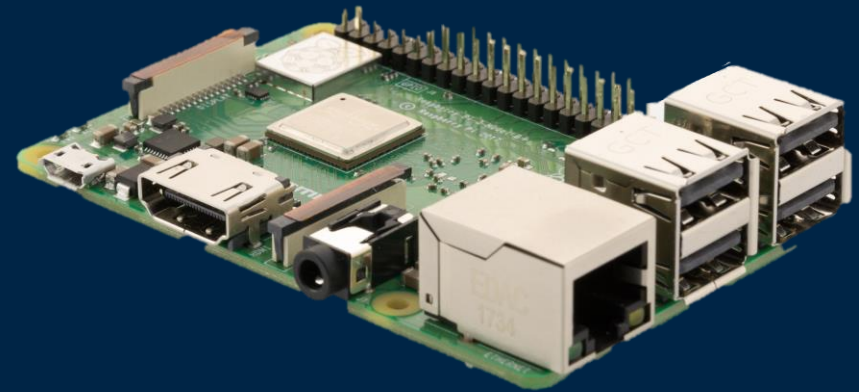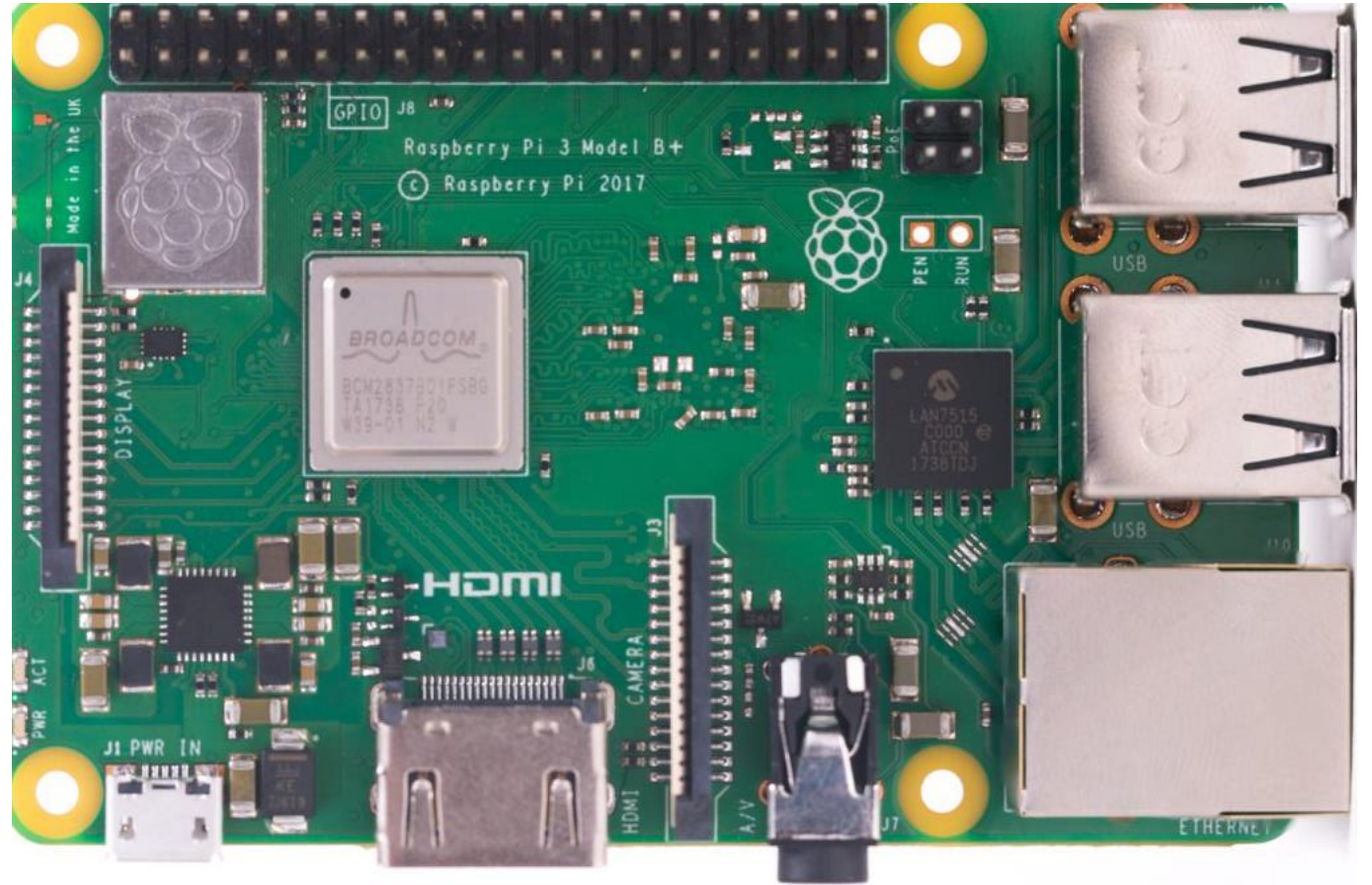# Raspberry PI Intro

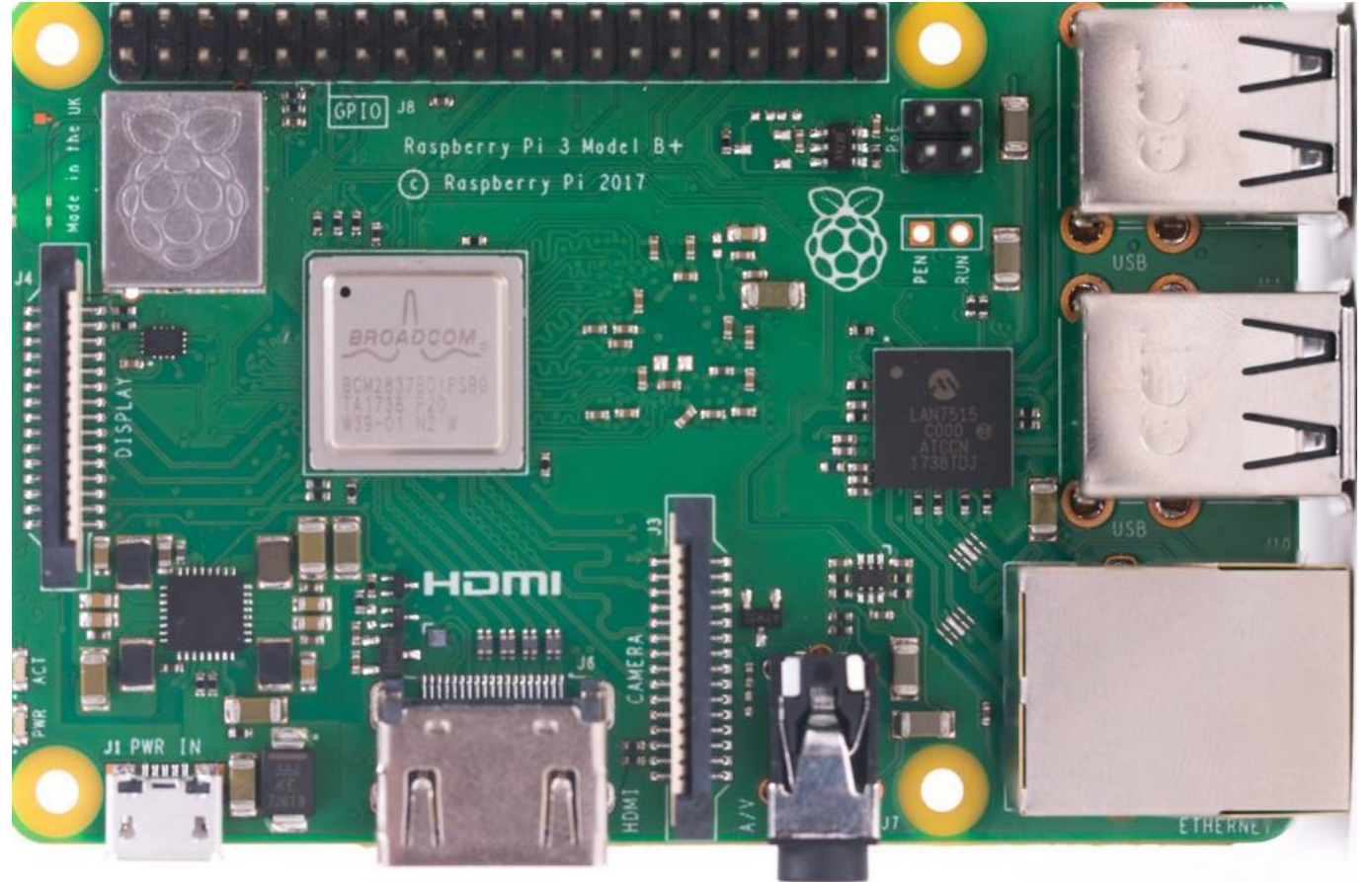# Raspberry PI 3 model B+

I.   Single-board computer

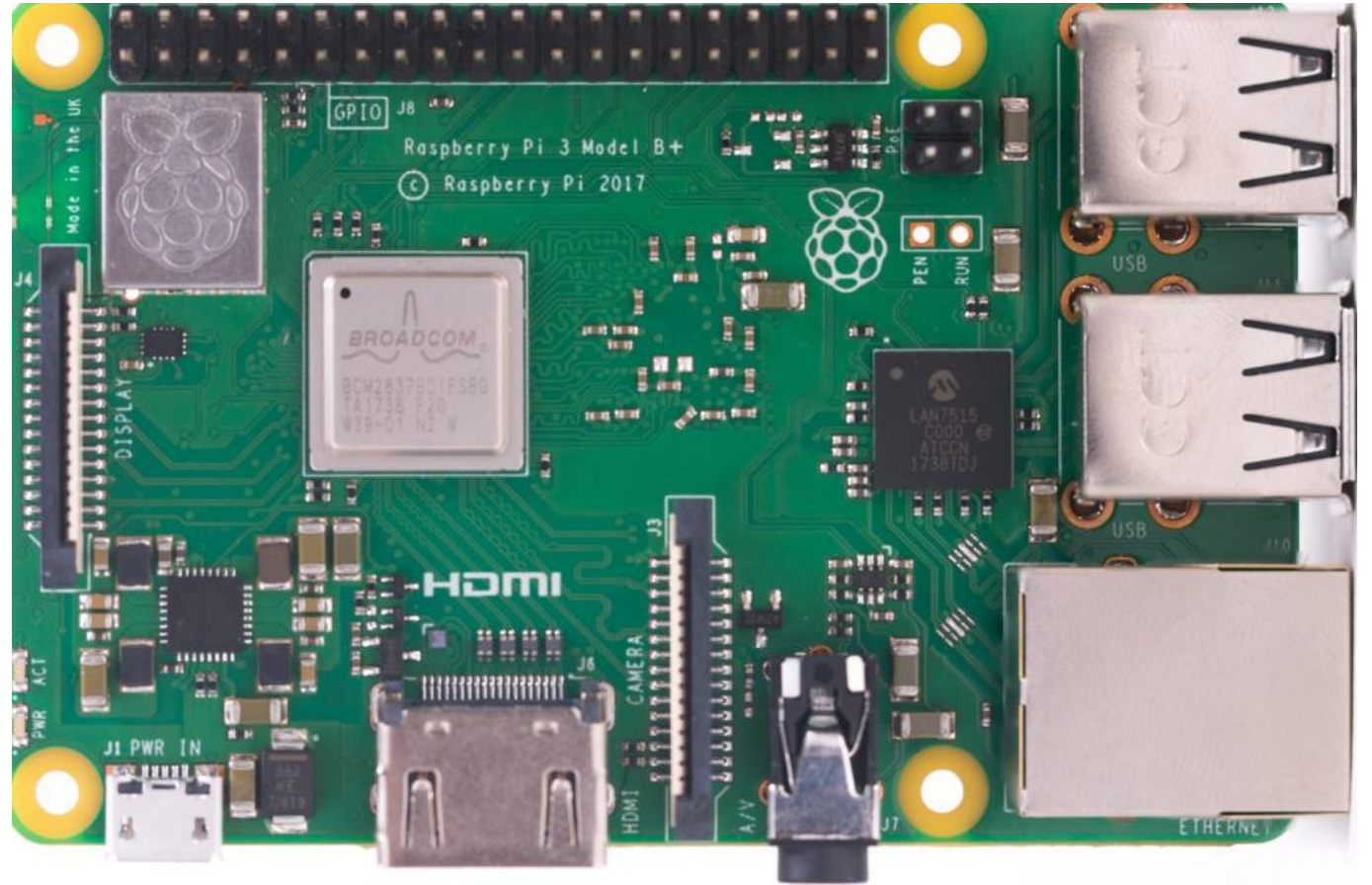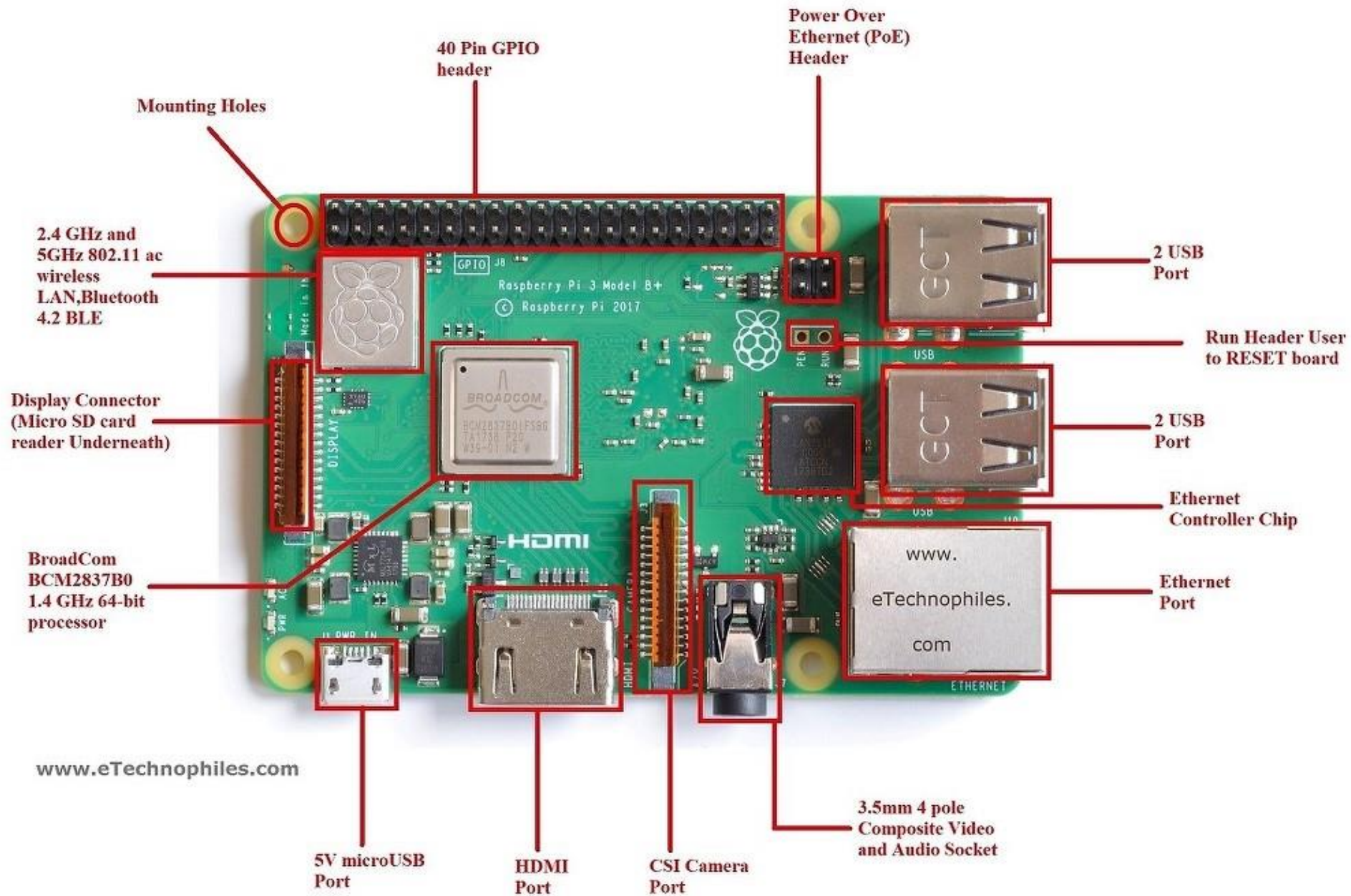# Raspberry PI 3 model B+

I. Single-board computer

II. A set of useful ports

    a. USBs

    b. Ethernet

    c. Hdmi

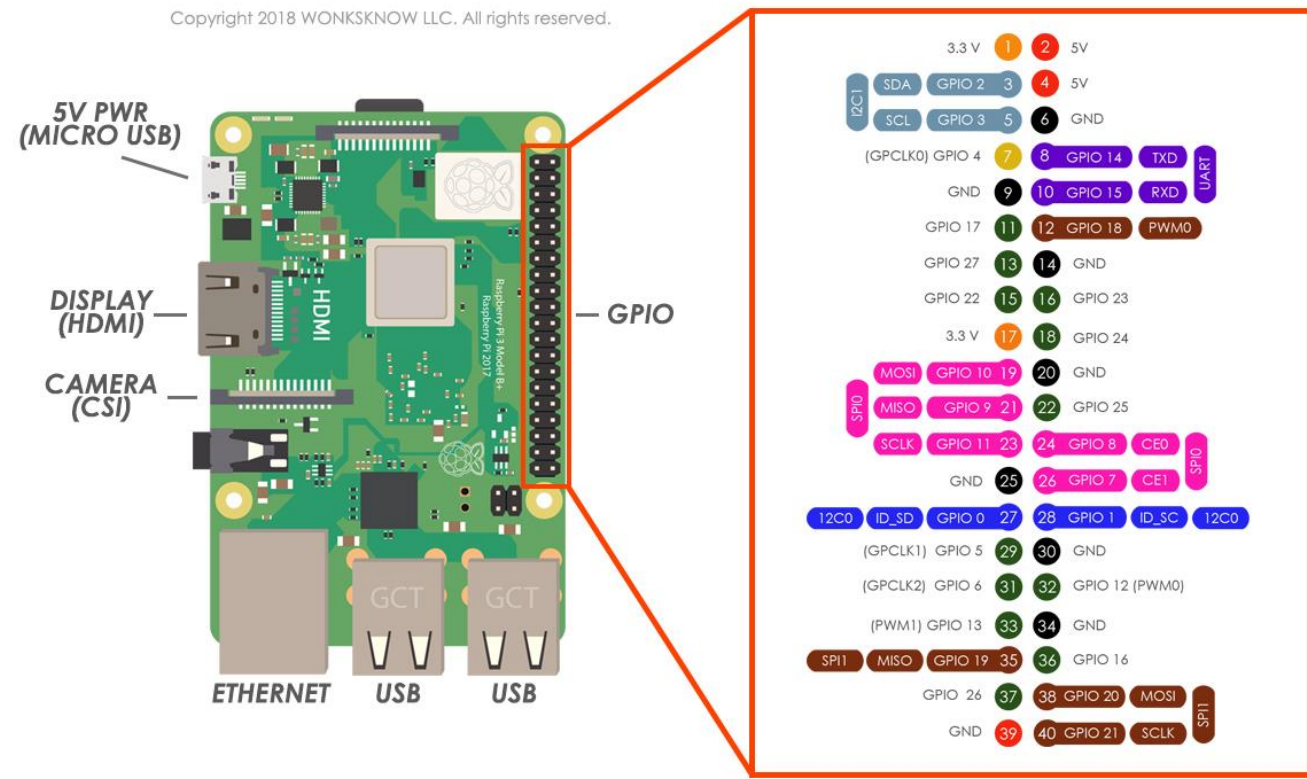   d. MicroUsb

    e. CSI camera

Raspberry PI 3 model B+

I.   Single-board computer

II.   A set of useful ports
   a.   USBs
   b.   Ethernet
   c.   Hdmi
   d.   MicroUsb
   e.   CSI camera

III.   40 Pin GPIO

Power Over Ethernet (PoE) Header

40 Pin GPIO header

Mounting Holes

2.4 GHz and 5GHz 802.11 ac wireless LAN,Bluetooth 4.2 BLE

Display Connector (Micro SD card reader Underneath)

BroadCom BCM2837B0 1.4 GHz 64-bit processor

2 USB Port

Run Header User to RESET board

2 USB Port

Ethernet Controller Chip

Ethernet Port

3.5mm 4 pole Composite Video and Audio Socket

5V microUSB Port

HDMI Port

CSI Camera Port

Raspberry Pi 3 Model B+
© Raspberry Pi 2017

BROADCOM
BCM2837B0LF5BG

HDMI

www. eTechnophiles. com

www.eTechnophiles.com

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Raspberry PI 3 model B+ cntd

I.   Pin Layout

Raspberry PI 3 model B+ cntd

I.   Pin Layout

II. Already connected on the turtlebot!

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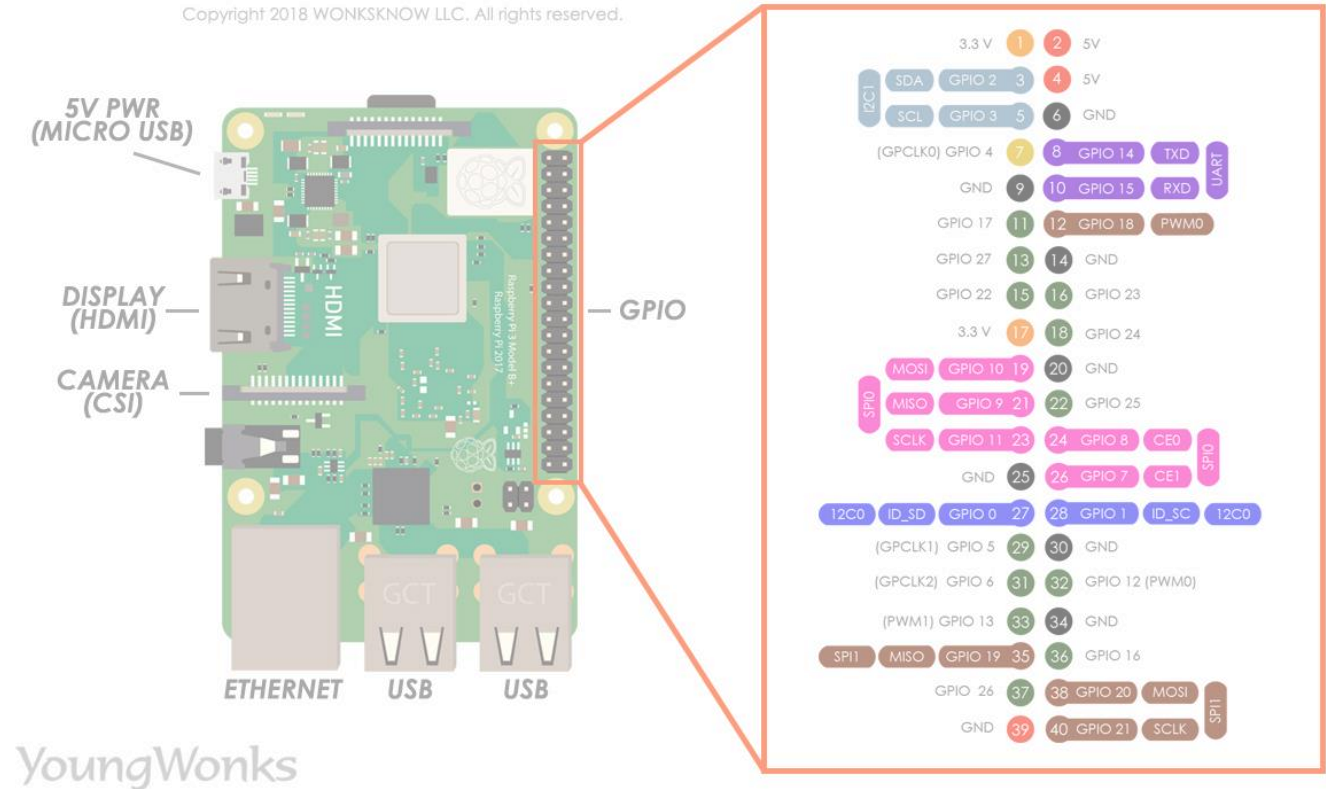
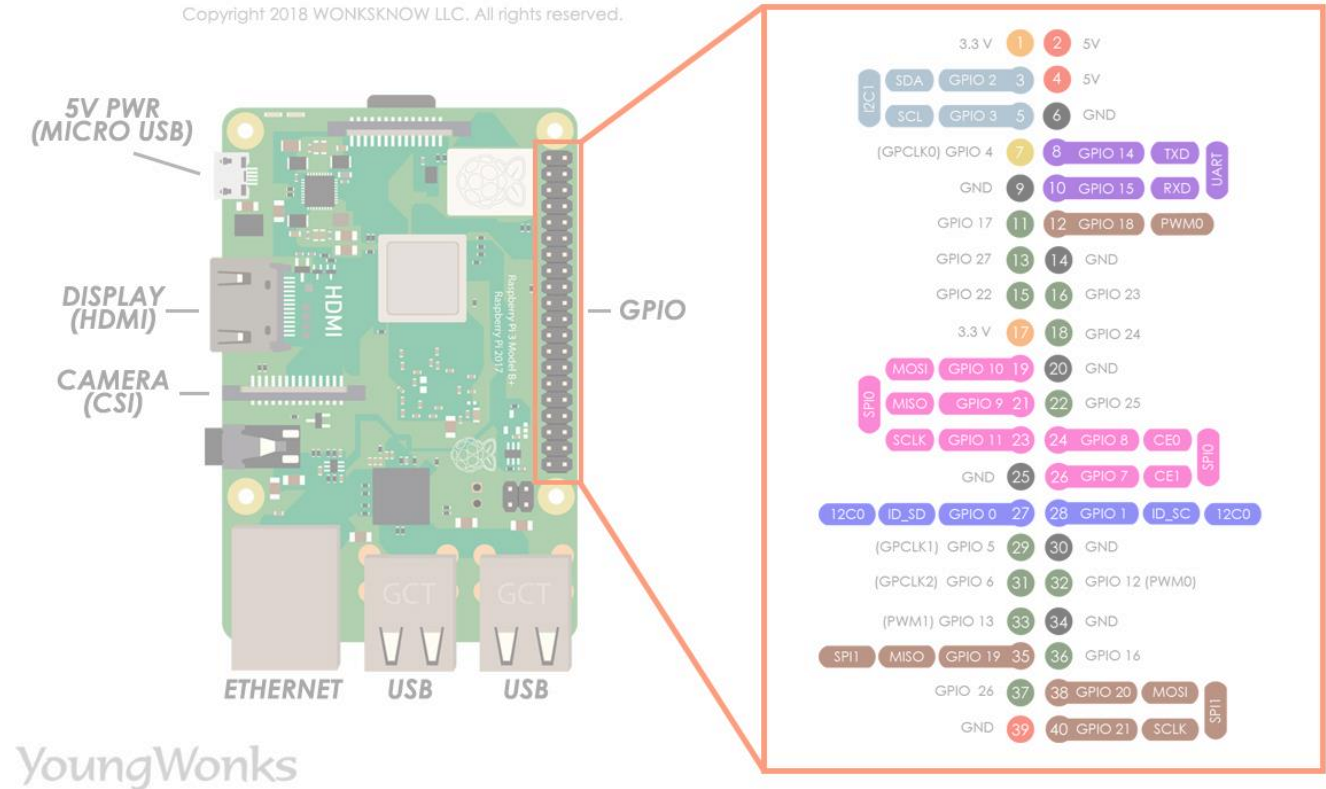# Raspberry PI 3 model B+ cntd

I. Pin Layout

II. Already connected on the turtlebot!

III. Your job today:

    a. **Communicte with the PI**

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Raspberry PI 4 ***

I.   5 robots have a Raspberry 4 instead

   a.   Check the label on top of the lidar

   b.   Usb-c instead of hdmi

   c.   Check for pinout when connecting
         the sensors
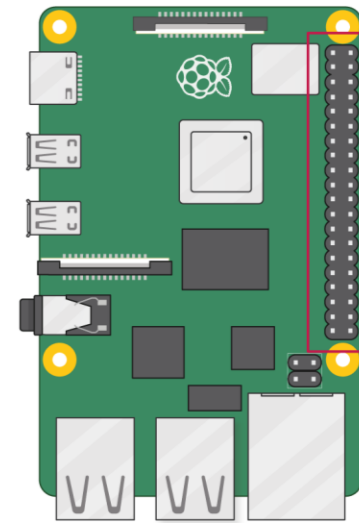
3V3 power	1	2		5V power
GPIO 2 (SDA)	3	4		5V power
GPIO 3 (SCL)	5	6		Ground
GPIO 4 (GPCLK0)	7	8		GPIO 14 (TXD)
Ground	9	10		GPIO 15 (RXD)
GPIO 17	11	12		GPIO 18 (PCM_CLK)
GPIO 27	13	14		Ground
GPIO 22	15	16		GPIO 23
3V3 power	17	18		GPIO 24
GPIO 10 (MOSI)	19	20		Ground
GPIO 9 (MISO)	21	22		GPIO 25
GPIO 11 (SCLK)	23	24		GPIO 8 (CE0)
Ground	25	26		GPIO 7 (CE1)
GPIO 0 (ID_SD)	27	28		GPIO 1 (ID_SC)
GPIO 5	29	30		Ground
GPIO 6	31	32		GPIO 12 (PWM0)
GPIO 13 (PWM1)	33	34		Ground
GPIO 19 (PCM_FS)	35	36		GPIO 16
GPIO 26	37	38		GPIO 20 (PCM_DIN)
Ground	39	40		GPIO 21 (PCM_DOUT)

Materials

I. Checkout: **THE OFFICIAL RASPBERRY PI BEGINNER'S GUIDE**

    a. **Chapters 1-2: get to know your PI**

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