IO Expansion HAT for Raspberry Pi Zero/Zero W

DFR0604
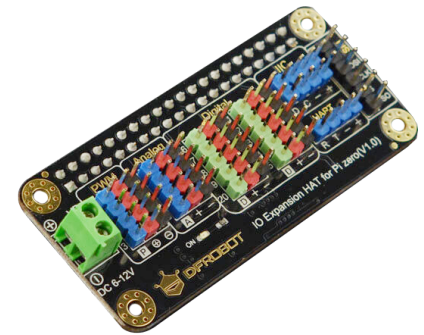
Product Overview

07-15-2022
For the most up-to-date information, visit www.mouser.com or the supplier's website.

Description

DFRobot IO Expansion HAT for Raspberry Pi Zero and Zero W (DFR0604) is designed to provide digital, analog, I^2C, PWM, UART, and SPI ports. The board leads out the I/O ports on Raspberry Pi including I^2C, UART, SPI, and digital, among which the digital ports are led out via the GPIO16 to GPIO25 (BCM) of Raspberry Pi, so these ports can be used directly.
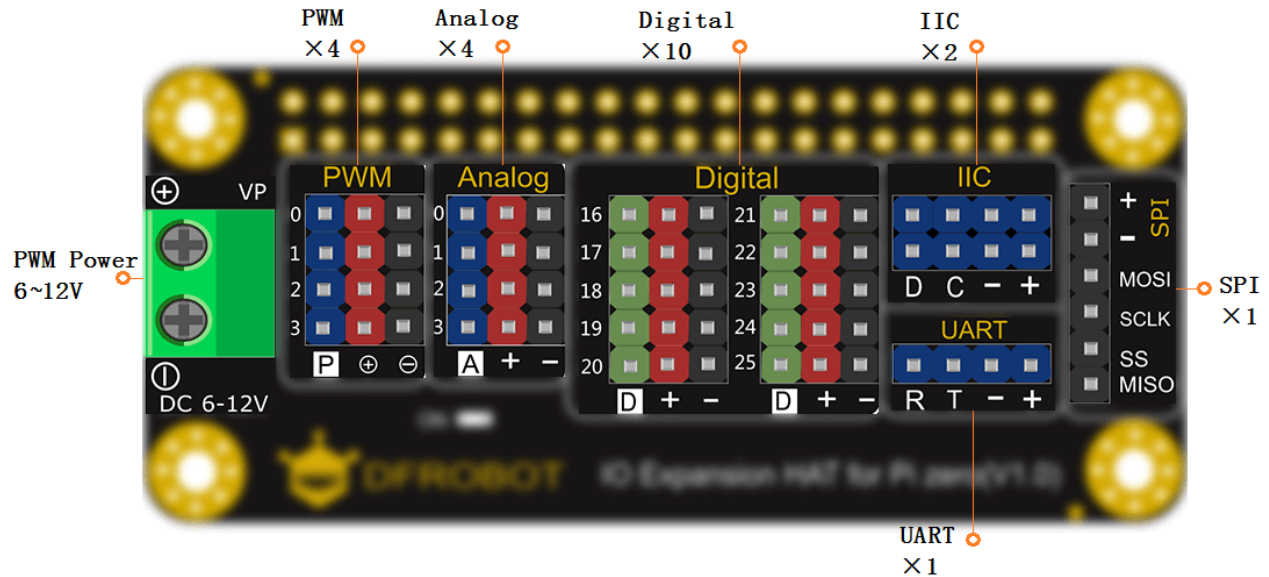

The PWM and analog ports that lead out through the onboard MCU STM32 can communicate with Raspberry Pi via I^2C. This expansion board supports a 5V power supply and 3.3V sensor modules, it's PWM port can be powered by external power (6V to 12V) or Raspberry Pi (5V). The IO expansion HAT is compact and can be conveniently used in Raspberry Pi to control PWM output or read ADC input.
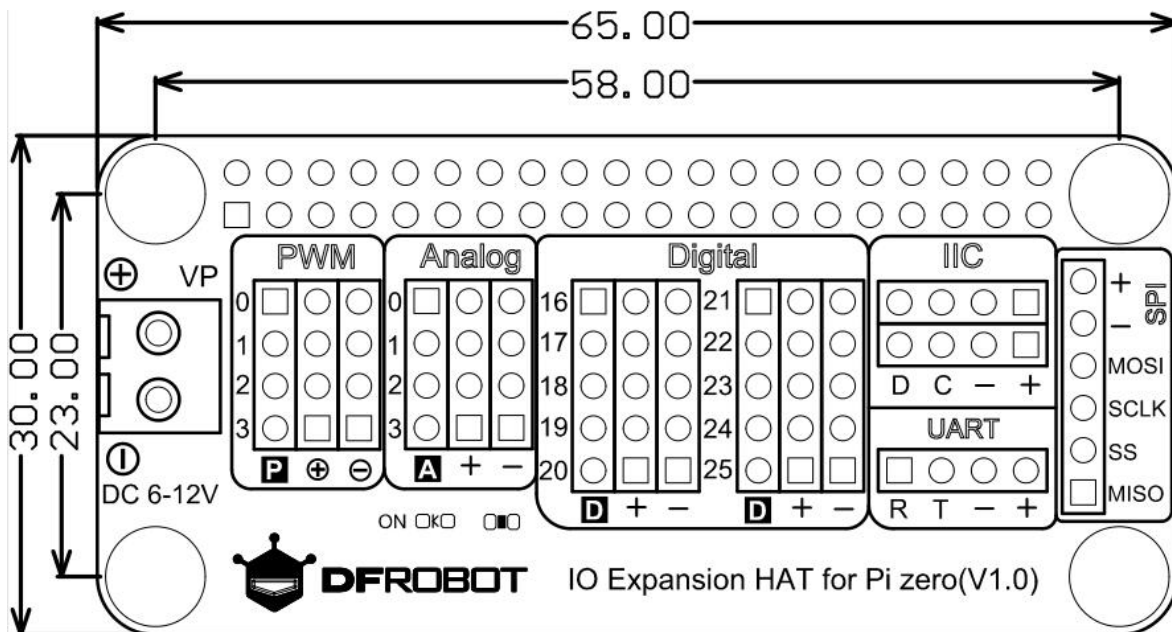
Features

- Compatible with Raspberry Pi 2/3/4 Model B/B+ and Zero/Zero W
- On-board STMicroelectronics STM32 Microcontroller provides 12-bit 8-channel ADC
- Multiple servo control
- Dual power options:
    - 5V expansion HAT power voltage
    - 6V to 12V PWM external power
    - 3.3V expansion HAT port output voltage
- 22 ports: 4 PWM ports
- 4 analog ports
- 10 digital ports
- 1 SPI, 2 I^2C ports
- 1 UART
- 0x10 device address
- 65mm x 30mm dimensions

Board Layout

Board Dimensions

Mouser Part Number

[View Part](#)

To learn more, visit https://www.mouser.com/new/dfrobot/dfrobot-io-expansion-hat-pi-zero/