

FireBeetle ESP32-E IoT Microcontroller

DFR0654

Product Overview

11/10/2022

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

Description

DFRobot DFR0654 FireBeetle ESP32-E IoT Microcontroller is designed for IoT and is an ESP-WROOM-32E-based main controller board with dual-core chips. This FireBeetle supports WiFi®, Bluetooth® dual mode communication, and Arduino programming. The ESP32-E IoT microcontroller features a small size, ultra-low power consumption, an onboard charging circuit, and an easy-to-use interface. Typical applications include smart home IoT, industrial IoT, and wearable devices.



Features

- ESP32 dual-core low power maincontroller with 10 μ A power consumption
- WiFi® + Bluetooth® 4.0 dual-mode module
- GDI display port for easy connection
- On-board charging circuit and PH2.0 lithium battery interface
- Wi-Fi protocol:
 - 802.11 b/g/n/d/e/i/k/r (802.11n, speed up to 150Mbps)
 - A-MPDU and A-MSDU aggregation support 0.4 μ s guard interval)
- 2.4GHz to 2.5GHz frequency range
- Bluetooth v4.2 BR/EDR and BLE standard compliant Bluetooth protocol
- CVSD and SBC Bluetooth audio
- 80mA average operating current
- 2.54mm pin pitch

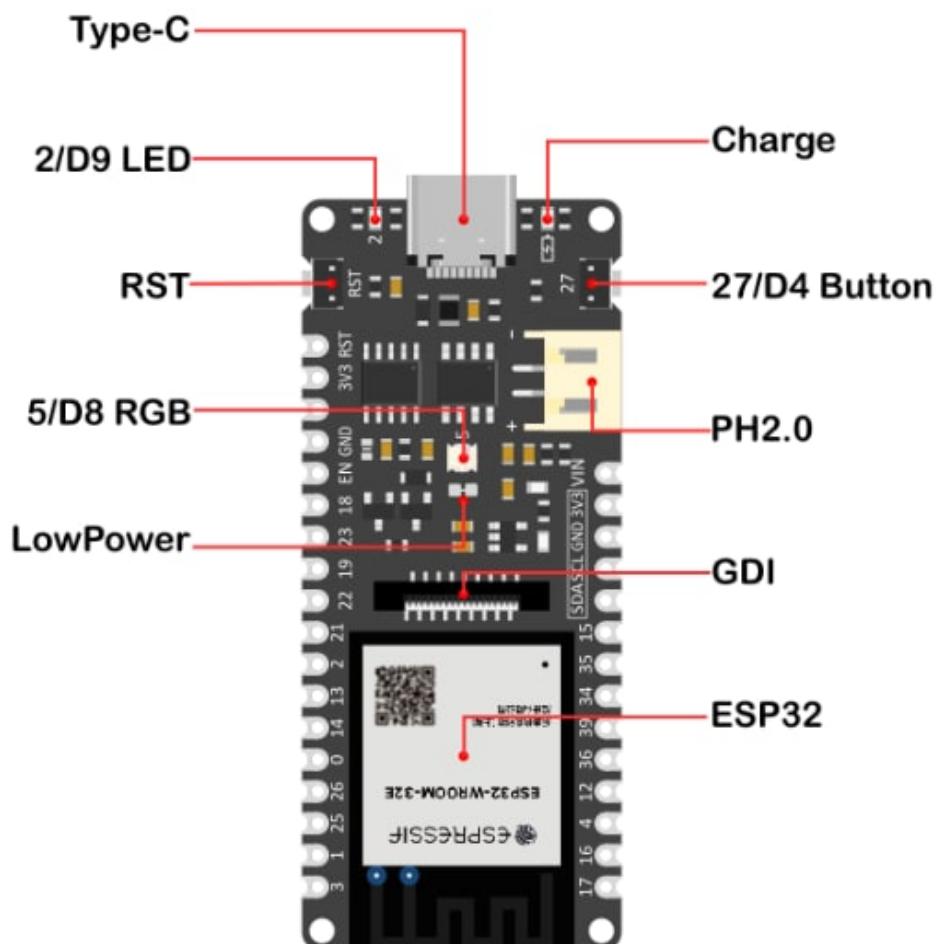
Kit Contents

- 1 x FireBeetle 2 board ESP32-E
- 1 x 18pin-2.54mm pitch pin
- 1 x 18pin-2.54mm pitch pin female
- 1 x 14pin-2.54mm pitch pin
- 1 x 14pin-2.54mm pitch pin female

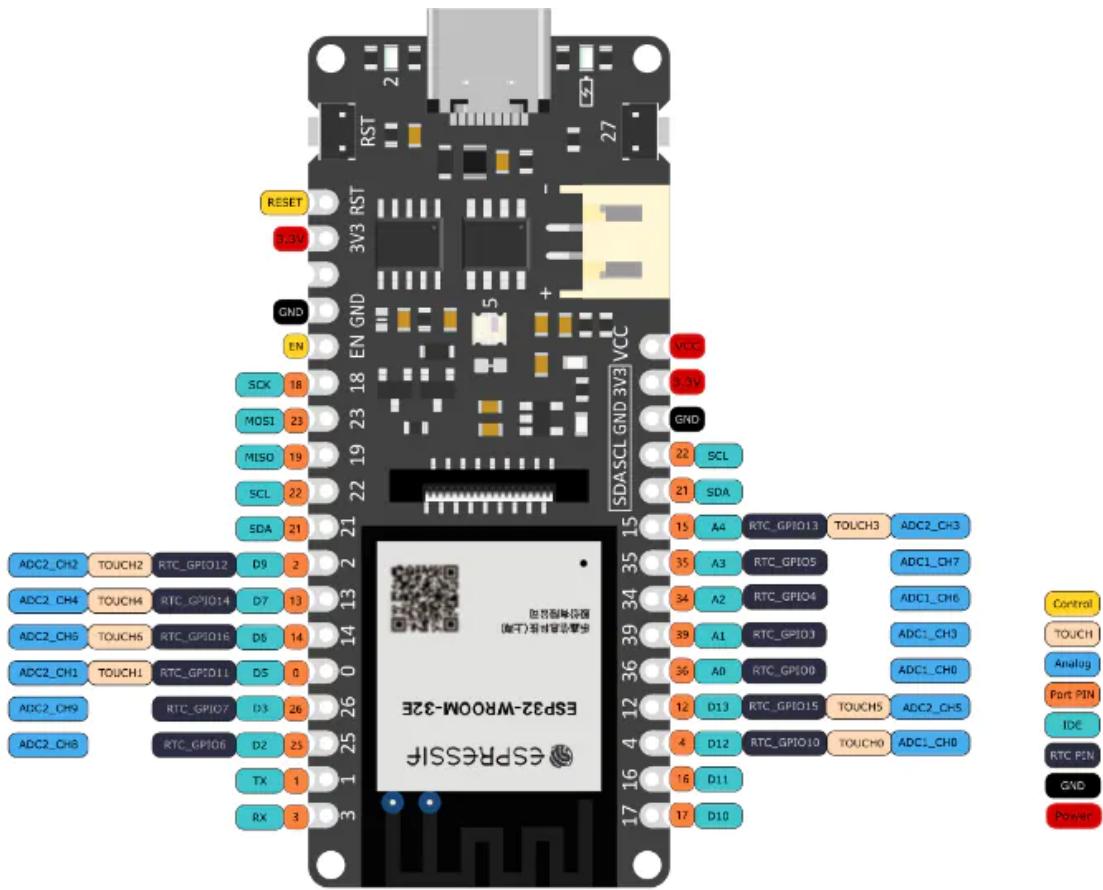
Specifications

- 3.3V operating voltage
- 3.3V to 5.5V input voltage range
- 10µA support low power
- 600mA at 3.3V LDO maximum discharge current
- 500mA maximum charge current
- 240MHz main frequency
- -40°C to 85°C operating temperature range
- 25.4mm x 60mm board dimensions

Board Overview



Pinout



Mouser Part Numbers

[View All Parts](#)

To learn more, visit <https://www.mouser.com/new/dfrobot/dfrobot-dfr0654-firebeetle/>