



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



## Contact us

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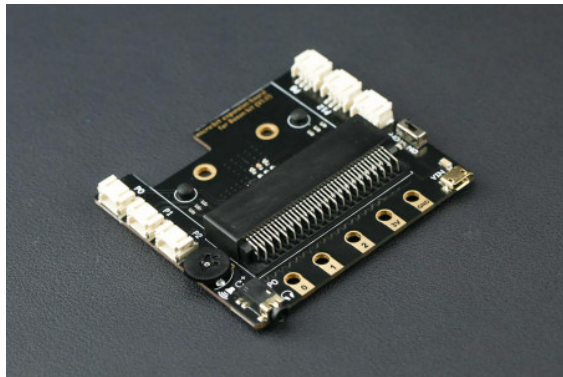
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





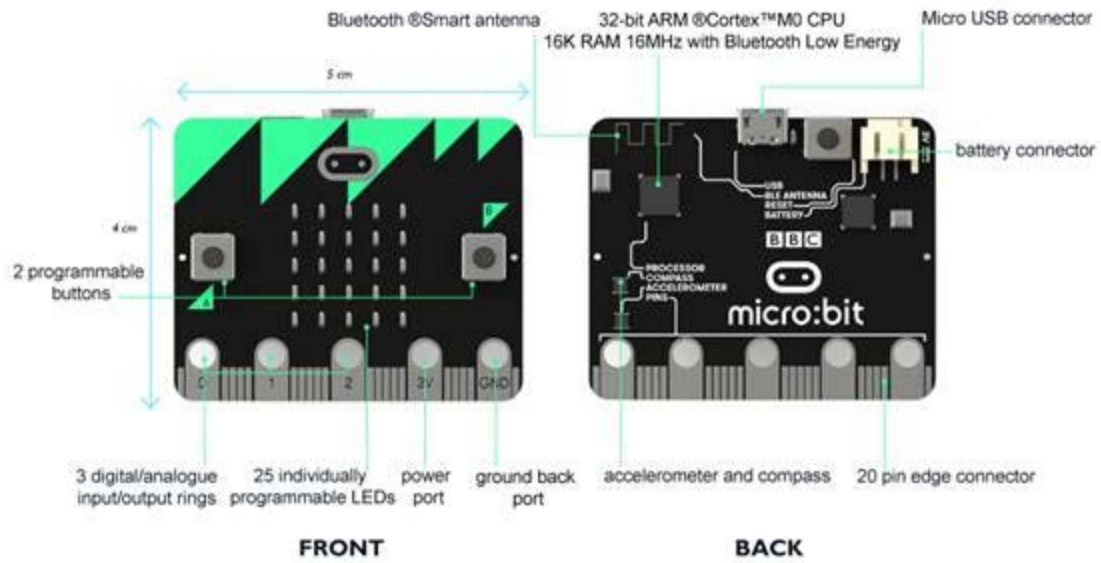
## micro:bit Expansion Board for Boson (Gravity Compatible)

SKU:DFR0521



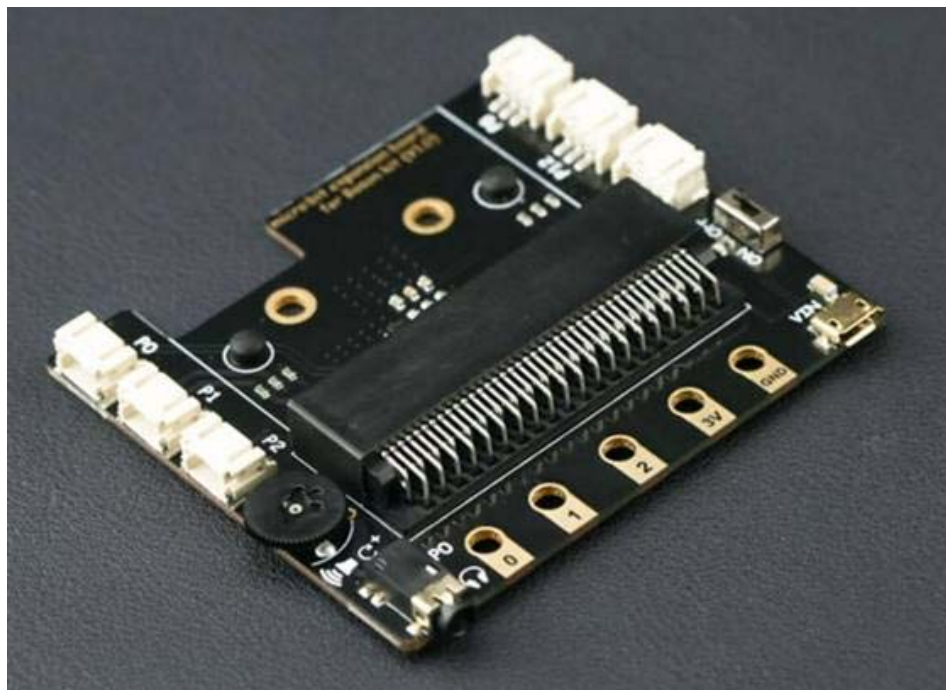
### INTRODUCTION

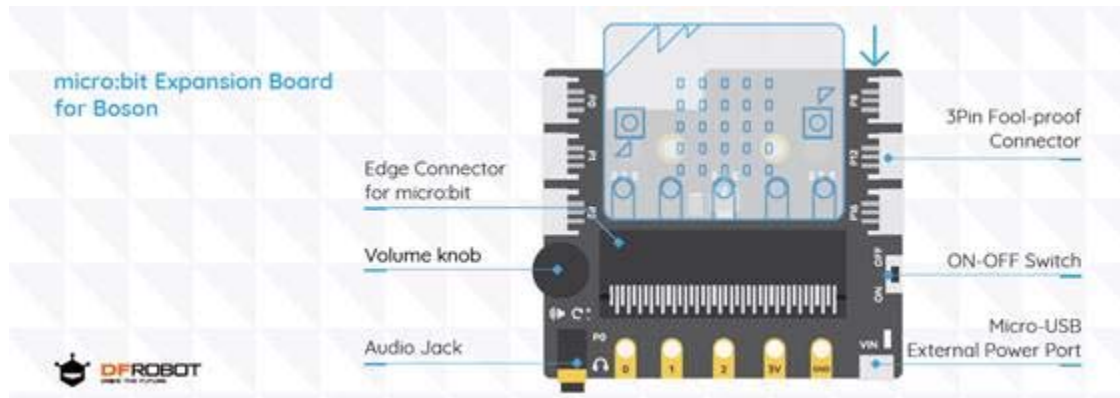
micro:bit is a pocket-sized microcontroller designed for kids and beginners to learn coding and electronics, letting them easily bring ideas into DIY digital games, interactive projects and robotics.



*Micro:bit*

However, on-board I/O rings and crocodile clips sometimes are not handy and safe enough to connect peripherals. To explore more possibilities with micro:bit, we have designed the micro:bit Expansion Board for Boson, a carry-on board that connects to micro:bit via edge connector.





The expansion board comes with 6 fool-proof 3-Pin sockets, compatible with hundreds of DFRobot's Boson and Gravity modularized electronic blocks, covering most popular digital and analog sensors and actuators, supporting sound, light and motion interaction.

Click the link to learn more about DFRobot's Boson module: <https://www.dfrobot.com/boson>

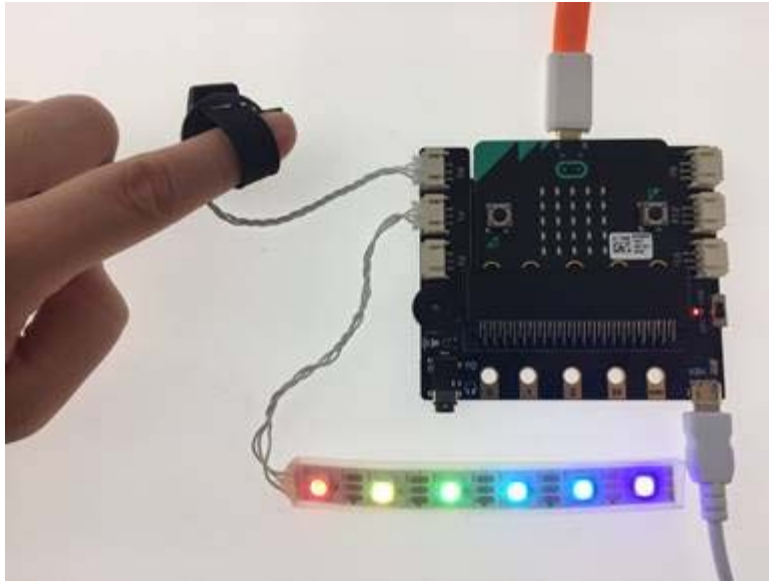
Click the link to learn more about DFRobot's Gravity module: <https://www.dfrobot.com/gravity>

Moreover, the on-board 3.5MM headphone jack and volume knob supports direct connection of headphone.

To ensure a steady current supply for these peripherals, the expansion board can be powered externally through the USB power port.





*micro:bit Boson game pad*



*micro:bit RGB LED heart rate monitor*

Gravity electronic module recommendation (micro:bit compatible):

	<p>Digital Capacitive Touch Sensor</p>
	<p>Digital PIR (Motion) Sensor</p>



Analog Rotation Potentiometer



Digital Speaker Module





Analog Grayscale Sensor



Analog Sound Sensor



Joystick Module

	<p>Analog Slide Position (Potentiometer) Sensor</p>
	<p>Heart Rate Monitor</p>

## FEATURES

- 3-Pin fool-proof connector x 6
- Headphone jack with volume knob
- External power port and ON/OFF switch
- DFRobot Gravity and Boson electronic module compatible

## SPECIFICATION

- MicroUSB Power Port Voltage : 5V
- PH2.0 Input/output Voltage: 3.3V
- Input/output ring Voltage: 3.3V
- Maximum Current: 500mA
- Working temperature: 0-85 °C
- Dimension 80 \* 70 mm / 3.15 \* 2.76
- Weight: 48g

## SHIPPING LIST

- micro:bit Expansion Board for Boson x 1
- 200mm fool-proof PH2.0 cable x 6

