Bluno Beetle SKU:DFR0339

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Introduction

Bluno Beetle is another milestone in wearable electronics device area, which makes DIY users have more options in the project design. It is fully compatible with Bluno in instructions and procedures, supporting Bluetooth HID and ibeacon



Bluno Beetle (SKU:DFR0339)

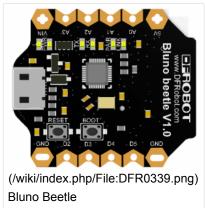
And it not only supports USB programming, but also wireless programming method. With the V shaped gilded I/O interface, it is convenient to screw conductor wire on it, which could a good choice in the wearable market.

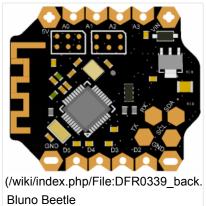
More instruction about Bluno Beetle can refer to **DFRobot Bluno** (https://www.dfrobot.com/wiki/index.php? title=Bluno SKU:DFR0267).

Specification

Bluetooth Chip CC2540 Sensitivity (-93dBm) (-10 °C ~ +85 °C) Working Temperature: Maximun Distance 50m(Open field) ATmega328P Microcontroller: Clock frequency: 16 MHz 5V DC Working voltage: Digital Pin х4 Analog Pin х4 **PWM Output** x2 **UART** interface **x**1 I2C interface **x**1 Micro USB interface x1 Power port x2

Pinout Diagram





Beetle Bluno Beetle

Pin Mapping

Silkscreen	Digital	PWM	Analog	UART	I2C
	Pin	Channel	Channel	UAITI	
RX	0			Serial1	
TX	1			Senain	
SDA	A4				SDA
SCL	A5				SCL
D2	2				
D3	3	3			
D4	4				
D5	5	5			
A0	A0		A0		
A1	A1		A1		
A2	A2		A2		
A3	A3		A3		

Power interface description:

Silkscreen	Description		
VIN	external power supply<8V		
5V	5V positive supply		
GND	GND		

Power Supply

- USB cable or external power supply: 5V
- External power supply <8V

Bluno Beetle Basic Demo

In this section, you can use the BLUNO Beetle to connect with the Android phone or iPhone .The Step by Step tutorial of the BLUNO Beetle is almost the same with the Bluno.

Bluno Basic Demo (http://www.dfrobot.com/wiki/index.php/Bluno_SKU:DFR0267#Bluno_Basic_Demo)

Wireless Programming via BLE

In this section, we will learn how to Upload the sketch on air via BLE. It is really amazing that you can do uploading process without a line. The Step by Step tutorial of

the Bluno Beetle is almost the same with the Bluno. How to Wireless Programming through BLE (http://www.dfrobot.com/wiki/index.php/Bluno_SKU:DFR0267#Wireless_Programming_via_BLE).

Configure the BLE through AT command

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 Configure the BLE through AT command (http://www.dfrobot.com/wiki/index.php/Bluno SKU:DFR0267#Configure the BLE through AT command).

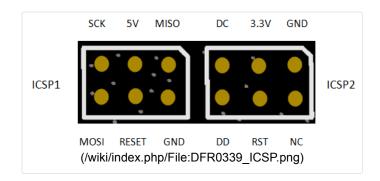
Update BLE Firmware

It is better to update the newest firmware for the better experience. As Bluno Beetle is using CC2540 chip, the method of the updating is very close to BLUNO. Please choose "Bluno" 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_c

ICSP interface



ICSP1: Atmega 328PICSP2: CC2540

More

(http://www.dfrobot.com/) Get it from **DFRobot Store** (http://www.dfrobot.com/index.php? route=product/product&product_id=1259&search=DFR0339&description=true#.VqX7WhWF6Uk) or **DFRobot Distributor** (http://www.dfrobot.com/index.php?route=information/distributorslogo).

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