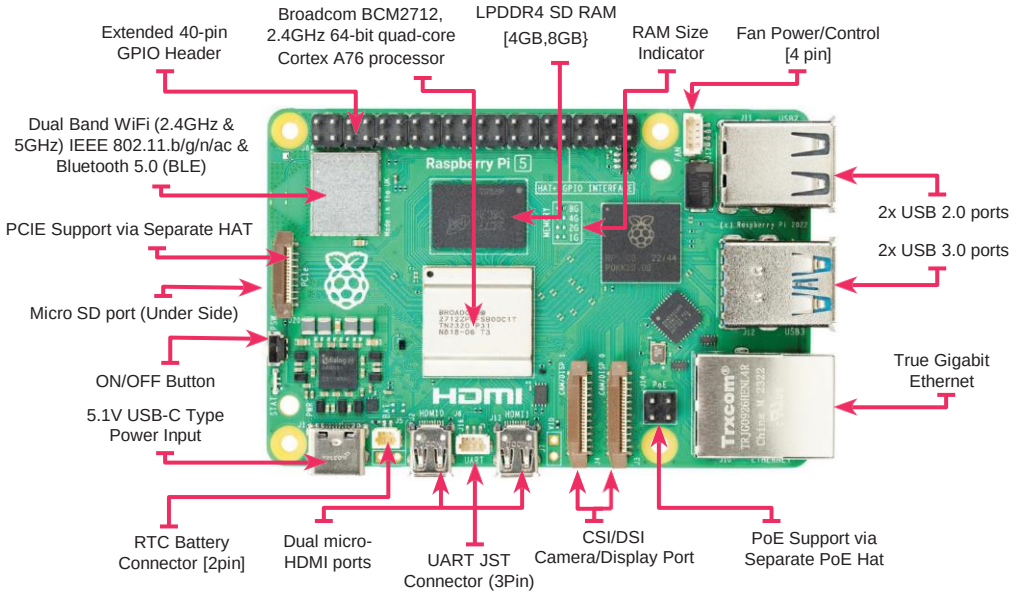

Getting Started

For full setup and installation instructions please visit: http://www.raspberrypi.org/help

Plugging in your Raspberry Pi

1. Begin by slotting your microSD card into the microSD card slot on the Raspberry Pi, which will only fit one way.
2. Next, plug in your USB keyboard and Mouse into the USB slots on the Raspberry Pi.
3. Then connect your HDMI cable from your Raspberry Pi to your monitor or TV.
4. Make sure that your monitor or TV is turned on, and that you have selected the right input (e.g. HDMI 1, DVI, etc).
5. If you intend to connect your Raspberry Pi to the internet, plug an ethernet cable into the ethernet port next to the USB ports. Or, connect via Wi-Fi by entering your Wi-Fi pre-shared key. For more connectivity instructions go to http://www.raspberrypi.org/help
6. When you are happy that you have plugged in all the cables and microSD card required, finally plug in the USB-C power supply.
7. The Raspberry Pi will automatically turn on and boot into a graphical desktop.

Raspberry Pi GPIO

The two rows of GPIO (general purpose input/output) pins along one edge of the board are one of Raspberry Pi's most powerful features. These 40 pins are the physical interface between the Raspberry Pi and the real world.

You can program the pins to interact with external devices. Inputs can be from switches, sensors or signals from another device. Outputs can also do various things; including turning on an LED, sending data to another device, driving a motor controller etc. The GPIO pins are your gateway to the world of physical computing.

With thanks to @gadgetoid. For more details on the GPIO connections visit www.pinout.xyz

Raspberry Pi HATs

As well as allowing you to connect discrete physical devices, the Raspberry Pi GPIO header can also be used to attach HATs (Hardware Attached on Top), add-on boards that allow you to enhance your Raspberry Pi to provide extra functionality and features.

These include miniature display HATs, high quality audio HATs and HATs that contain multiple sensors and motor control options.

Pinout

3.3v DC Power	1	2	5v DC Power
GPIO02 SDA1, I2C	3	4	5v DC Power
GPIO03 SCL1, I2C	5	6	Ground
GPIO04 GPCLKO	7	8	GPIO14 TXD0, UART
Ground	9	10	GPIO15 RXD0, UART
GPIO17	11	12	GPIO18 PWM0
GPIO27	13	14	Ground
GPIO22	15	16	GPIO23
3.3v DC Power	17	18	GPIO24
GPIO10 SPI0_MOSI	19	20	Ground
GPIO09 SPI0_MISO	21	22	GPIO25
GPIO11 SPI_CLK	23	24	GPIO08 SPI0_CE0_N
Ground	25	26	GPIO07 SPI0_CE1_N
GPIO00 SDA0, I2C	27	28	GPIO01 SCL0, I2C
GPIO05	29	30	Ground
GPIO06	31	32	GPIO12 PWM0
GPIO13 PWM1	33	34	Ground
GPIO19	35	36	GPIO16
GPIO26	37	38	GPIO20
Ground	39	40	GPIO21