

BeagleConnect Freedom User Manual

Features

- Power: USB Type-C 、 BAT(Batteries are not included in the shipment.)
- TI CC1352P7 48-MHz Arm®Cortex®-M4F
 - sub-1 GHz and 2.4-GHz wireless MCU with power amp
 - 704KB flash, 144KB RAM
- TI MSP430F5503 25-MHz MCU with 32KB flash for USB to UART bridge 1-cell LiPo battery connection with charging
- Built-in light, temperature and humidity sensors
- 2-mikroBUS connectors with ADC, PWM, I2C, SPI, UART and GPIO

Hardware Overview



Operating temperature

0 - 60 °C

Quick Start with BeagleConnect Freedom

1. Normally, just connect Type-C to BeagleConnect Freedom and it will work.
2. If you can configure it according to your needs, you will need to connect BeagleConnect Freedom to the Linux host.
Send commands to the product through minicom for configuration.
example: review the commands

\$ [tab]

```
uart:~$  
  clear      date      device    devmem    flash    gpio  
  help      history    i2c      ieee802154 kernel    log  
  net       resize     sensor    shell  
uart:~$
```

example: gpio

```
uart:~$ gpio conf GPIO_0 18 out  
Configuring GPIO_0 pin 18  
uart:~$ gpio set GPIO_0 18 0  
Writing to GPIO_0 pin 18  
uart:~$
```

FCC Warning:

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.