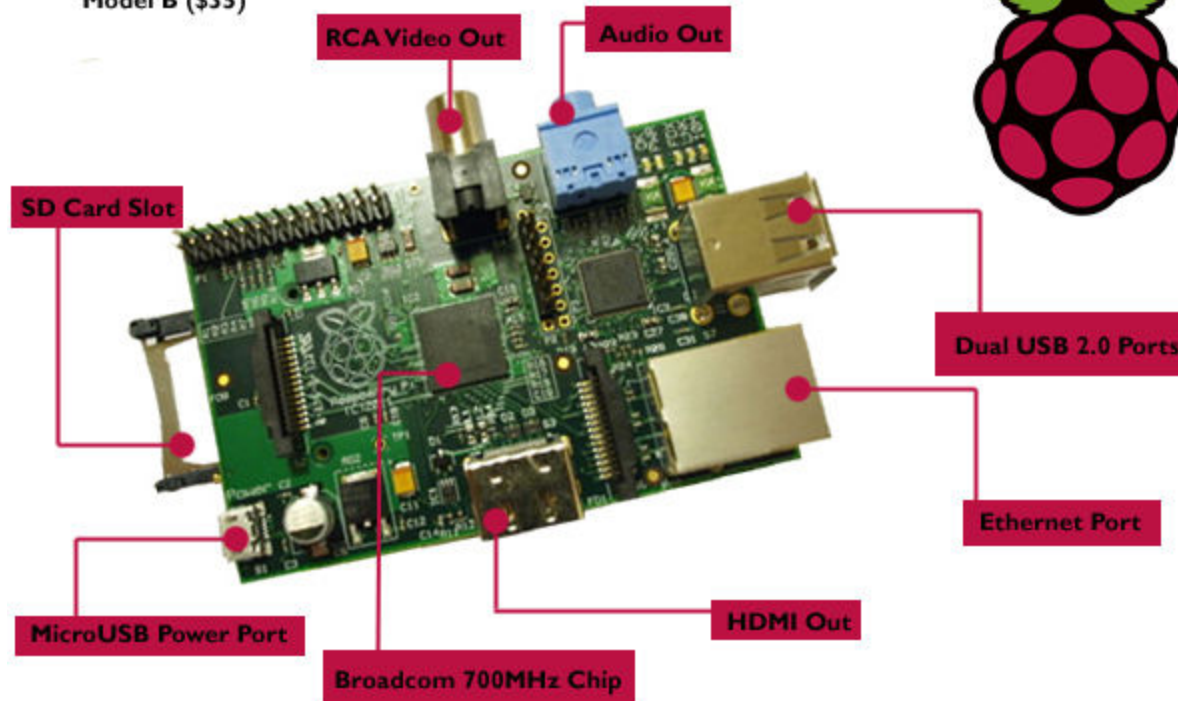# Raspberry Pi : Pocket PC

Credit card-sized single-board computers developed in the United Kingdom with the intent to promote the teaching of basic computer science in schools and developing countries.
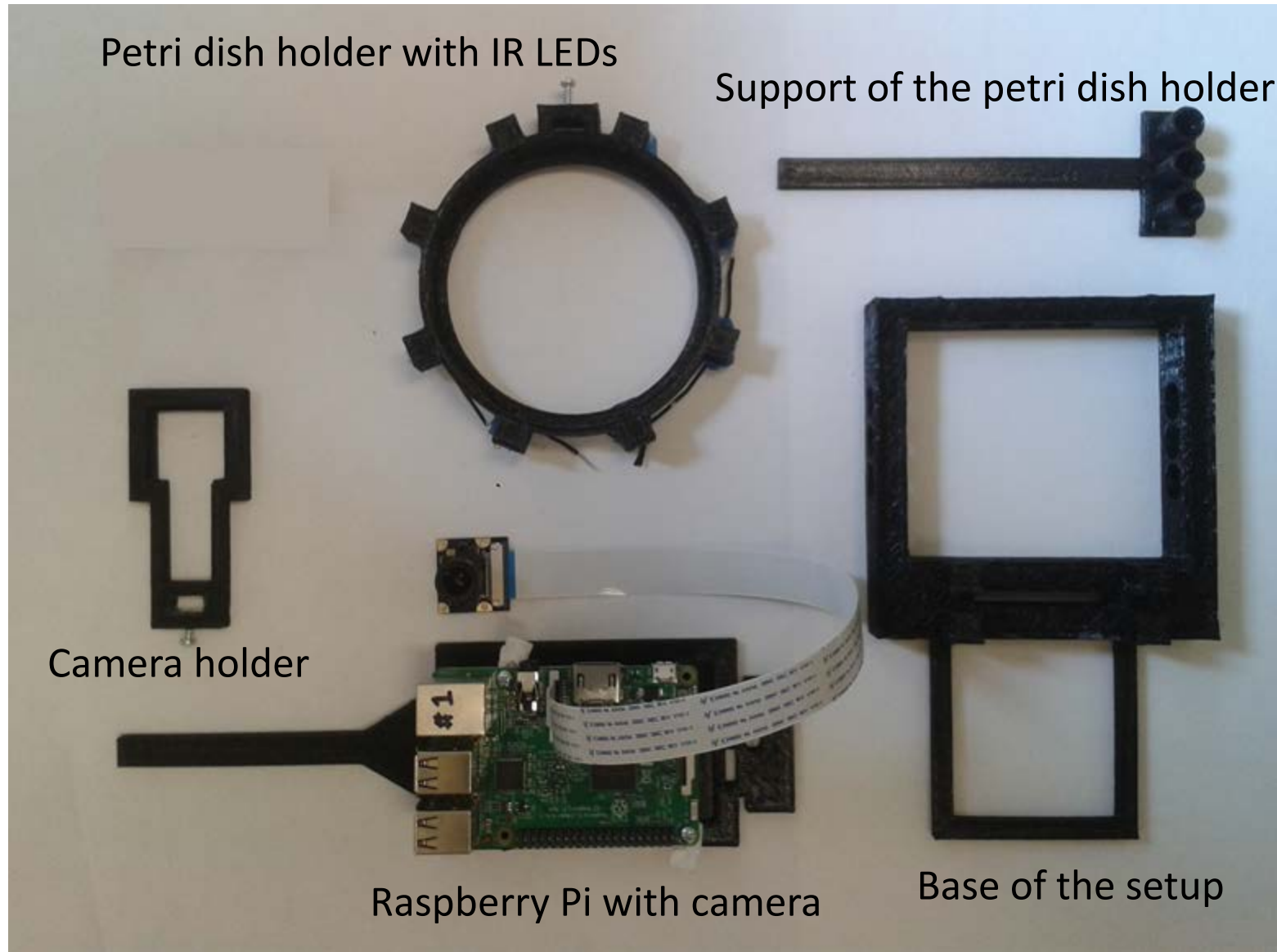

Raspberry Pi
Model B ($35)

RCA Video Out

Audio Out

SD Card Slot

Dual USB 2.0 Ports

Ethernet Port

MicroUSB Power Port

Broadcom 700MHz Chip

HDMI Out

Building a FlyPi setup

Design files for 3D prints: https://github.com/LabLouis/FlyPi_LarvalChemotaxis

Petri dish holder with IR LEDs

Support of the petri dish holder

Camera holder

Raspberry Pi with camera
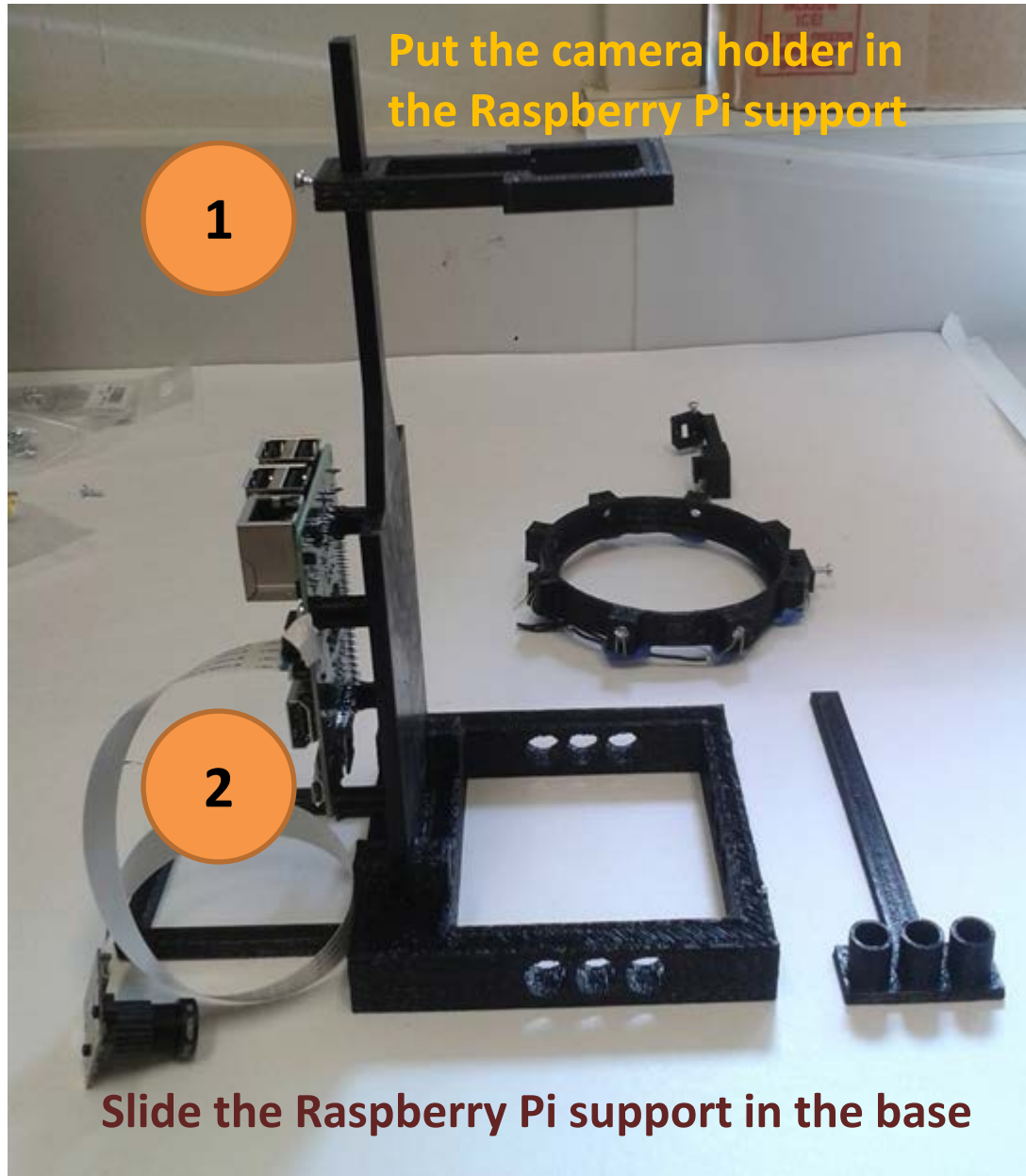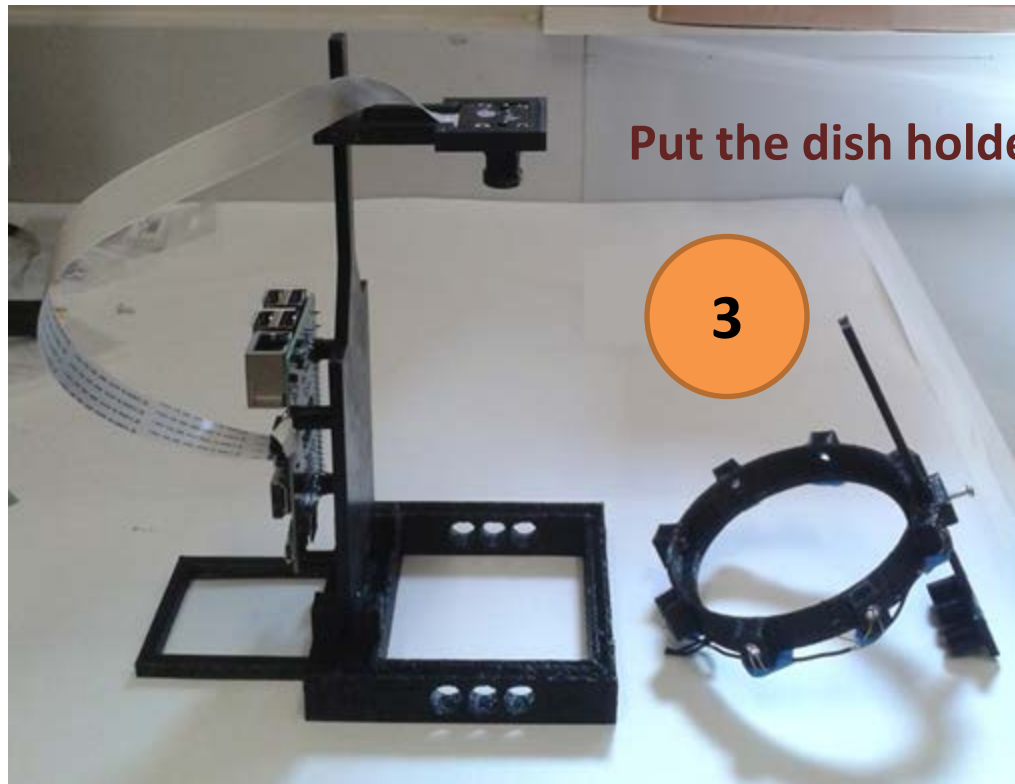
Base of the setup

Put the camera holder in the Raspberry Pi support

1

2

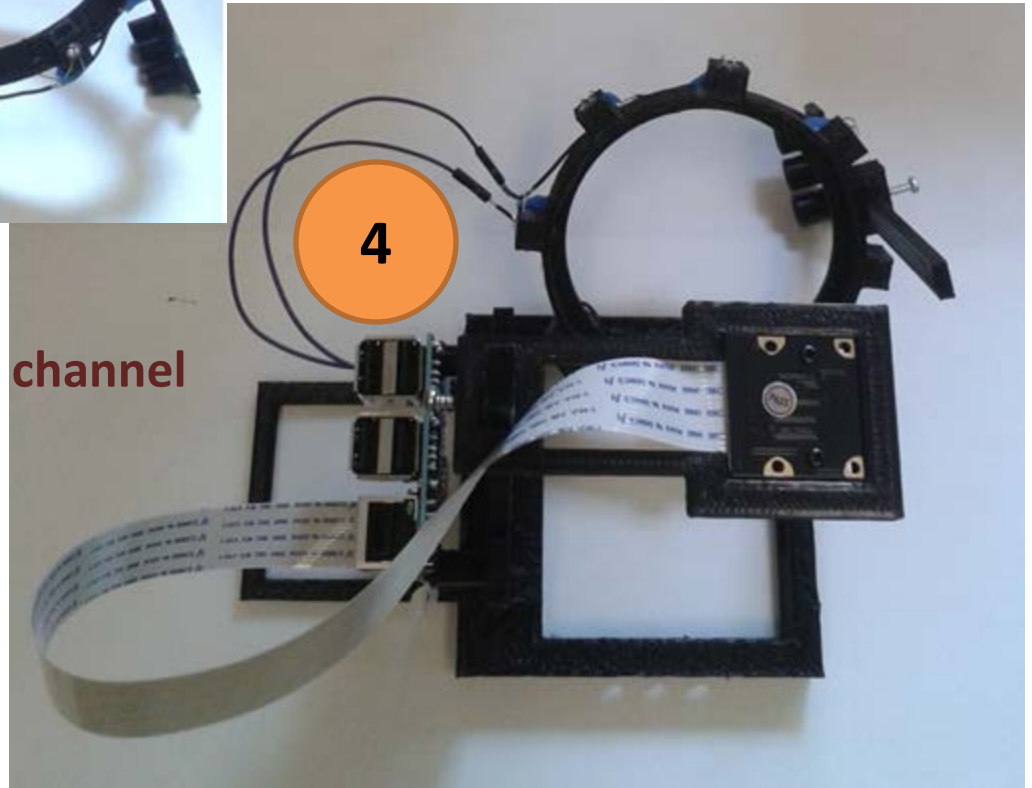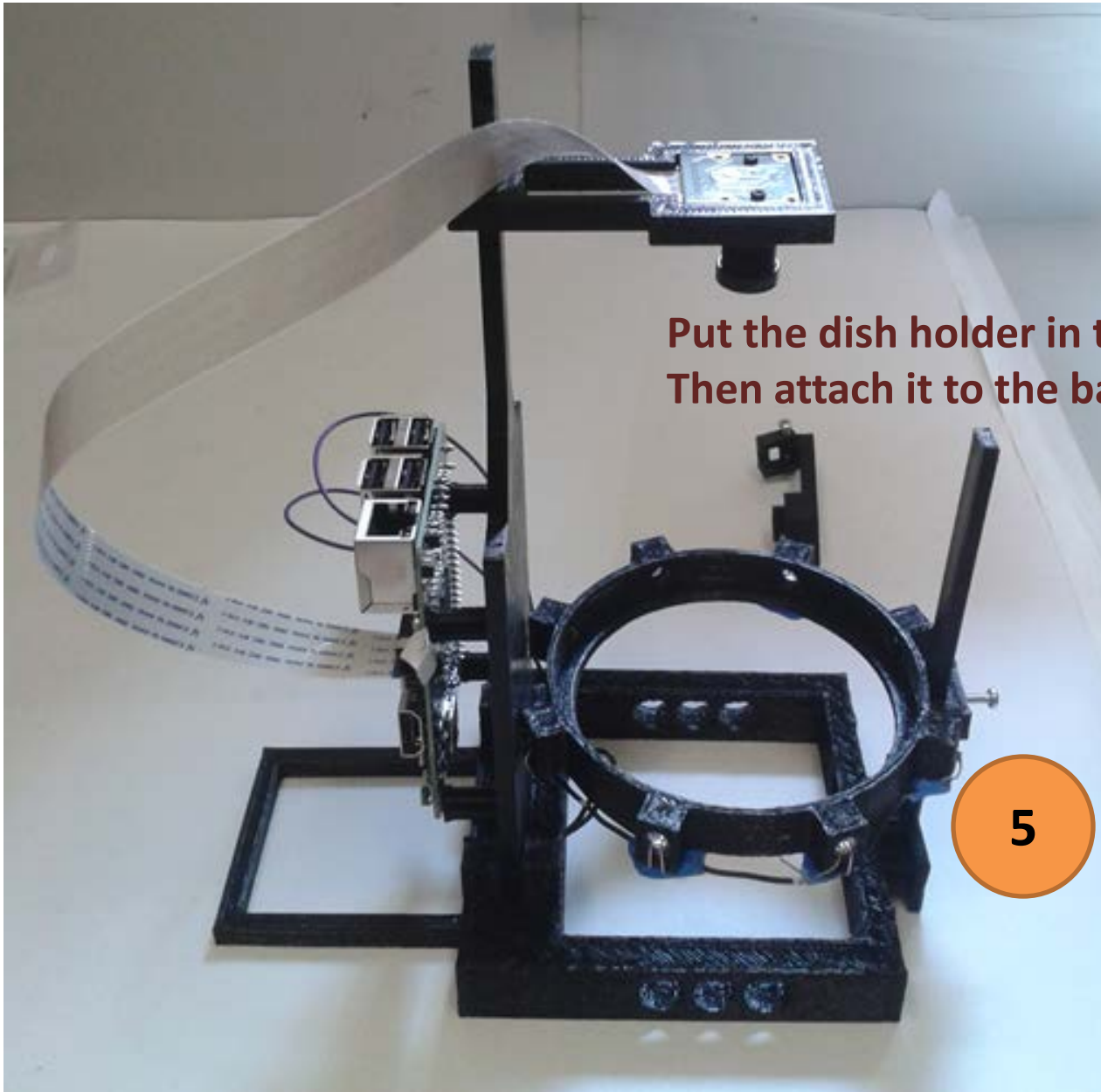**Slide the Raspberry Pi support in the base**

Put the dish holder in the dish support

3

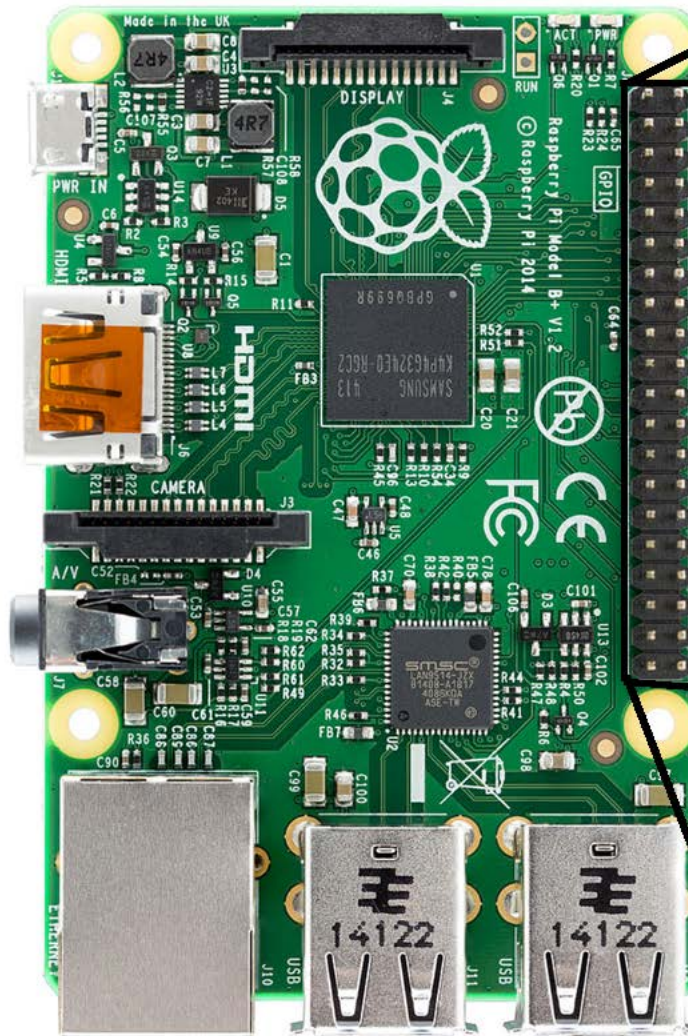**4**

Connect wires to the IR LEDs channel (GPIO17, GND)

Put the dish holder in the support,
Then attach it to the base

5

Connect all the components Keyboard, mouse, monitor, and power line to the labtop

6

Pin array of the Raspberry Pi

	Pin No.		
3.3V	1	2	5V
GPIO2	3	4	5V
GPIO3	5	6	GND
GPIO4	7	8	GPIO14
GND	9	10	GPIO15
GPIO17	11	12	GPIO18
GPIO27	13	14	GND
GPIO22	15	16	GPIO23
3.3V	17	18	GPIO24
GPIO10	19	20	GND
GPIO9	21	22	GPIO25
GPIO11	23	24	GPIO8
GND	25	26	GPIO7
DNC	27	28	DNC
GPIO5	29	30	GND
GPIO6	31	32	GPIO12
GPIO13	33	34	GND
GPIO19	35	36	GPIO16
GPIO26	37	38	GPIO20
GND	39	40	GPIO21

Key

Power +	UART
GND	SPI
I²C	GPIO