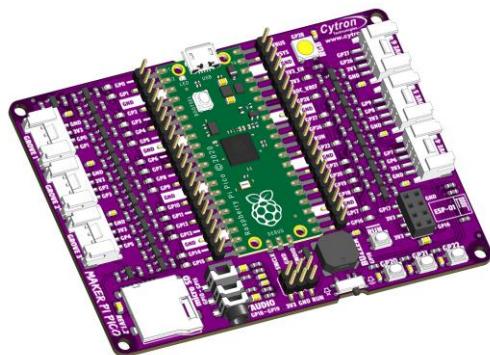


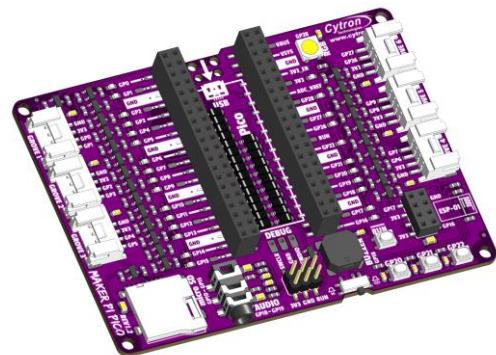


# MAKER PI PICO

## Simplifying Raspberry Pi Pico for Beginner



**MAKER-PI-PICO**



**MAKER-PI-PICO-NB**

## Datasheet

Rev 1.2  
March 2021

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## 1. BOARD LAYOUT & FUNCTION

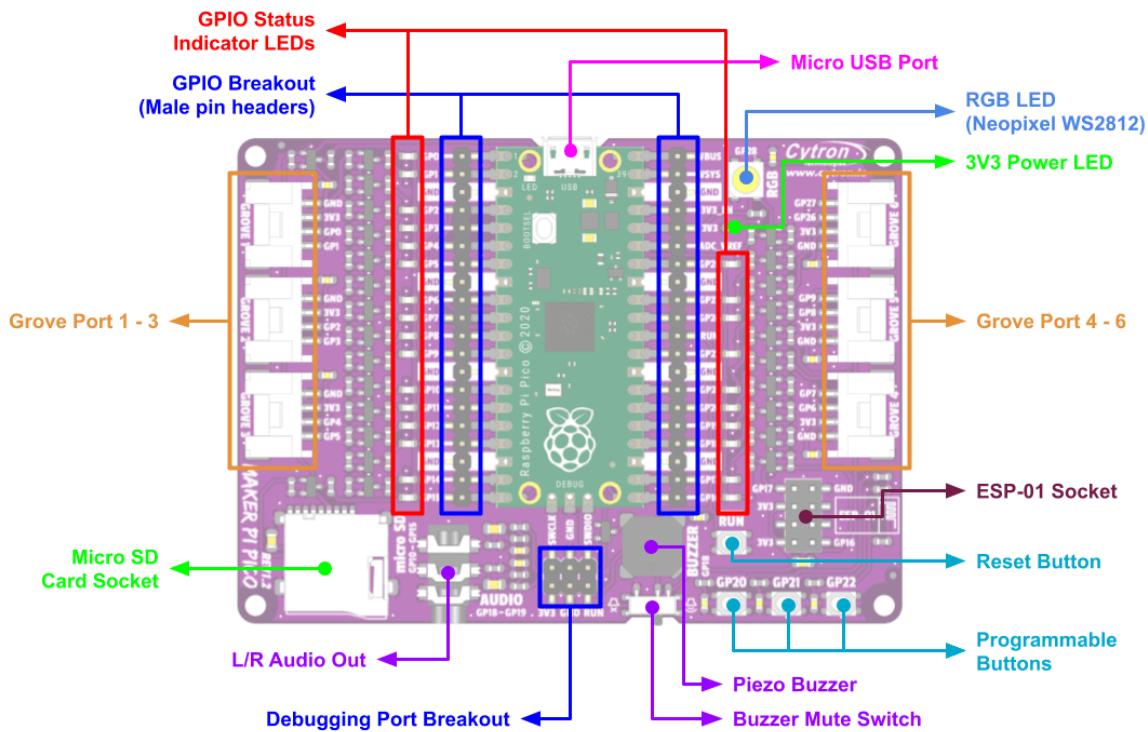


Figure 1: MAKER-PI-PICO Board Functions

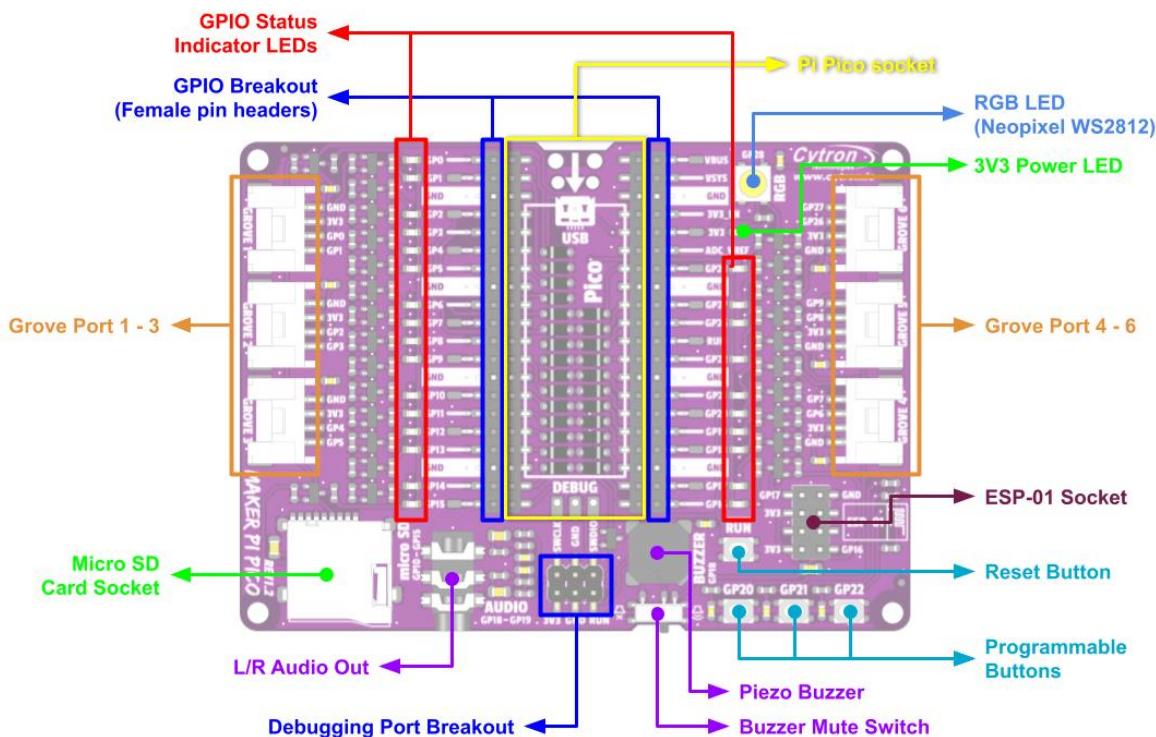


Figure 2: MAKER-PI-PICO-NB Board Functions

Function	Description																									
<b>Micro USB Port</b> *MAKER-PI-PICO only	Used to power up the Maker Pi Pico and upload programs from PC.																									
<b>3V3 Power LED</b>	LED indicator for 3V3. Turn on when powered up.																									
<b>GPIO LEDs</b>	LED indicator for Raspberry Pi Pico GPIO. Turn on when the GPIO state is high.																									
<b>WS2812B RGB LED</b>	User programmable WS2812B RGB LED. Connected to GP28.																									
<b>GPIO Breakout</b>	Breakout of the Raspberry Pi Pico GPIO pins. * MAKER-PI-PICO = Male Pin Headers * MAKER-PI-PICO-NB = Female Pin Headers																									
<b>Debugging Port Breakout</b>	Breakout of the Raspberry Pi Pico debugging port.																									
<b>Reset Button</b>	Press to reset the Raspberry Pi Pico.																									
<b>Programmable Buttons</b>	Connected to pin GP20, GP21 and GP22 respectively. Accessible from the user program. * Rev1.0.0 to 1.1.0 = To enable internal pull-up in software. * Rev1.2.0 = Pulled-up permanently on hardware with debouncing capacitor.																									
<b>Piezo Buzzer</b>	Can be used to play tone or melody. Connected to GP18.																									
<b>Buzzer Mute Switch</b>	Used to mute the piezo buzzer.																									
<b>Audio Out</b>	Non amplified audio output. Can be connected to an earphone or amplified speaker. ● Left Channel : GP18 ● Right Channel : GP19																									
<b>ESP-01 Socket</b>	Socket for ESP-01 WiFi module. Can be used to IoT-enable your project.																									
<b>Micro SD Card Socket</b>	Socket for micro SD Card. <table border="1" data-bbox="568 1448 1325 1852"> <thead> <tr> <th rowspan="2">Raspberry Pi Pico GPIO</th> <th colspan="2">SD Card</th> </tr> <tr> <th>SD Mode</th> <th>SPI Mode</th> </tr> </thead> <tbody> <tr> <td>GP10</td> <td>CLK</td> <td>SCK</td> </tr> <tr> <td>GP11</td> <td>CMD</td> <td>SDI</td> </tr> <tr> <td>GP12</td> <td>DAT0</td> <td>SDO</td> </tr> <tr> <td>GP13</td> <td>DAT1</td> <td>X</td> </tr> <tr> <td>GP14</td> <td>DAT2</td> <td>X</td> </tr> <tr> <td>GP15</td> <td>CD/DAT3</td> <td>CSn</td> </tr> </tbody> </table>			Raspberry Pi Pico GPIO	SD Card		SD Mode	SPI Mode	GP10	CLK	SCK	GP11	CMD	SDI	GP12	DAT0	SDO	GP13	DAT1	X	GP14	DAT2	X	GP15	CD/DAT3	CSn
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* Unused pins must be configured as internal pull-ups.																										
<b>Pi Pico Socket</b> *MAKER-PI-PICO-NB only	Socket for Raspberry Pi Pico. Can be used with <a href="#">Raspberry Pi Pico with Pre-soldered Headers</a> .																									

Table 1: MAKER-PI-PICO &amp; MAKER-PI-PICO-NB Board Functions

## 2. RASPBERRY PI PICO PINOUT DIAGRAM

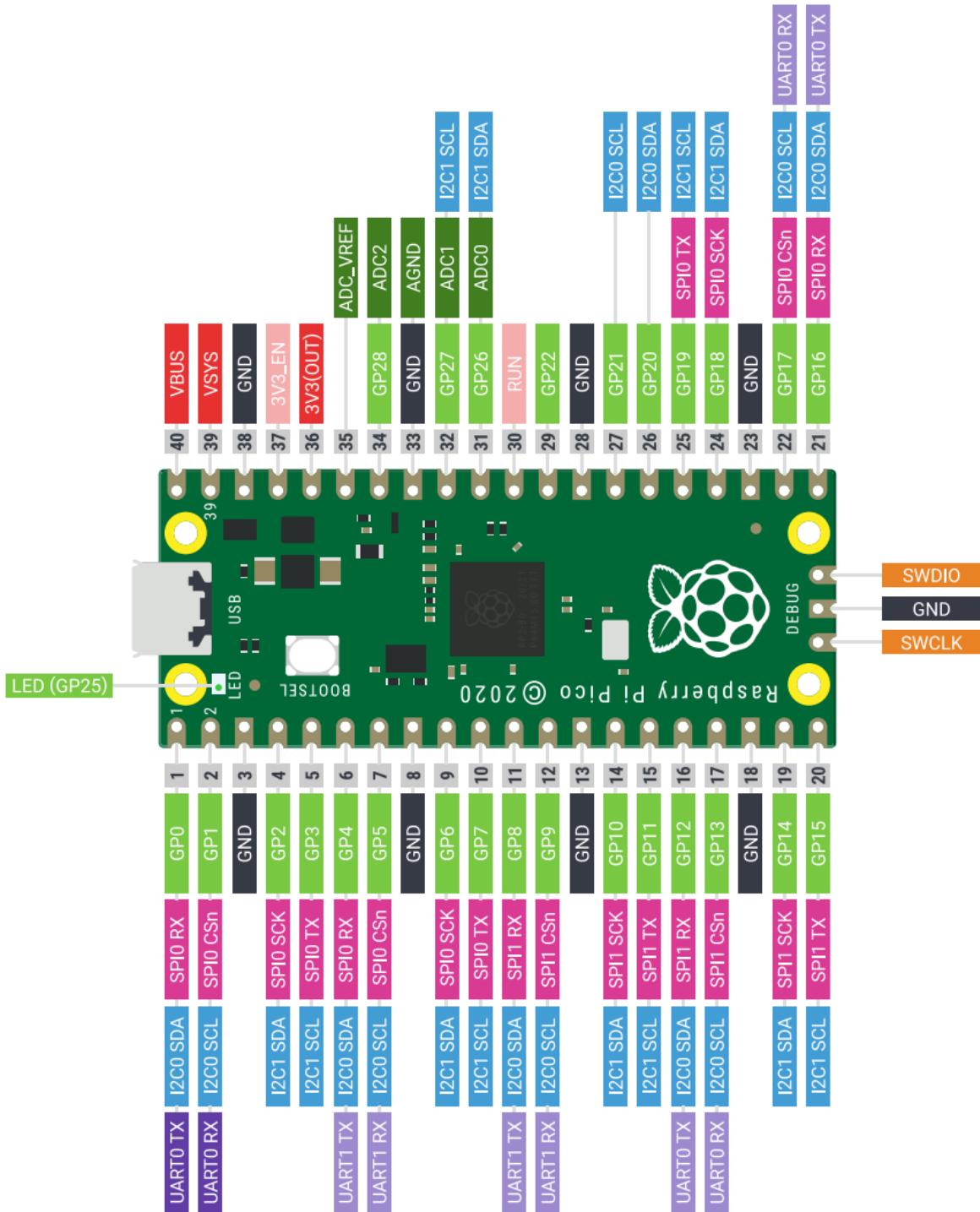


Figure 3: Raspberry Pi Pico Pinout Diagram

### 3. SPECIFICATIONS

No	Parameters		Min	Max	Unit
1	Power Input Voltage (USB)		4.5	5.5	VDC
2	Digital Input Voltage	Low Level	-0.3	0.8	V
		High Level	2.0	3.6	V
3	Digital Output Voltage	Low Level	0	0.5	V
		High Level	2.62	3.3	V
4	Analog Input Voltage		0	3.3	V
5	Operating Temperature		-20	85	°C

Table 2: MAKER-PI-PICO Absolute Maximum Ratings

## 4. DIMENSION

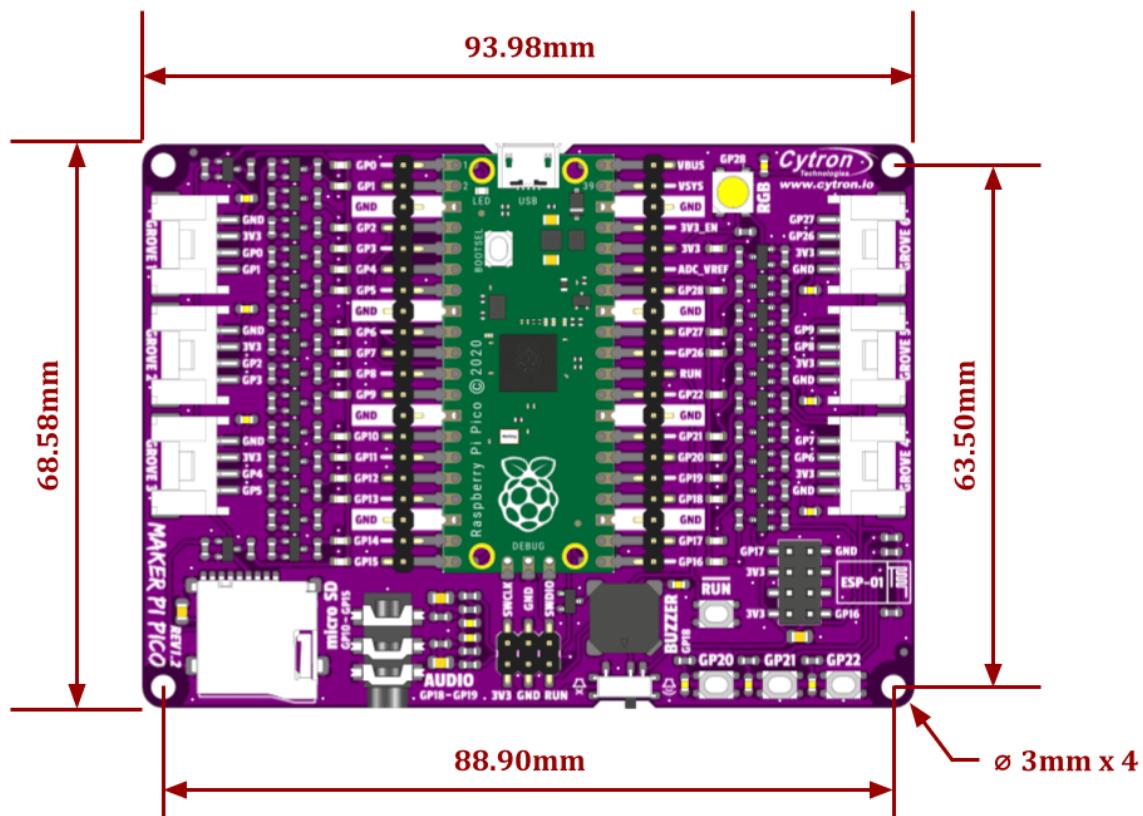


Figure 4: MAKER-PI-PICO Dimension

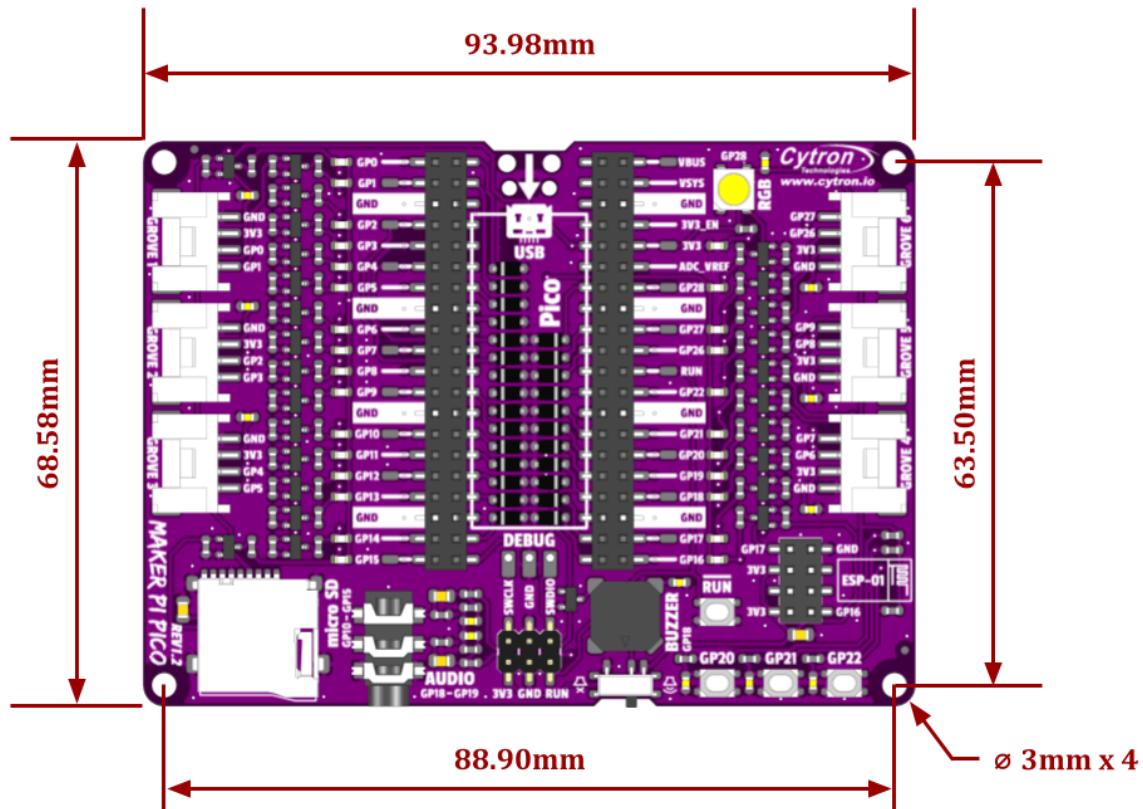


Figure 5: MAKER-PI-PICO Dimension

*Prepared by:*

**Cytron Technologies Sdn Bhd**  
[www.cytron.io](http://www.cytron.io)

No. 1, Lorong Industri Impian 1,  
Taman Industri Impian,  
14000 Bukit Mertajam,  
Penang, Malaysia.

*Tel:* +604 - 548 0668  
*Fax:* +604 - 548 0669

*Email:*  
[support@cytron.io](mailto:support@cytron.io)  
[sales@cytron.io](mailto:sales@cytron.io)