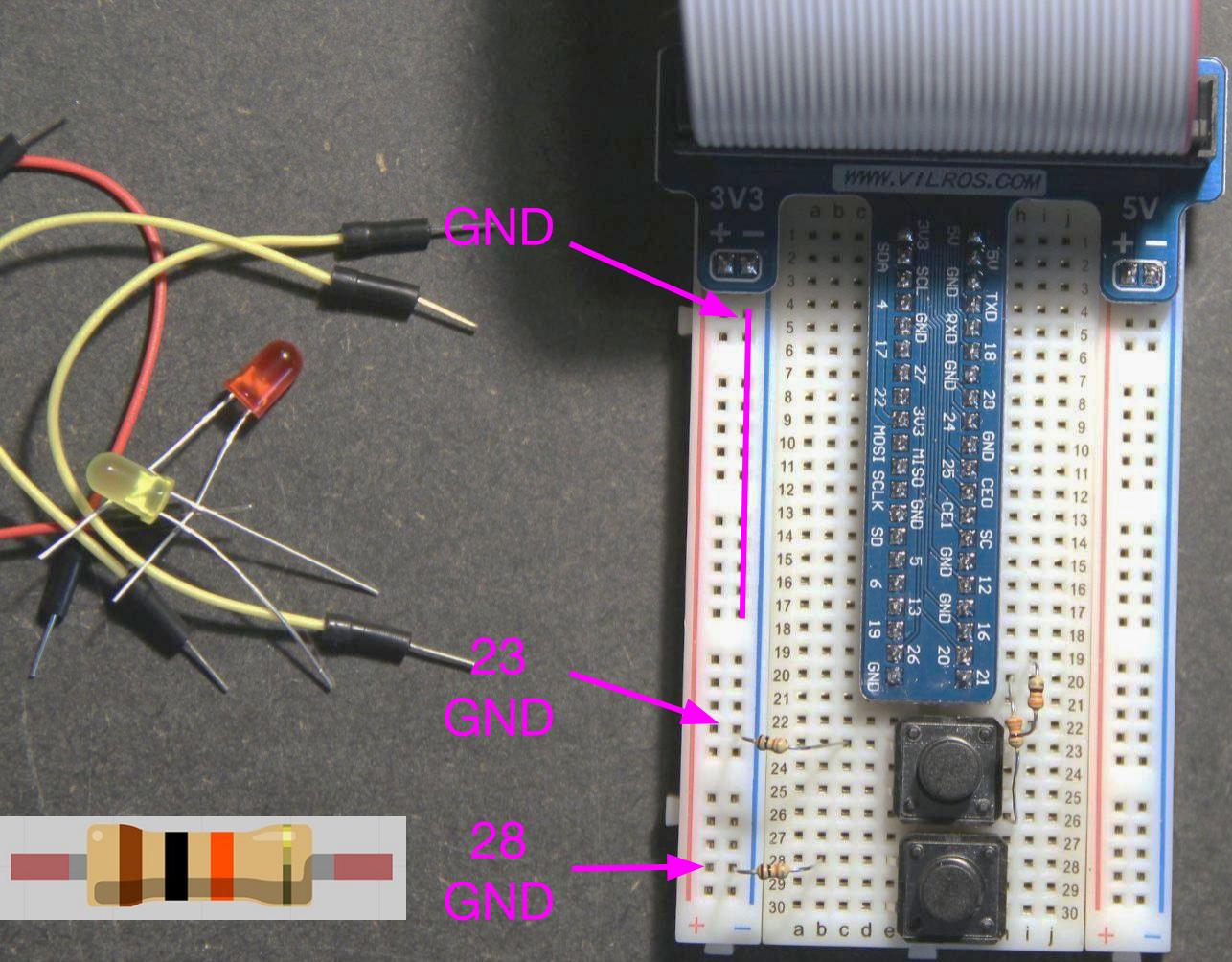
28  
30

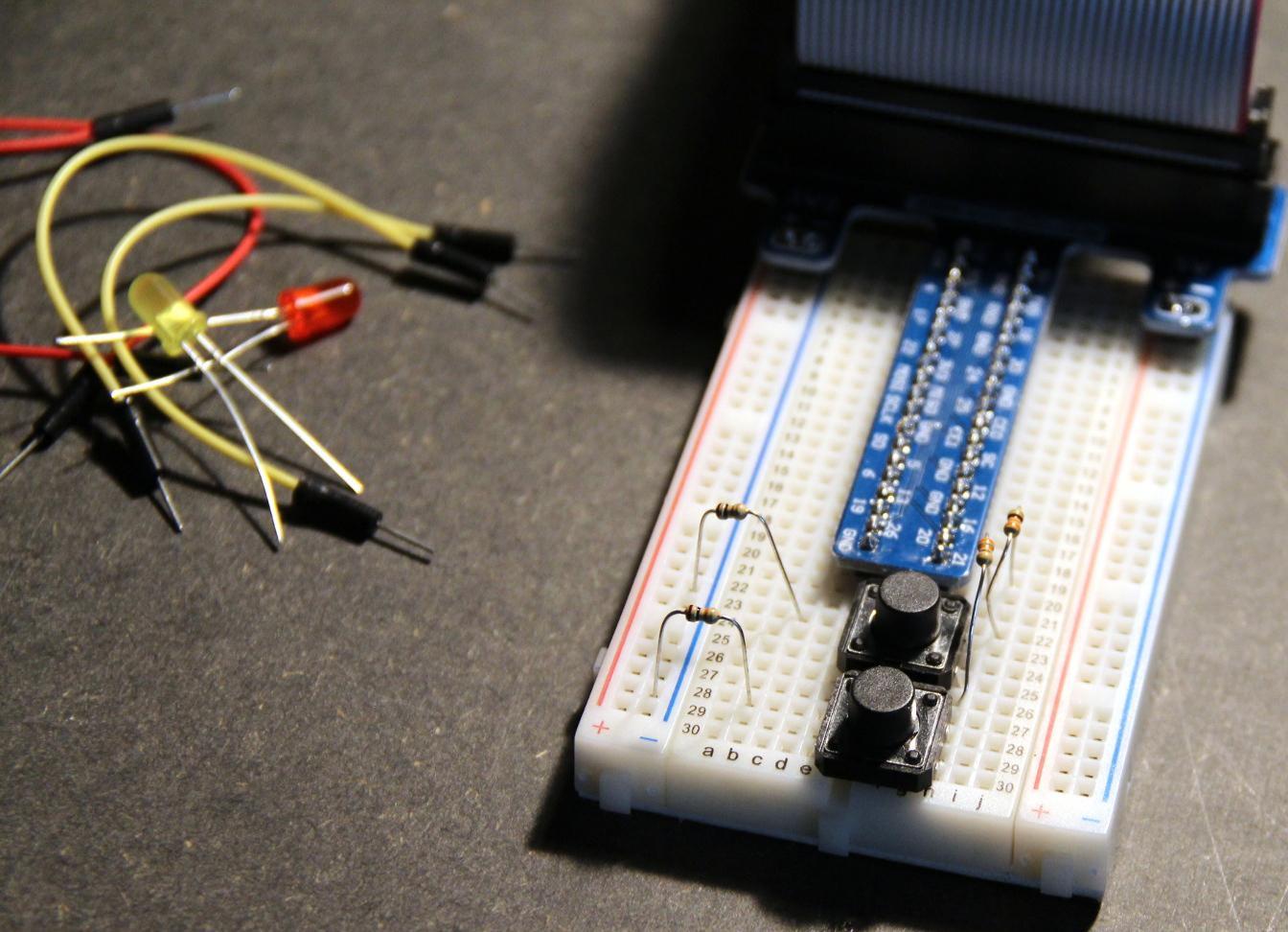


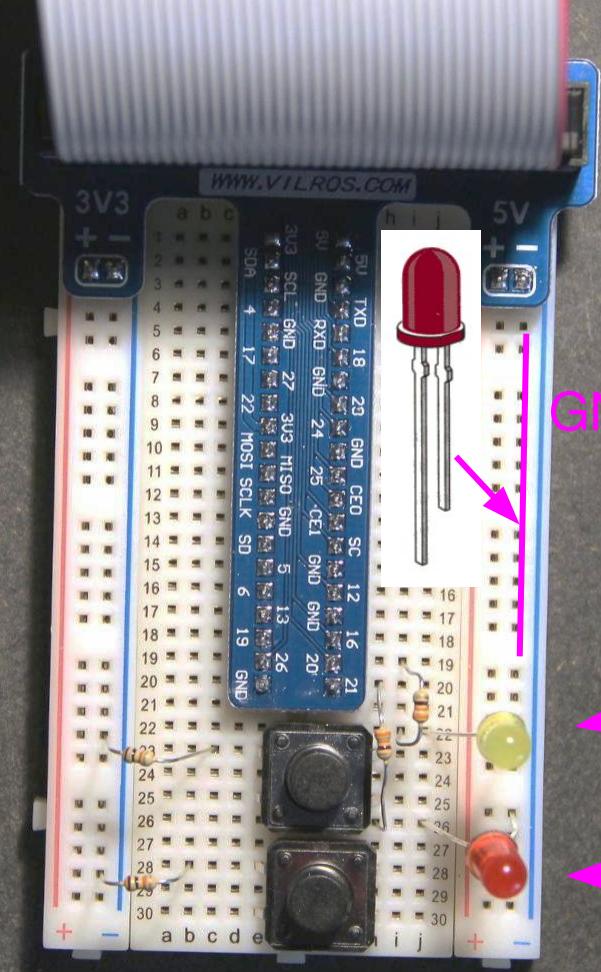
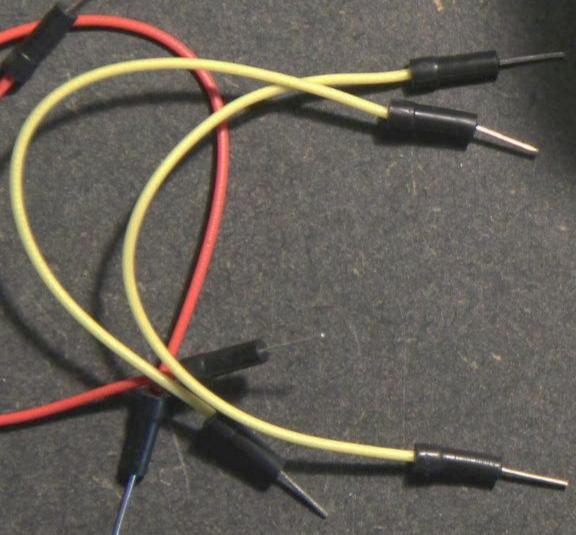
19  
22

20  
26





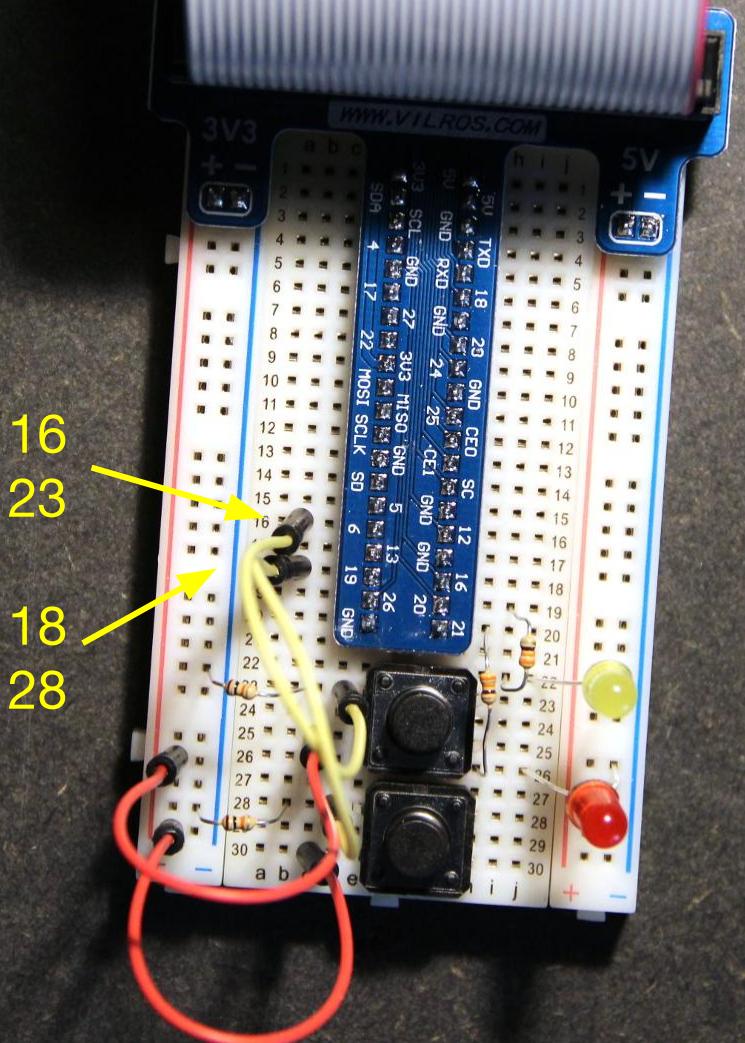


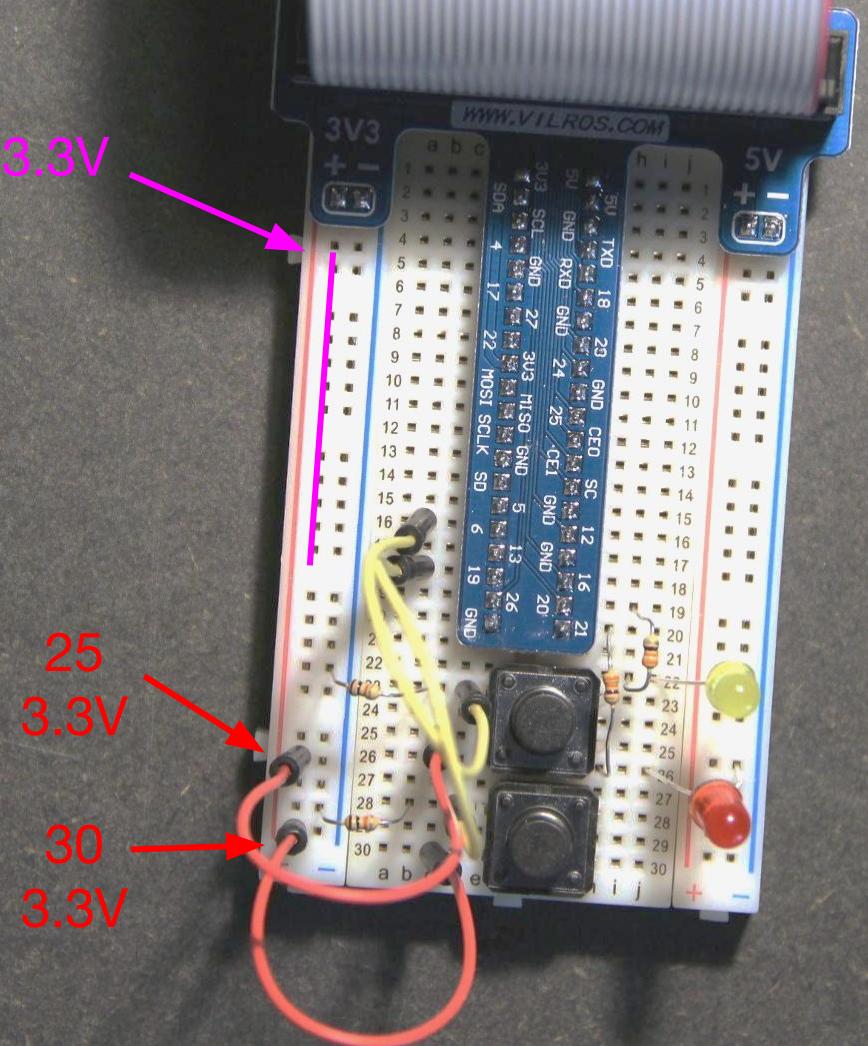


GND

22  
GND

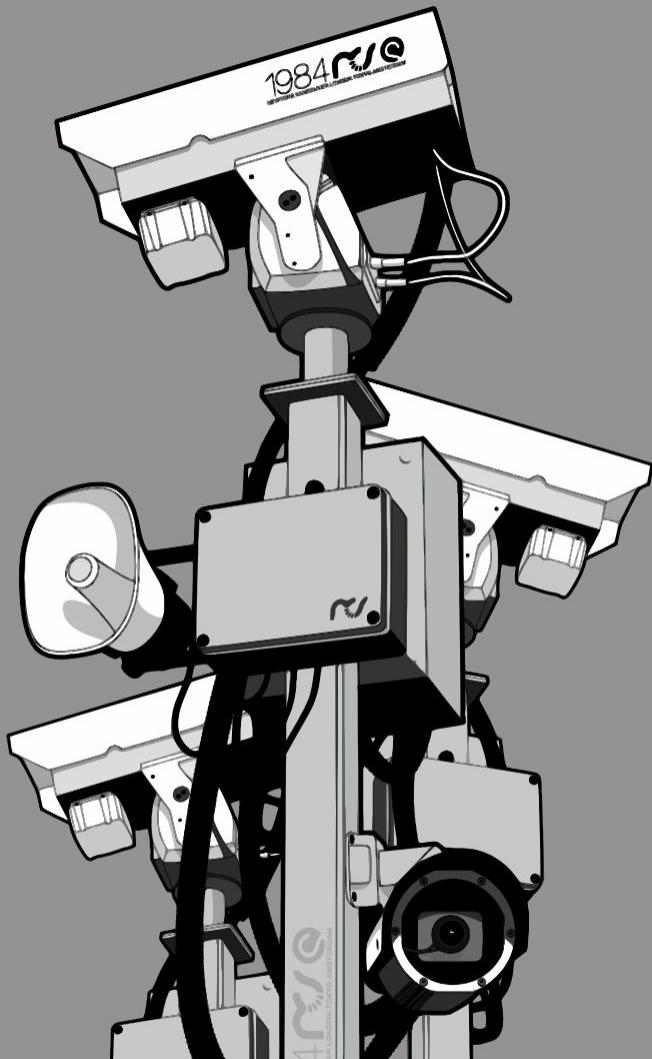
26  
GND

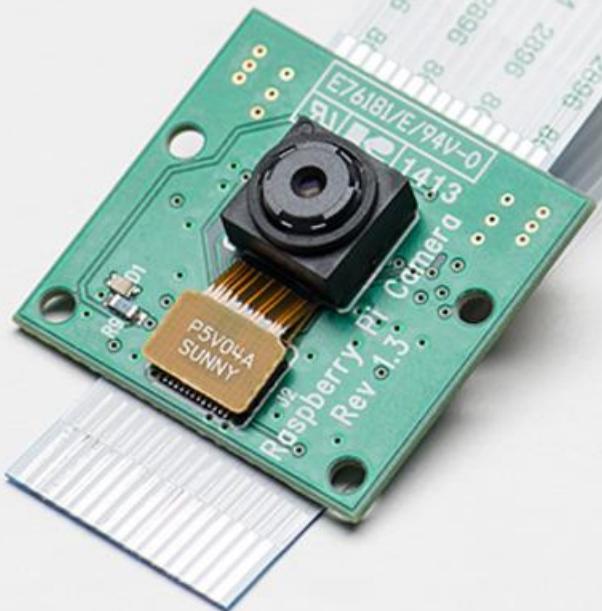




# Surveillance as an extension of (our desire for) Clairvoyance

(seeing objects/events from afar)





E7897  
0-AV4-0  
E/94/E/1897

1413

P5V04A  
SUNNY

Raspberry Pi Camera  
Rev 1.3



# **Social Media**

as an extension of  
(our desire for)

# **Divination**

(rituals for gaining insight into situations)

# The Internet

