



## Description:

ADIY FLY RP2040 Type C comes with a large on-chip memory, symmetric dual-core processor complex, deterministic bus fabric, and rich peripheral set augmented with a unique Programmable I/O (PIO) subsystem, RP2040 provides professional users with unrivalled power and flexibility. ADIY FLY pairs RP2040 with 4MB of Flash memory, and a power supply chip supporting input voltages from 3.3-5.5V. It provides 27 GPIO pins, 4 of which can function as analogue inputs, on 2.54mm-pitch through-hole pads. The RESET button on ADIY FLY makes the usage of module easy. On Board LED is added to indicate the power supply.

RP2040 is manufactured on a modern 40nm process node, delivering high performance, low dynamic power consumption, and low leakage, with a variety of low-power modes to support extended-duration operation on battery power.

## Features:

1. Pin to Pin as Compatible as Raspberry Pi Pico
2. Type C connector
3. With RESET Button
4. With 4MB FLASH memory
5. Dual-core Arm Cortex-M0+ processor, flexible clock running up to 133 MHz
6. 264KB on-chip SRAM
7. DMA controller

8. Accelerated integer and floating-point libraries on-chip
9. Drag-and-drop programming using mass storage over USB
10. 2 on-chip PLLs to generate USB and core clocks
11. 27 GPIO pins, 4 of which can be used as analog inputs
12.  $2 \times$  UART,  $2 \times$  SPI controllers,  $2 \times$  I2C controllers,  $16 \times$  PWM channels
13.  $1 \times$  USB 1.1 controller and PHY, with host and device support
14. Accurate on-chip clock, Temperature sensor
15.  $8 \times$  Programmable I/O (PIO) state machines for custom peripheral support
16. High quality, low cost, high availability
17. Simple yet highly flexible power supply architecture
18. Various options for easily powering the unit from micro-USB, external supplies, or batteries
19. Comprehensive SDK, software examples and documentation

### Specifications:

- USB Connector: Type C
- Form factor:  $21 \text{ mm} \times 51 \text{ mm}$
- CPU: Dual-core Arm Cortex-M0+ @ 133MHz
- Memory: 264KB on-chip SRAM; 4MB on-board Flash
- Interfacing: 27 GPIO pins, including 4 analogue inputs
- Peripherals:
  - $2 \times$  UART.
  - $2 \times$  SPI controllers
  - $2 \times$  I2C controllers
  - $16 \times$  PWM channels
  - $1 \times$  USB 1.1 controller and PHY, with host and Device support
  - $8 \times$  PIO state machines
- Input power: 3.3–5.5V DC.
- Reset button: Included