

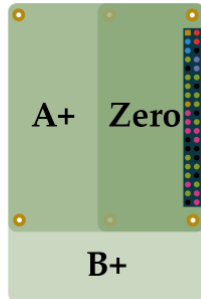


3v3 Power	1	•	2	5v Power
GPIO 2 (I2C1 SDA)	3	•	4	5v Power
GPIO 3 (I2C1 SCL)	5	•	6	Ground
GPIO 4 (GPCLK0)	7	•	8	GPIO 14 (UART TX)
Ground	9	•	10	GPIO 15 (UART RX)
GPIO 17 (SPI1 CE1)	11	•	12	GPIO 18 (SPI1 CE0)
GPIO 27	13	•	14	Ground
GPIO 22	15	•	16	GPIO 23
3v3 Power	17	•	18	GPIO 24
GPIO 10 (SPI0 MOSI)	19	•	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 (SPI1 MISO)	35	•	36	GPIO 16 (SPI1 CE2)
GPIO 26	37	•	38	GPIO 20 (SPI1 MOSI)
Ground	39	•	40	GPIO 21 (SPI1 SCLK)

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)
- I²C (Inter-integrated Circuit)
- UART (Universal Asynchronous Receiver/Transmitter)
- PCM (Pulse Code Modulation)
- Ground
- 5v (Power)
- 3.3v (Power)



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

Browse pinouts for HATs, pHATs and add-ons »

SPI - Serial Peripheral Interface

SPI0 pins are GPIO 7, 8, 9, 10, 11

SPI1 pins are GPIO 16, 17, 18, 19, 20, 21

Known as the four-wire serial bus, SPI lets you attach multiple compatible devices to a single set of pins by assigning them different chip-select pins.

To talk to an SPI device, you assert its corresponding chip-select pin.

By default the Pi allows you to use SPI0 with chip select pins on CE0 on **GPIO 8** and CE1 on **GPIO 7**.

You can enable SPI1 with a dtoverlay configured in `"/boot/config.txt"`, for example:

```
1. dtoverlay=spi1-3cs
```

For full details of the SPI dtoverlays (and others) see [the Raspberry Pi dtoverlay README](#)

Details

- [More Information](#)