

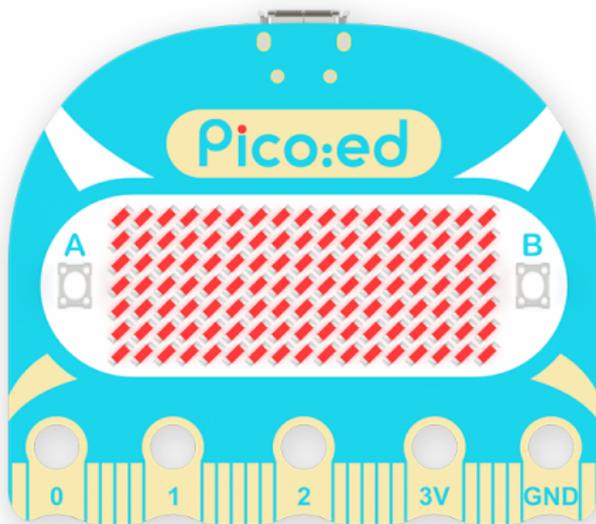
Pico:ed V2

Contents

- [10.1. Introduction](#)
- [10.2. Related Links](#)
- [10.3. Specifications](#)
- [10.4. Function Introduction](#)

10.1. Introduction

[Pico:ed V2](#) is an educational development board developed by ELECFREAKS based on Raspberry Pi Pico. [Pico:ed V2](#) is based on the acclaimed RP2040 microcontroller which is the most popular microcontroller in the world, and we have added the resets button to make it easier for users to operate. [Pico:ed V2](#) adopts a more rounded shape design: the head is changed to an arc, and the pin edge adopts a wavy beautiful design so that users are less likely to hurt their hands when using it. It is also good to see that there are more choices to the colors of the LED screen which are able to meet the demands for personalization on [Pico:ed V2](#). [Pico:ed V2](#) retains two programmable buttons and a firmware burn-in button, a separate power supply, USB connection ports, and an onboard 7 x 17 LED dot matrix screen for additional graphics and text display. [Pico:ed V2](#) uses CircuitPython or C++ programming method, you can learn to program it alone or you can play it with other educational products from our company, such as Ring:bit Car V2, Cutebot Car V3, Starter Kit, and so on! Start your inventive and creative thinking while playing it!



10.2. Related Links

Purchase: [ELECFREAKS Pico:ed V2](#)

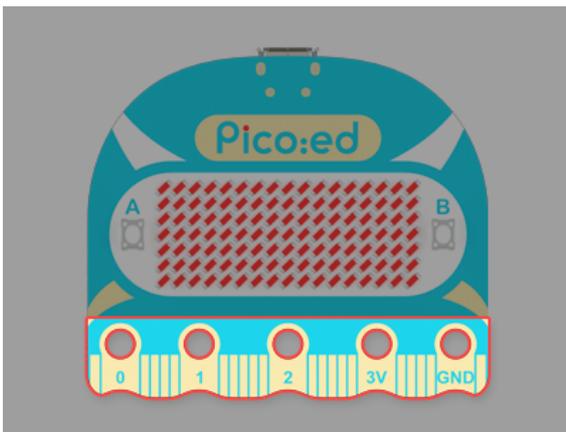
10.3. Specifications

Item	ELECFREAKS Pico:ed V2
Microcontroller	RP2040
Random Access Memory	264KB of SRAM
Flash Memory	2MB Flash storage
Universal Input/Output	19-pin Universal edge connector
	4 × Analog inputs
	3 × GPIO alligator clip connector
	2 × IIC interfaces
	2 × SPI interfaces
	2 × UART interfaces
Programmable Buttons	2 Units
LED Matrix	7 × 17 LED matrix screen
Buzzer	1 X Passive buzzer
Size	52 × 42mm
Power Supply	USB or 2* AAA batteries
Maximum input voltage at USB	6.5V
Goldfinger maximum input voltage	3.3V
Programming Methods	CircuitPython/C++

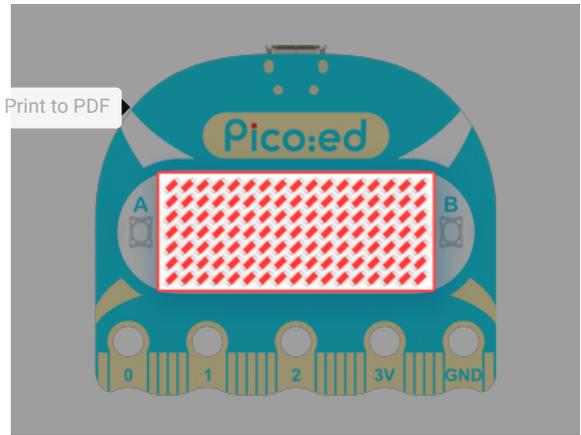
10.4. Function Introduction

Pins

Pins are used as a way to physically connect to externally connected components and can be combined with the corresponding expansion boards or crocodile clip cables introduced by ELECFREAKS to extend the usability of the Pico:ed V2 even more. For detailed tutorials, please see: [Digitalio Module - Basic Digital Pin Support](#)

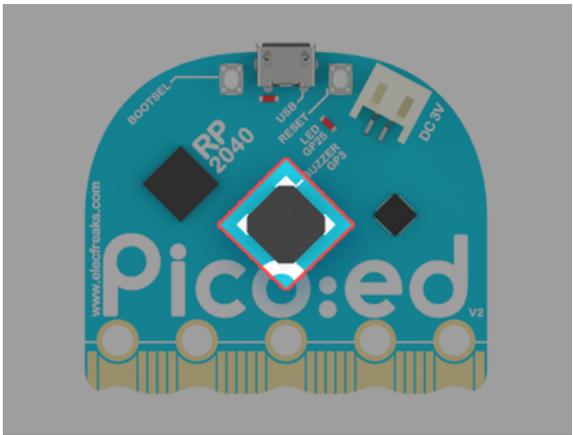


Pin Diagram



Buzzer

The buzzer is used in many devices as a common output device and can be programmed to control it to play different kinds of music. For detailed tutorials, please see: [Music](#)



By ELECFREAKS Team

© Copyright 2022, ELECFREAKS Team.