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Connection guide for GT-511C3 Fingerprint Scanner and Raspberry Pi 2 Model B

I have a [Fingerprint Scanner - TTL \(GT-511C3\)](#)



and I want to connect that with Raspberry Pi 2 Model B, through GPIO. I have referred [this](#) website, to understand what input will go for different pins on that scanner, and referred [this](#) to understand how GPIO works in Raspberry. Below image will have a connector and 4 individual pins to connect my PI on Pins [1, 17, 9 and 2]. Now, my **doubt** should I directly connect those black female connector to Pi GPIO male connector, or do I need a bread board to do that.

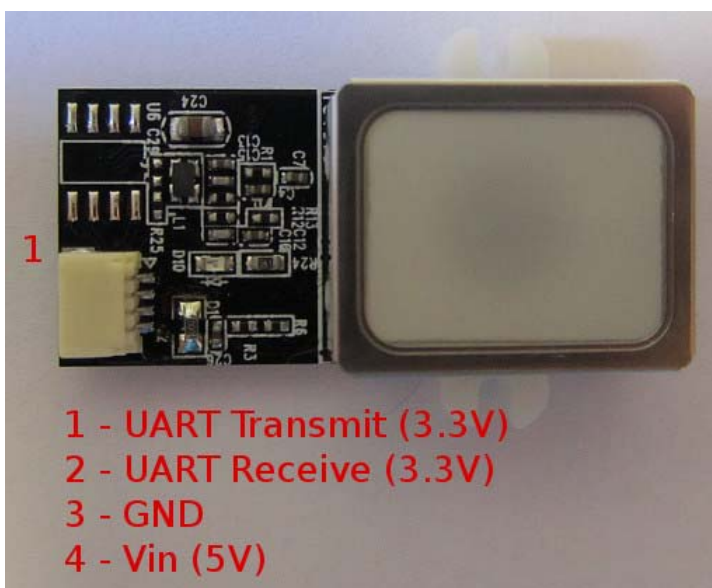
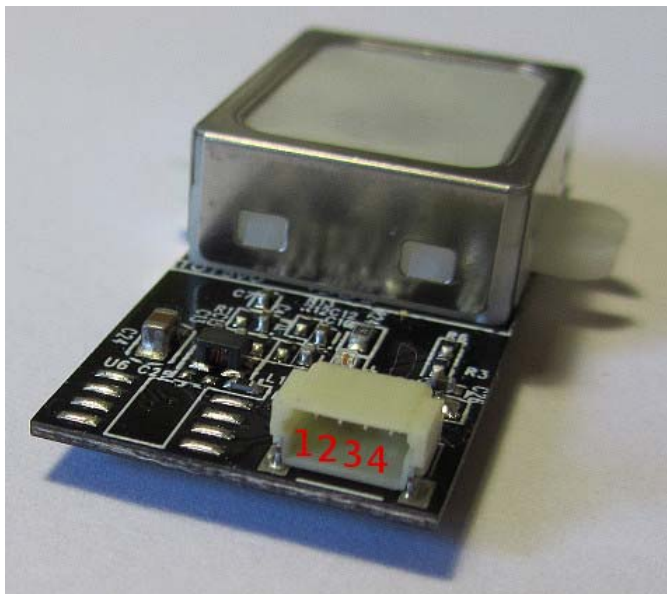
This is the only device I'll be connecting to my Pi.



P.S. I don't have much of a hold in electronics, so I just want to be sure. + I asked the same question on [electronics.stackexchange](https://electronics.stackexchange.com), but got 0 fruitful response.

I have even looked [here](#), as it is something similar to my case, but the approved answer is saying to connect the device on 14 and 15 pin, which I'm not sure, as it will provide ground and IO, but no power.

Image(s) for Finger Print Male Connectors:



Raspberry Pi2 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

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<http://www.element14.com>

pi-2 electronics cable

edited Mar 16 '16 at 9:02

asked Mar 16 '16 at 8:33



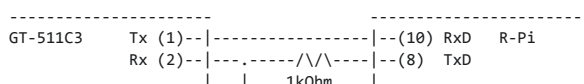
Gaurav Dave
170 12

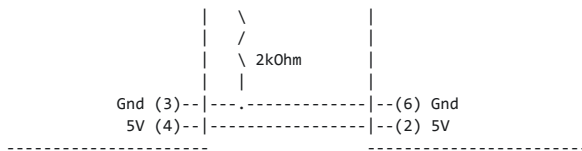
2 Answers

I have connected the Raspberry Pi Zero to the GT511-C3, and made a simple GUI for it. You can get the connection pin guide from the previous answer.

Here is the Python code on [GitHub](#). Sorry I cannot paste the code here because the package spans several files.

I think the following connection diagram should be working:





answered Oct 22 '16 at 3:53



RafazZ
126 1

The pictured module has the following connections.

Vcc, GND, Tx, Rx.

You need to make the following connections.

- 1 Transmit needs to be connected to pin 10 (GPIO 15, RXD)
- 2 Receive needs to be connected to pin 8 (GPIO 14, TXD)
- 3 GND needs to be connected to a Pi ground pin (pin 6 or 9 or any other ground pin)
- 4 Vcc need to be connected to a Pi 5V pin (pin 2 or pin 4)

edited Mar 16 '16 at 9:05

answered Mar 16 '16 at 8:56



joan
30.9k 2 33 53

@GauravDave Edited answer. – joan Mar 16 '16 at 9:05

That is up to you. Do whatever is most convenient for your circumstances. – joan Mar 16 '16 at 10:02