SKU:DFR1075 (https://www.dfrobot.com/product-2771.html)

(https://www.dfrobot.com/product-2771.html)

Introduction

FireBeetle 2 ESP32-C6 is a low-power IoT main control board designed based on the ESP32-C6 chip. It is suitable for smart home projects. The ESP32-C6 supports communication protocols such as Wi-Fi 6, Bluetooth 5, Zigbee 3.0, and Thread 1.3, enabling connectivity to various IoT networks. FireBeetle 2



ESP32-C6 supports Type-C, 5V DC, and solar power, providing more options for power supply during deployment.

Multiple protocol support for expanded wireless connectivity

FireBeetle 2 ESP32-C6 supports Wi-Fi and Thread communication protocols, allowing seamless communication and collaboration between Matter Wi-Fi terminal devices and Matter Thread terminal devices in multi-system, multi-platform smart home setups. Additionally, FireBeetle 2 ESP32-C6 also supports BLE and Zigbee communication protocols, enabling it to serve as a Thread border router, Matter gateway, and Zigbee bridge when combined with other MCUs.

Wi-Fi 6 support for ultra-low-power IoT devices

ESP32-C6 is Espressif's first chip to support the Wi-Fi 6 (802.11ax) protocol. Wi-Fi 6 offers improved network capacity, enabling devices to work with higher efficiency and lower latency. Moreover, Wi-Fi 6's Target Wake Time (TWT) technology effectively reduces device power consumption, extends battery life, and enables long-lasting device operation.

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Excellent power system for convenient device power supply

FireBeetle 2 ESP32-C6 integrates lithium battery charging management, allowing the lithium battery to be charged via Type-C, 5V DC, and solar panels. Solar charging solves the problem of deploying devices in scenarios without power lines, such as balconies, windows, and rooftops. FireBeetle 2 ESP32-C6 uses the same solar power management chip as the Solar Power Manager 5V (https://www.dfrobot.com/product-1712.html) and has a maximum power point tracking MPPT algorithm that can maximize the output power of the solar panel under various lighting conditions.FireBeetle 2 ESP32-C6 also supports battery level monitoring to take measures when the battery is low, ensuring continuous device operation.

If you encounter difficulties with programming, please refer to the FAQ (https://wiki.dfrobot.com/SKU_DFR1075_FireBeetle_2_Board_ESP32_C6#target_9) section.

Features

- Equipped with the ESP32-C6 chip, it supports communication protocols including Wi-Fi, BLE, Zigbee, and Thread.
- Supports Wi-Fi 6 protocol for lower latency and lower power consumption.
- Solar charging enables deployment without the need for power lines.
- Battery level detection allows monitoring of device battery information.
- Ultra-low power consumption with deep sleep at 16uA.
- Onboard GDI interface for easy connection to screens.

Specification

- Basic Parameters
 - Operating Voltage: 3.3V
 - Type-C Input Voltage: 5V DC
 - VCC Input Voltage: 5V DC or 4.5-6V Solar Panel

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- Max Charging Current: 0.5A
- Sleep current: 16uA (in deep sleep mode, powered by battery)
- Operating Temperature: -10~60°C
- Dimension: 25.4x60mm/1x2.36"
- Hardware Information
 - Processor: RISC-V single-core processor
 - Main Frequency: 160 MHz
 - SRAM: 512KB
 - ROM: 320KB
 - Flash: 4MB
 - RTC SRAM: 16KB
 - USB: USB 2.0 CDC
- WIFI
 - WIFI Protocol: IEEE 802.11b/g/n
 - IEEE 802.11ax (20 MHz-only non-AP mode)
 - Bandwidth: Support 20 MHz and 40 MHz at 2.4 GHz band
 - WIFI Mode: Station, SoftAP, SoftAP+Station combined mode
 - WIFI Frequency: 2.4GHz



Firebeetle 2 Board ESP32-C6 Microcontroller Wiki - DFRobot

-22.00mm-

25.40mm

- Frame Aggregation: TX/RX A-MPDU, TW/RX A-MSDU
- Bluetooth
 - Bluetooth Protocol: Bluetooth 5, Bluetooth mesh
 - Bluetooth Frequency: 125 Kbps, 500 Kbps, 1 Mbps, 2 Mbps
- IEEE 802.15.4
 - Compatible with IEEE 802.15.4-2015 protocol
 - Frequency band: 2.4GHz
 - Data rate: 250Kbps
 - Supports Thread 1.3 and Zigbee 3.0
- Ports
 - Digital I/O x19
 - LED PWM 6 Channel
 - SPI x1
 - UART x3 (LP UART x1)
 - I2C x2 (LP I2C x1)
 - I2S x1
 - IR Transceiver: transmit channel x5, receive channel x5
 - 1 × 12-bit SAR ADC, 7 Channel
 - DMA Controller: transmit channel x3, receive channel x3



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- Type-C:Type-C USB port
- IO15/D13:onboard LED pin
- Charge: Charging indicator
 - Off: not plugged in power supply or fully charged
 - On: charging
 - Blinking: battery not connected
- RST: Reset button
- IO9/D9/BOOT: GPIO9 / Boot button
- HM6245

(https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/6f630301d84caf0e92266e3c5cf11e dc.PDF): 3.3V Low power LDO

- BAT:Lithium ion battery or lithium polymer battery interface
- IOO: Battery voltage detection pin
- CN3165

(https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/85759bb076bf6bb24fd8ca5683f19 603.pdf): Solar management chip

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- GDI: GDI display interface
- ESP32-C6

(https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/5eeffd974782b6cc442f7a2ee7f005 77.pdf): ESP32-C6FH4 chip

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Pin Definition

- Power: Power pin
 - VIN: 5V DC or 4.5-6V Solar Panel
 - 3V3: 3.3V stable output
- GND: common ground pin
- GPIO: ESP32 default GPIO number
- Arduino: FirebBeetle 2 ESP32-C6 GPIO mapping in Arduino
- ADC: ESP32 default analog-to-digital conversion pin
- I2C: I2C interface
 - FirebBeetle 2 ESP32-C6 I2C mapping in Arduino
 - LP_SDA/SCL: Low power I2C pin
- UART: UART interface
 - LP_TX/RX: Low power UART pin
- SPI: FirebBeetle 2 ESP32-C6 SPI mapping in Arduino
- SDIO: ESP32 default SDIO pin
- JTAG: debug interface

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Connect Solar Panels

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GDI Display Interface

This interface is a DFRbot dedicated GDI display interface for connecting a screen using a 18pin-FPC wire.

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| The | nin li | st for | usina | GDL | camera | interfa | ice is | shown | below. |
|-----|--------|--------|-------|-----|--------|---------|--------|-----------|--------|
| THC | pnin | 31101 | using | | camera | interic | | 3110 1011 | DCIOW. |

| FPC PINS | FireBeetle 2 ESP32-C6 Pins | Description |
|----------|----------------------------|--------------------------|
| VCC | 3V3 | 3.3V |
| LCD_BL | 15/D13 | Backlight |
| GND | GND | GND |
| SCLK | 23/SCK | SPI clock |
| MOSI | 22/MOSI | Host output, slave input |
| MISO | 21/MISO | Host input, slave output |
| LCD_DC | 8/D2 | Data/command |
| LCD_RST | 14/D3 | Reset |
| LCD_CS | 1/D6 | TFT Chip Select |
| SD_CS | 18/D7 | SD card chip select |
| FCS | NC | Font library chip select |
| TCS | 6/D12 | Touch chip select |
| SCL | 20/SCL | I2C clock |
| SDA | 19/SDA | I2C data |

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| | FPC PINS | FireBeetle 2 ESP32-C6 Pins | Description | | |
|--|----------|----------------------------|----------------|--|--|
| | INT | 7/D11 | INT | | |
| | BUSY | NC | Tearproof pins | | |
| | X1 | NC | custom pin 1 | | |
| | X2 | NC | custom pin 2 | | |

When using FPC to connect the screen, please configure the corresponding pin numbers according to the GDL demo. Normally, only three pins need to be configured on different main controllers.

Displays that support GDI:

- 1.54" 240x240 IPS wide viewing angle TFT display (https://www.dfrobot.com/product-2072.html)
- 1.8" 128x160 IPS TFT LCD Display (https://www.dfrobot.com/product-2580.html)
- 2.0" 320x240 IPS wide viewing angle TFT display (https://www.dfrobot.com/product-2071.html)
- 2.8" 320x240 IPS TFT resistive touch display (https://www.dfrobot.com/product-2106.html)
- 3.5" 480x320 IPS TFT capacitive touch display (https://www.dfrobot.com/product-2107.html)
- 1.51" OLED Transparent Display with Converter (https://www.dfrobot.com/product-2521.html)

Tutorial - First Time Use

Arduino IDE Configuration

Please pay attention to the followings when using FireBeetle 2 ESP32-C6 for the first time.

- 1. Add the json link in the IDE
- 2. Download the core of the MCU
- 3. Select the development board and serial port

4. Open the sample code and burn it into the board

1. Open Arduino IDE and click File->Preferences, as shown below.

5. Get to know the serial monitor

Arduino IDE compiler environment config

• Configure URL to the Arduino IDE

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| | | 💿 E | Blink Arduino | 1.8.0 | |
|---|---------------------------|------|-----------------|--------------------|--|
| | 1 | File | Edit Sketch | Tools Help | |
| | e | | New | Ctrl+N | |
| | Introduction | | Open | Ctrl+O | |
| | | | Open Recent | | Figure 1 and the second s second second s Second second s Second second seco |
| | Features | | Sketchbook | | • |
| | Specification | | Examples | | • |
| | Board Overview | | Close | Ctrl+\W | econd, then off for one second, repeatedly. |
| | Pin Diagram | | Save | Ctrl+S | I TED war and and a charlen MECA and TEDO |
| | Tutorial – First Time Use | | Save As | Ctrl+Shift+S | ra LED you can control. On the ONO, MEGA and ZENO |
| | Basic Tutorial | | D C · | ou lu cl.'(u p | ent of which board is used. |
| | | | Page Setup | Ctrl+Shift+P | the on-board LED is connected to on your Arduino model, check |
| | | | Print | Ctrl+P | board at <u>https://www.arduino.cc/en/Main/Products</u> |
| | Tutorial for MicroPython | | Preferences | Ctrl+Comma |] |
| | FAQ | | 0 | auto a | public domain. |
| | More Documents | 12 | Quit | Ctrl+Q | |
| - | | 14 | hr Scott Fit | ay 2014 zeerold | |
| | | 15 | by 50000 110 | sect and | |
| > | | 16 | modified 2 S | ep 2016 | |
| | | 17 | by Arturo Gu | adalupi | |
| | | 18 | | | |
| | 1 | 19 | modified 8 S | ep 2016 | |
| | | 20 | by Colby New | man | |
| | ء د | 21 | */ | | |
| | - | 23 | | | |
| | | 24 | // the setup f | unction runs o | nce when you press reset or power the board |
| | ×. | 25 | void setup() { | | |
| | 1 | 26 | // initializ | e digital pin | LED_BUILTIN as an output. |
| | | 27 | pinMode (LED_ | BUILTIN, OUTPU | I); |
| | | 28 | } | | |
| | I | 29 | | | |

2. In the newly opened interface, click the button in the red circle as shown below

| | Settings Network | | | | | |
|---------------------------|---|--|--|--|--|--|
| | Sketchbook location: | | | | | |
| | C:\Users\Fman\Documents\Arduino Brows | | | | | |
| Introduction | Editor language: | English (English) v (requires restart of Arduino) | | | | |
| Features | Editor font size: | 19 | | | | |
| Specification | Interface scale: | Automatic 100 🔿 % (requires restart of Arduino) | | | | |
| Board Overview | Theme: | Default theme \checkmark (requires restart of Arduino) | | | | |
| Pin Diagram | Show verbose output during: | compilation upload | | | | |
| Tutorial – First Time Use | Compiler warnings: | None 🗸 | | | | |
| Basic Tutorial | 🗹 Display line numbers | 🗹 Enable Code Folding | | | | |
| Advanced Tutorial | ☑ Verify code after upload | d Use external editor | | | | |
| Tutorial for MicroPython | 🗹 Check for updates on sta | artup 🔽 Save when verifying or uploading | | | | |
| FAQ | Use accessibility featur | res | | | | |
| More Documents | Additional Boards Manager UF | RLs: 2_dev_index.json, http://download.dfrobot.top/FireBeetle/package_DFRobot_index.json (🕞) | | | | |
| | More preferences can be edited directly in the file | | | | | |
| | C:\Users\Fman\AppData\Local | \Arduino15\preferences.txt | | | | |
| | (edit only when Arduino is r | not running) | | | | |

3. Copy the following link into the new pop-up dialog box:

Stable version: https://espressif.github.io/arduino-esp32/package_esp32_index.json (https://espressif.github.io/arduino-esp32/package_esp32_index.json) Development release: https://espressif.github.io/arduino-esp32/package_esp32_dev_index.json (https://espressif.github.io/arduino-esp32/package_esp32_dev_index.json)

Note:

• Please choose the appropriate version according to Chip Support Situation (https://github.com/espressif/arduino-esp32#supported-chips).

0K

Cancel

• If you have installed another environment before, you can press Enter key at the beginning or end of the previous link and paste the link at a new line.

| | 🐵 Additional Boards Manager URLs 🛛 🕹 | : |
|---------------------------|---|---|
| Introduction | Enter additional URLs, one for each row | |
| Features | https://raw.githubusercontent.com/espressif/arduino-esp32/gh-pages/package_esp32_dev_index.ison | 1 |
| Specification | http://download.dfrobot.top/FireBeetle/package_DFRobot_index.json | |
| Board Overview | | |
| Pin Diagram | | |
| Tutorial – First Time Use | | |
| Basic Tutorial | Click for a list of unofficial boards support URLs | |
| Advanced Tutorial | OK Cancel | |
| Tutorial for MicroPython | | |

4. Click OK. Update the board. Open Tools->Board:->Boards Manager... as shown below:

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5. Boards Manager will automatically update the boards as shown below:



6. After completing the update, you can enter esp32 at the top, select esp32 and click install when the following occurs (It's recommended to install the latest version):



7. Wait for the end of the following progress bar:

| | 💿 Boards Manager | × |
|---------------------------|---|--------|
| | Type All V ESP32 | |
| | DFRobot ESP32 Boards by DERobot version 0.2.1 INSTALLED | ^ |
| Introduction | Boards included in this package: | |
| Features | FireBettle ESP32-E Borad. More Info | |
| Specification | | |
| Board Overview | | |
| Pin Diagram | by Espressif Systems | |
| Tutorial – First Time Use | Boards included in this package: ESP32 Dev Module, WEMOS LoLin32, WEMOS D1 MINI ESP32, | |
| Basic Tutorial | More Info | |
| Advanced Tutorial | Install | ing |
| Tutorial for MicroPython | | |
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| | | ~ |
| | Verifying archive integrity | Cancel |

8. After completing the installation, the list will show that the esp32 has been installed, as shown below:

.

| | 💿 Boards Manager | × |
|---------------------------|---|--------|
| | Type All V ESP32 | |
| | DFRobot ESP32 Boards | ^ |
| Introduction | by DFRobot version 0.2.1 INSTALLED Boards included in this package: | |
| Features | FireBettle ESP32-E Borad, FireBettle ESP32 Borad. More Info | |
| Specification | | |
| Board Overview | | |
| Pin Diagram | esp32 by Espressif Systems version 2.0.0 INSTALLED | |
| Tutorial – First Time Use | Boards included in this package: ESP32 Dev Module, WEMOS LoLin32, WEMOS D1 MINI ESP32, | |
| Basic Tutorial | More Info | |
| Advanced Tutorial | Select version V Install | Remove |
| Tutorial for MicroPython | | |
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| | | ~ |
| | | Close |

2024/5/14 19:08

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9. Click Tools->Board, select DFRobot FireBeetle 2 ESP32-C6.

| | Sketch Janiza | Arduno 1.6.19 | | | |
|---------------------------|-------------------------|---|--------------|--------------------|---------------------------------|
| | File Edit Sketch To | ools Help | | | |
| | | Auto Format | Ctrl+T | | |
| | | Archive Sketch | | | |
| | sketch_jan12a | Fix Encoding & Reload | | | |
| Introduction | 1 void s | Manage Libraries | Ctrl+Shift+I | | |
| Fosturos | 2 // p | Serial Monitor | Ctrl+Shift+M | | |
| l'edules | 3 | Serial Plotter | Ctrl+Shift+L | | |
| Specification | 4 } | WiFi101 / WiFiNINA Firmware Updater | | | |
| Board Overview | 5 | Board: "DFRobot FireBeetle 2 ESP32-C6" | 2 | Boards Manager | |
| | 6 void 1 | Upload Speed: "921600" | 3 | Arduino AVR Boards | |
| Pin Diagram | 7 // p | USB CDC On Boot: "Enabled" | 3 | ESP32 Arduino | DFRobot Beetle ESP32-C3 |
| Tutorial – First Time Use | 8 | CPU Frequency: "160MHz (WiFi)" | > | | DFRobot Beetle ESP32-C6 |
| | 0 1 | Flash Frequency: "80MHz" | > | | FireBeetle 2 ESP32-E |
| Basic Tutorial | - I | Flash Mode: "QIO" | > | | DFRobot Firebeetle 2 ESP32-S3 |
| | | Flash Size: "4MB (32Mb)" | > | | DFRobot FireBeetle 2 ESP32-C6 |
| Advanced Lutorial | | Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS) | · · · · · | | DFRobot Romeo ESP32-S3 |
| Tutorial for MicroPython | | Core Debug Level: "None" | > | | FireBeetle-ESP32 |
| FΔQ | 10 Defense to | | | | |
| | IU. Before stal | rting, you need to configure the followi | ng setting | gs (when you se | elect Disabled, the serial port |
| More Documents | is RX(17), ⁻ | TX(16), if you need to print on the Ardu | ino monit | or via USB, yoι | I need to select Enable) |

| | 🥯 sk | etch_jan12 | 2a | Arduino 1.8.19 | | | | |
|---------------------------|------------------|------------|----|--|--------------|--|--|--|
| | File Edit Sketch | | h | Tools Help | | | | |
| | | | 1 | Auto Format | Ctrl+T | | | |
| | | | | Archive Sketch | | | | |
| Introduction | ske | etch_jan12 | a | Fix Encoding & Reload | | | | |
| Features | 1 | void | s | Manage Libraries | Ctrl+Shift+I | | | |
| Specification | 2 | 11 | q | Serial Monitor | Ctrl+Shift+M | | | |
| Board Overview | 3 | | - | Serial Plotter | Ctrl+Shift+L | | | |
| Pin Diagram | 4 | } | | WiFi101 / WiFiNINA Firmware Updater | | | | |
| Tutorial – First Time Use | 5 | | | Board: "DFRobot FireBeetle 2 ESP32-C6" | > | | | |
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| Tutorial for MicroPython | , o | // | Р | CPU Frequency: "160MHz (WiFi)" | > | | | |
| FAQ | 0 | | | Flash Frequency: "80MHz" | > | | | |
| More Documents | 9 | } | | Flash Mode: "QIO" | > | | | |
| More Documents | - | | | Flash Size: "4MB (32Mb)" | > | | | |
| | | | | Partition Scheme: "Default 4MB with spiffs (1.2MB APP/1.5MB SPIFFS)" | > | | | |
| | | | | Core Debug Level: "None" | > | | | |
| | | | | Erase All Flash Before Sketch Upload: "Disabled" | > | | | |
| | | | | JTAG Adapter: "Disabled" | > | | | |
| | | | | Port: "COM151 (ESP32H2 Dev Module)" | > | | | |
| | | | | Get Board Info | | | | |
| | | | | Programmer | > | | | |
| | 1 | | | Burn Bootloader | | | | |

11. Click Port to select the corresponding serial port.

5.2 LED Blinking

. ...

The default pin for the onboard LED is pin 15.

Sample Code

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```
int led = 15;
void setup() {
    pinMode(led,OUTPUT);
}
void loop() {
    digitalWrite(led,HIGH);
    delay(1000);
    digitalWrite(led,LOW);
    delay(1000);
}
```

- Copy the codes above to the code editing box.
- Click the arrow to complile the program and burn it into your development board.

Burning Successful



The image above shows that your codes have been successfully loaded into the board. Then, the onboard LED will start blinking.

• Burning failed? Click here.

(https://wiki.dfrobot.com/SKU_DFR1075_FireBeetle_2_Board_ESP32_C6#target_9)

Basic Tutorial

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The basic tutorial (https://wiki.dfrobot.com/SKU_DFR1075_FireBeetle_2_Board_ESP32_C6_Basic_Tutorial) includes the use of Battery voltage detection, PWM, interrupt, serial port, servo, and SD card.

Advanced Tutorial

The advanced tutorial (https://wiki.dfrobot.com/SKU_DFR1075_FireBeetle_2_Board_ESP32_C6_Advanced_Tutorial) domenstrates how to use screen, Bluetooth, WiFi, ESP-NOW, one-key for networking config and sample projects.

Tutorial for MicroPython

Build Environment for MicroPython

To run microPython on the FireBeetle 2 ESP32-C6, you need to burn the firmware into FireBeetle 2 ESP32-C6 first.

1.Click to download microPython firmware.

 MicroPython official firmware (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/2ad9b053ae696dbcd307dd27a8acb0b5. zip) (by HonestQiao)

2.Click to download esptool Flash burning tool (https://www.espressif.com/sites/default/files/tools/flash_download_tool_3.9.6_1.zip) 3.Run flash_download_tool.exe

4.Select the ESP32-C6 main controller, than Press Boot, press RST and release both, then try burning again.

| Introduction | | | | | |
|---------------------------|----------------|------------|--------|--------------------|---------------|
| Features | DOWN | - 🗆 | × | | |
| Specification | | ECD32-C3 | ~ | | |
| Board Overview | ChipType: | L3F32-33 | | | |
| Pin Diagram | WorkMode: | Develop | \sim | | |
| Tutorial – First Time Use | | | | | |
| Basic Tutorial | LoadMode: | USB | ~ | | |
| Advanced Tutorial | | OK | | | |
| Tutorial for MicroPython | | OK | | | |
| FAQ | | | | | |
| More Documents | | | | | |
| | 5.Select the a | downloaded | tırmwa | re, clear the flas | h and then bu |



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MicroPython Interpreter

1.Click to download thonny (https://thonny.org/)

2.Open the software and set up the interpreter (Run->Configure interpreter...) Introduction Features × Thonny options Specification **Board Overview** General Interpreter Editor Theme & Font Run & Debug Terminal Shell Assistant Pin Diagram Which interpreter or device should Thonny use for running your code? Tutorial - First Time Use MicroPython (ESP32) \sim **Basic Tutorial** Details Advanced Tutorial Connecting via USB cable: Tutorial for MicroPython Connect your device to the computer and select corresponding port below (look for your device name, "USB Serial" or "UART"). If you can't find it, you may need to install proper USB driver first. More Documents Connecting via WebREPL (EXPERIMENTAL): If your device supports WebREPL, first connect via serial, make sure WebREPL is enabled (import webrepl setup), connect your computer and device to same network and select < WebREPL > below Port or WebREPL USB Serial Device (COM40) \sim Install or update firmware OK Cancel

3.Copy and paste the code into the code box, save the file to the MicroPython device and name it main.py

| | import time from machine import Pin |
|---------------------------------|--|
| Introduction | <pre>led=Pin(15,Pin.OUT)</pre> |
| Features | while True: |
| Specification Board Overview | <pre>led.value(1) time.sleep(1)</pre> |
| Pin Diagram | <pre>led.value(0)</pre> |
| Tutorial – First Time Use | <pre>time.sleep(1)</pre> |
| Basic Tutorial | |
| Advanced Tutorial | <untitled> * X</untitled> |

| <pre>import time from machine import Pir</pre> | 1 | | |
|--|------------------------|-------------------------------|--------------|
| led=Pin(<mark>10</mark> ,Pin.OUT) | TR Where to save to? X | Tk Save to MicroPython device | |
| while True: | | MicroPython device | = / |
| 1-1 | This computer | Name | Size (bytes) |
| <pre>time sleen(1)</pre> | L | 🖶 boot.py | 139 |
| led.value(0) | | | |
| me.sleep(1) | MicroPython device 📋 | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | File name: main.pv | OK Cancel |
| | | me name. | 2 OK Cancer |

4.Reboot the FireBeetle 2 ESP32-C6, and you can see the L LED flashing.

FAQ

1. What will cause burning error?

Tutorial for MicroPython

More Documents

FAQ

• There is no delay or too short delay in Loop.



• Press and hold BOOT, click RST, and then release the BOOT button to burn.

Principle During the initialization process, ESP32 undertakes a verification of the voltage level on the BOOT (IO9) pin. If the voltage level is determined to be high, the system proceeds with a normal startup. In contrast, if the voltage level is deemed to be low, the device enters into the programming mode. By default, the BOOT pin maintains a high voltage level, but it transitions to a low level when a button is pressed.

10:24 AM

7/23/2015

2. Data cannot be printed on serial port

- Check if the USB CDC is enabled
- Check print information using other serial debugger.

For any questions, advice or cool ideas to share, please visit the **DFRobot Forum** (https://www.dfrobot.com/forum/).

Features

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More Documents

- ESP32-C6 Chip Datasheet (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/5eeffd974782b6cc442f7a2ee7f00577.pdf)
- DFR1075-Schematics.pdf (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/65df25004a7d1e8bc128894c75ce4089.p df)
- DFR1075-Dimension.pdf (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/fc5aabe8620a8c9519643a7e8c997ecb.p df)
- CN3165 Chip Datasheet (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/85759bb076bf6bb24fd8ca5683f19603.p df)
- HM6245 Chip Datasheet (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/6f630301d84caf0e92266e3c5cf11edc.P DF)
- FireBeetle2 Shell stl (https://dfimg.dfrobot.com/5d57611a3416442fa39bffca/wiki/e98b6467f3636d6d33c8d894b29bad89 .zip)

Get **FireBeetle 2 Board ESP32-C6** (https://www.dfrobot.com/product-2771.html) from DFRobot Store or **DFRobot Distributor**. (https://www.dfrobot.com/distributor)

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