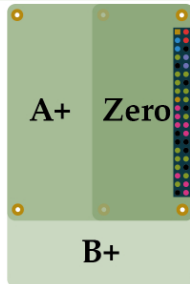


3v3 Power	1	2	5v Power
GPIO 2 (I2C1 SDA)	3	4	5v Power
GPIO 3 (I2C1 SCL)	5	6	Ground
GPIO 4 (GPCLK0)	7	8	GPIO 14 (UART TX)
Ground	9	10	GPIO 15 (UART RX)
GPIO 17	11	12	GPIO 18 (PCM CLK)
GPIO 27	13	14	Ground
GPIO 22	15	16	GPIO 23
3v3 Power	17	18	GPIO 24
GPIO 10 (SPI0 MOSI)	19	20	Ground
GPIO 9 (SPI0 MISO)	21	22	GPIO 25
GPIO 11 (SPI0 SCLK)	23	24	GPIO 8 (SPI0 CE0)
Ground	25	26	GPIO 7 (SPI0 CE1)
GPIO 0 (EEPROM SDA)	27	28	GPIO 1 (EEPROM SCL)
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)

## Legend

Orientate your Pi with the GPIO on the right and the HDMI port(s) on the left.

- GPIO (General Purpose IO)
- SPI (Serial Peripheral Interface)
- I<sup>2</sup>C (Inter-integrated Circuit)
- UART (Universal Asynchronous Receiver/Transmitter)
- PCM (Pulse Code Modulation)
- Ground
- 5V (Power)
- 3.3V (Power)



GPCLK	1-WIRE	3v3 Power	PCM	Ground	SPI	WiringPi	JTAG	5v Power	
					SDIO	UART	PWM	I2C	DPI

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# Pinout!

## The Raspberry Pi GPIO pinout guide.

This GPIO Pinout is an interactive reference to the Raspberry Pi GPIO pins, and a guide to the Raspberry Pi's GPIO interfaces. Pinout also includes [hundreds of pinouts for Raspberry Pi add-on boards, HATs and pHATs](#).

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Every \$1 makes all the difference! Thank you.

## pHAT Stack

Pinout has teamed up with Pimoroni to create a [prototype board compatibility tool](#), [check it out here!](#)

## Explore HATs & pHATs

[Check out Pinout's board explorer!](#) Use it to find the pinout for your Raspberry Pi add-on board, or discover new boards. If you manufacture boards, we'd love to add yours too. [You can contribute to Pinout.xyz at GitHub.com](#).

## What do these numbers mean?

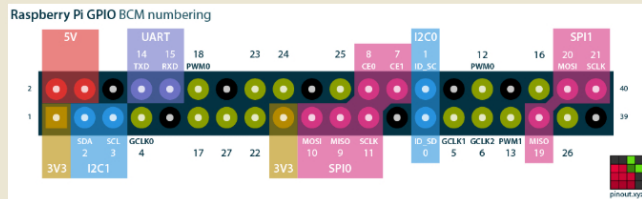
- GPIO - General Purpose Input/Output, aka "BCM" or "Broadcom". These are the big numbers, e.g. "GPIO 22". You'll use these with RPi.GPIO and GPIO Zero.
- Physical - or "Board" correspond to the pin's physical location on the header. These are the small numbers next to the header, e.g. "Physical Pin 15".
- WiringPi - for Gordon Henderson's Wiring Pi library. These are shown as a tooltip when you mouseover a pin.
- Rev 1 Pi - alternate GPIO/Broadcom numbers for the original, 26-pin model "A" and "B" Pi.

## What's the orientation of this pinout?

Pinout depicts pin 1 in the top left corner. Pin 1 is the only pin with a square solder pad, which may only be visible from the underside of your Pi. If you orient your Pi such that you are looking at the top with the GPIO on the right and HDMI port(s) on the left, your orientation will match Pinout.

## Graphical Pinout

We've whipped up a simple graphical Raspberry Pi GPIO Pinout. Feel free to print, embed, share or hotlink this image and don't forget to credit us!



Spotted an error, want to add your board's pinout? Contribute to Pinout.xyz at GitHub  
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