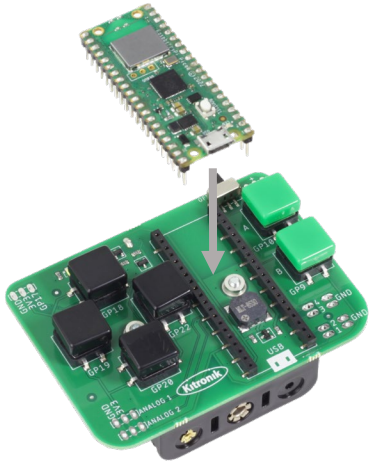
Mini Controller for Pico

The Mini Controller for Pico is a programmable gamepad for the Raspberry Pi Pico. It features a buzzer for audio feedback, and 6 input buttons. It also breaks out; GP1, 2, 3, 4, 14, and 17, along with ADC1 and ADC2, and several 3.3V and GND pads, all on 0.1"/2.54mm pitch. The buttons are arranged in a typical Gamepad layout, with 4 directional buttons and two action buttons. The Pico is connected via two low profile 20-way pin sockets.

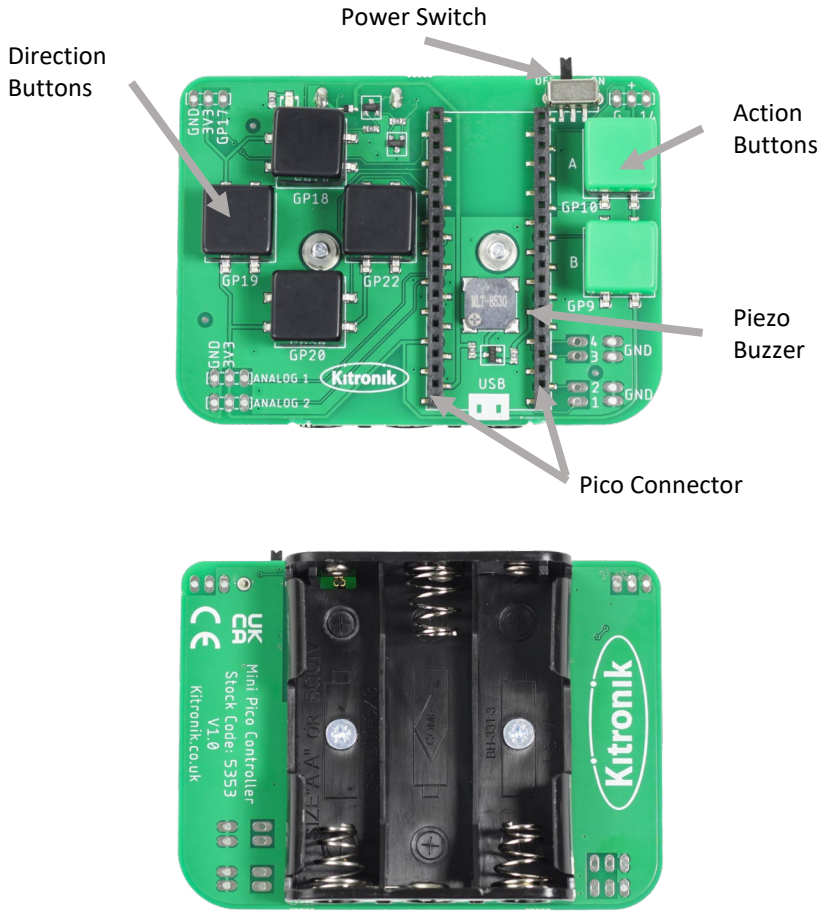


Inserting a Pico: To use the Mini Controller the Pico should have soldered pin header and be inserted firmly into the connector as shown. Note: The Pico pins will stick through the board slightly as the pin sockets are low-profile.

Power is provided via the built-in AA battery holder on the underside of the board which accommodates 3 x AA batteries.

Example Pico Code:

Kitronik have developed a micro-python module and sample code to support the use of the Mini Controller for Pico.
This code is available in the GitHub repo at:
https://github.com/KitronikLtd/Kitronik-Pico-Mini-Controller-MicroPython



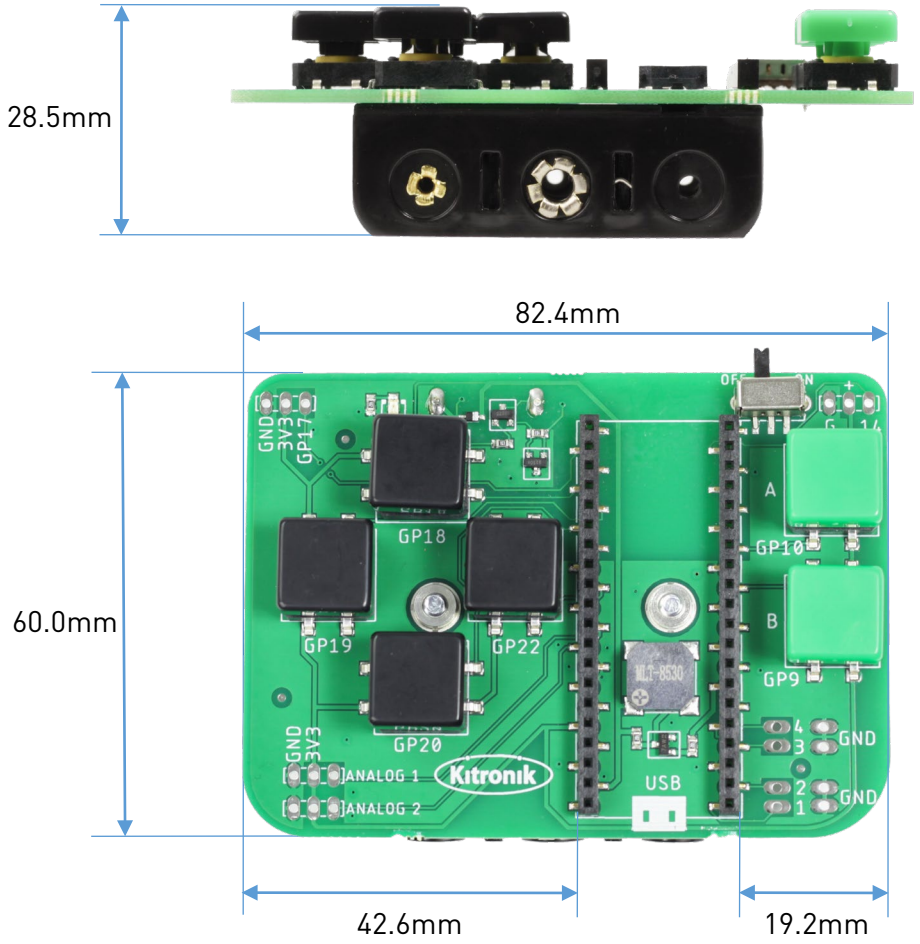
Electrical Information

Attribute	Value
Operating Voltage (Vcc) [ZIP LEDs, Buzzer]	+3.5V – +5.5V
Regulated Voltage (from Pico) [Buttons, Vibration Motor]	+3.3V
Max Current (excluding Pico & buzzer)	4mA
Typical current in use (Normal use – Pico but buzzer off)	25mA
Typical current with Pico present & buzzer driven	80mA
Number of Pin Breakouts	8 (6 x Digital GPIO, 2 x ADC, several 3.3V & GND)

Pin Mapping

Up button	GP18
Down button	GP20
Left button	GP19
Right button	GP22
A button	GP10
B button	GP9
Buzzer	GP5

Dimensions



(Dimensions +/- 0.5mm)