



## DF-Beacon EVB SKU: TEL0086

From Robot Wiki



DF-Beacon EVB

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### Introduction

Bluno is great but I want small size for my product; Ble-link does well in its work but I don't want additional adapter to be inserted. Now, these problems are solved with [BLE micro](#), a new kind of bluetooth 4.0 device. Comes in a small size, BLE Micro can be easily put on your PCB board, just ignore the problems like "how to design an antenna", "how to make a bluetooth chip work" and so on. BLE Micro is perfect for wearable projects. With it, you will be able to use Andriod or IOS devices to communicate with your clothes!

And for developers, BLE Micro can be used for transparent transmission, or remote programmer uploading, and even building an HID connection with PC. It can be configurated by AT command and you can also update its firmware by USB. Of course, it supports iBeacon. With the latest firmware version 1.8, you can switch the mode between AT command and transparent transmission by serial port.

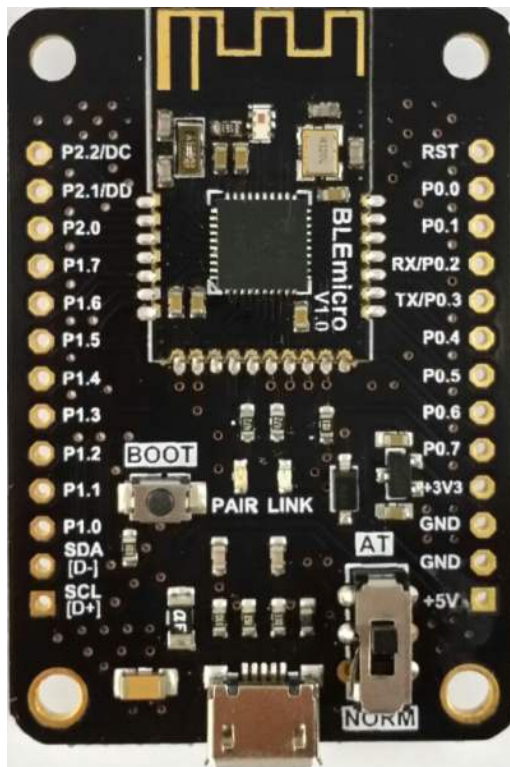
## STABLE POWER:

Please make sure to provide the BLE module with a reliable and stable 3.3V power supply whose noise should be less than 10mV, or its bootloader and the BT service will get lost.

## Specification

- bluetooth chip:TI CC2540
- Frequency: 2.4GHz
- Transfer rate:  $\leq 1$ Mbps
- Modulation: GFSK, bluetooth low power, V4.0
- Power consumption: working:10.6mA average ,ready mode:8.7mA
- sensitivity: -93dB
- Input Voltage: +3.3 DC
- Operating temperature : -10 °C ~ +65 °C
- Transmission distance: 30m in free space
- size:49mm \* 35mmPinout

## Pinout



DF-Beacon EVB Pinout

## Update BLE Firmware

It is better to update the newest firmware for the better experience.

As DF-Beacon EVB is using CC2540 chip, the method of the updating is very close to BLUNO

The only difference is the firmware name. Please choose **BLE LINK** firmware. Or it won't work.

[How to update the BLE firmware.](#)

[http://www.dfrobot.com/wiki/index.php/Bluno\\_SKU:DFR0267#Update\\_BLE\\_Firmware\\_on\\_Bluno.EF.BC.88AT.2BVERSION\\_to\\_check\\_the\\_version.EF.BC.89](http://www.dfrobot.com/wiki/index.php/Bluno_SKU:DFR0267#Update_BLE_Firmware_on_Bluno.EF.BC.88AT.2BVERSION_to_check_the_version.EF.BC.89)

## Configure Bluetooth parameter

There are three revolutionary BLE firmware versions now, maybe it will be more.

For the reason of unified management, we will put all BLE AT command on the BLUNO wiki page

[BLE AT Command Configuration](#)

[http://www.dfrobot.com/wiki/index.php/Bluno\\_SKU:DFR0267#Configure\\_the\\_BLE\\_through\\_AT\\_command](http://www.dfrobot.com/wiki/index.php/Bluno_SKU:DFR0267#Configure_the_BLE_through_AT_command)