

Custom Bootloaded Raspberry Pi Zero (without SD card)

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I. COMPONENTS

Components	Quantity
RaspberryPi Zero	1
Raspberry Pi3	1
LED	1
Resistor	1
Jumper Wires (M to F)	5

II. HARDWARE SETUP

STM32 Pins	LED
GPIO20	+ve
GND	-ve (via resistor)

TABLE I
RPi0AND LED CONNECTION

III. SOFTWARE SETUP

A. Installation and Configuration

```
cd ~
git clone https://github.com/gadepall/
  PiZero
sudo chmod +x -R PiZero
cd PiZero

./run.sh
```

Raspberry Pi 3 GPIO Header			
Pin#	NAME		NAME Pin#
01	3.3v DC Power		DC Power 5v 02
03	GPIO02 (SDA1 , I ² C)		DC Power 5v 04
05	GPIO03 (SCL1 , I ² C)		Ground 06
07	GPIO04 (GPIO_GCLK)		(TXD0) GPIO14 08
09	Ground		(RXD0) GPIO15 10
11	GPIO17 (GPIO_GEN0)		(GPIO_GEN1) GPIO18 12
13	GPIO27 (GPIO_GEN2)		Ground 14
15	GPIO22 (GPIO_GEN3)		(GPIO_GEN4) GPIO23 16
17	3.3v DC Power		(GPIO_GEN5) GPIO24 18
19	GPIO10 (SPI_MOSI)		Ground 20
21	GPIO09 (SPI_MISO)		(GPIO_GEN6) GPIO25 22
23	GPIO11 (SPI_CLK)		(SPI_CE0_N) GPIO08 24
25	Ground		(SPI_CE1_N) GPIO07 26
27	ID_SD (I ² C ID EEPROM)		(I ² C ID EEPROM) ID_SC 28
29	GPIO05		Ground 30
31	GPIO06		GPIO12 32
33	GPIO13		Ground 34
35	GPIO19		GPIO16 36
37	GPIO26		GPIO20 38
39	Ground		GPIO21 40

Fig. 1. Raspberry Pi Pin Configuration

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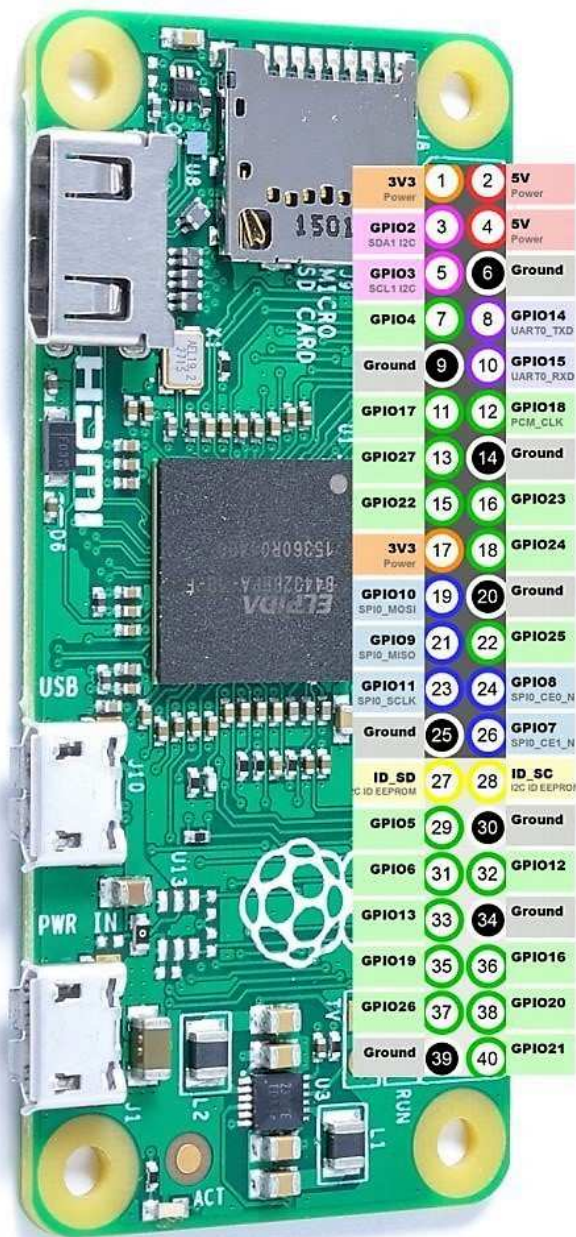


Fig. 2. Pi Zero Pin Configuration