



# Raspberry Pi Zero v1.3

## Description

**Please Note: there is a limit of one Pi Zero per customer**

The Raspberry Pi Zero v1.3 is super low cost and smaller than its bigger brother, the Raspberry Pi 3. The Raspberry Pi Zero v1.3 now comes complete with a camera port. Using the new Raspberry Pi Zero Camera Adapter, you can now connect a Raspberry Pi camera to your Zero.

## HAT Compatibility Note

The Pi Zero is fully compatible with all HAT breakout boards, as it features the same 40 Pin GPIO as the Raspberry Pi 2/B+/A+

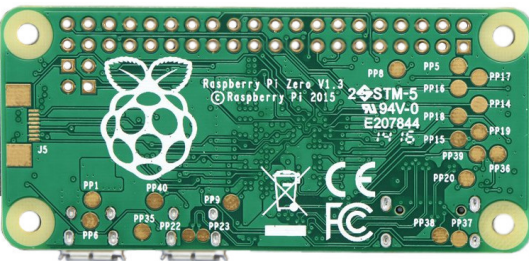
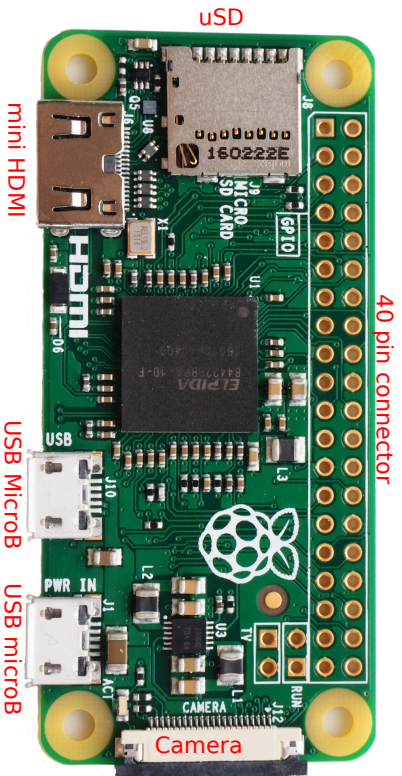
## Raspberry Pi Zero includes:

- BCM2835 (same as Pi 1) but up-clocked to 1GHz, so 40% faster
- 512MB of RAM
- micro-SD Slot
- mini-HDMI
- micro-USB for data
- micro-USB for power
- unpopulated 40-pin GPIO connector (same pinout as A+/B+/2B)
- Size is 65mm x 30mm x 5mm

## Recommended Pi Zero Projects

- [JustBoom Amp Zero pHAT](#)
- [JustBoom DAC Zero pHAT](#)
- [JustBoom Digi Zero pHAT](#)
- [PaPiRus Zero](#)

# Raspberry Pi Zero v1.3



Position **Power** **Ground** **Control** **GPIO**

**Wiring** **BCM** **Serial** **PWM** **Misc**

Different places use different pin numbers  
GPIO, Wiring, and BCM have been included.

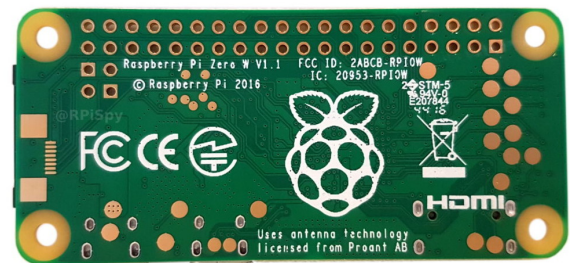
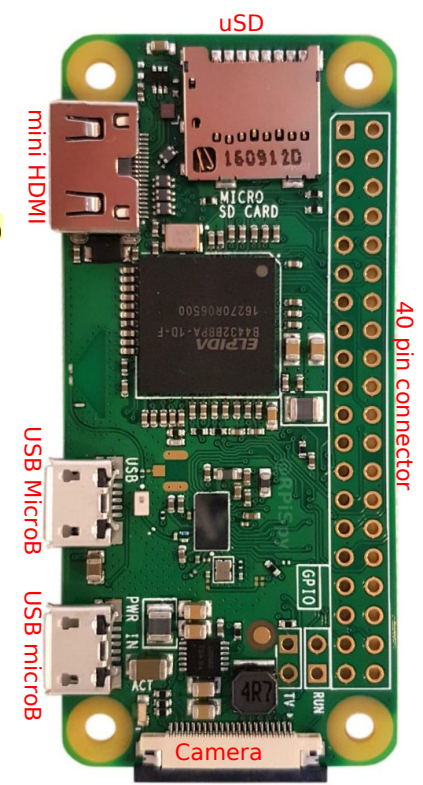
		<b>3.3V</b>	1	2	<b>5V</b>		
SDA	8	2	3	4	<b>5V</b>		
SCL	9	3	5	6	<b>GND</b>		
GPCLK0	4	7	4	7	8	14	15 TXD
		<b>GND</b>	9	10	15	16	RXD
spi1 CS1	17	0	17	11	12	18	1
	27	2	27	13	14	<b>GND</b>	
	22	3	22	15	16	23	4
		<b>3.3V</b>	17	18	18	24	5
MOSI	12	10	19	20	<b>GND</b>		
MISO	13	9	21	22	25	6	25
SCLK	14	11	23	24	8	10	SPI CS0
		<b>GND</b>	25	26	7	11	SPI CS1
ID_SD	30	0	<b>DNC</b>	27	28	<b>DNC</b>	1
GPCLK1	5	21	5	29	30	<b>GND</b>	
GPCLK2	6	22	6	31	32	12	26
PWM1	13	23	13	33	34	<b>GND</b>	
PWM1 miso1	19	24	19	35	36	16	27
	26	25	26	37	38	20	28
		<b>GND</b>	39	40	21	29	21

PP1	<b>USB</b>
PP6	<b>GND</b>
PP8	<b>3.3V</b>
PP14	SD CLK
PP15	SD CMD
PP16	SD DAT0
PP17	SD DAT1
PP18	SD DAT2
PP19	SD CD
PP22	USB D+
PP23	USB D-

<b>TV +</b>	TV	Run	Run
<b>TV -</b>	TV	Run	Run

GPIO 0 and 1 are reserved - Do Not Connect  
PAL or NTSC via composite video on TV pads  
Run - temporarily connect pins to reset chip (or start chip after a shutdown)  
Camera Connector (not on Zero 1.1 or 1.2) - 22pin, 0.5mm  
Board Dimensions - 65mm x 30mm x 0.2mm  
Mounting holes M2.5

# Raspberry Pi Zero W v1.1



**Processor - BCM2835**  
ARM v7  
Single Core  
1GHz  
(same as B/B+ and A/A+)

**Memory**  
512MB RAM  
uSD slot to run OS

**Video**  
mini HDMI  
PAL or NTSC via pads  
HDMI capable of 1080p

**USB**  
microB for power  
microB for OTG

**Audio**  
from HDMI port only

**Wireless**  
2.4GHz  
802.11n  
Bluetooth 4.1/BLE

sparkfun ELECTRONICS

CC BY SA