Introduction to Super:bit Expansion Board
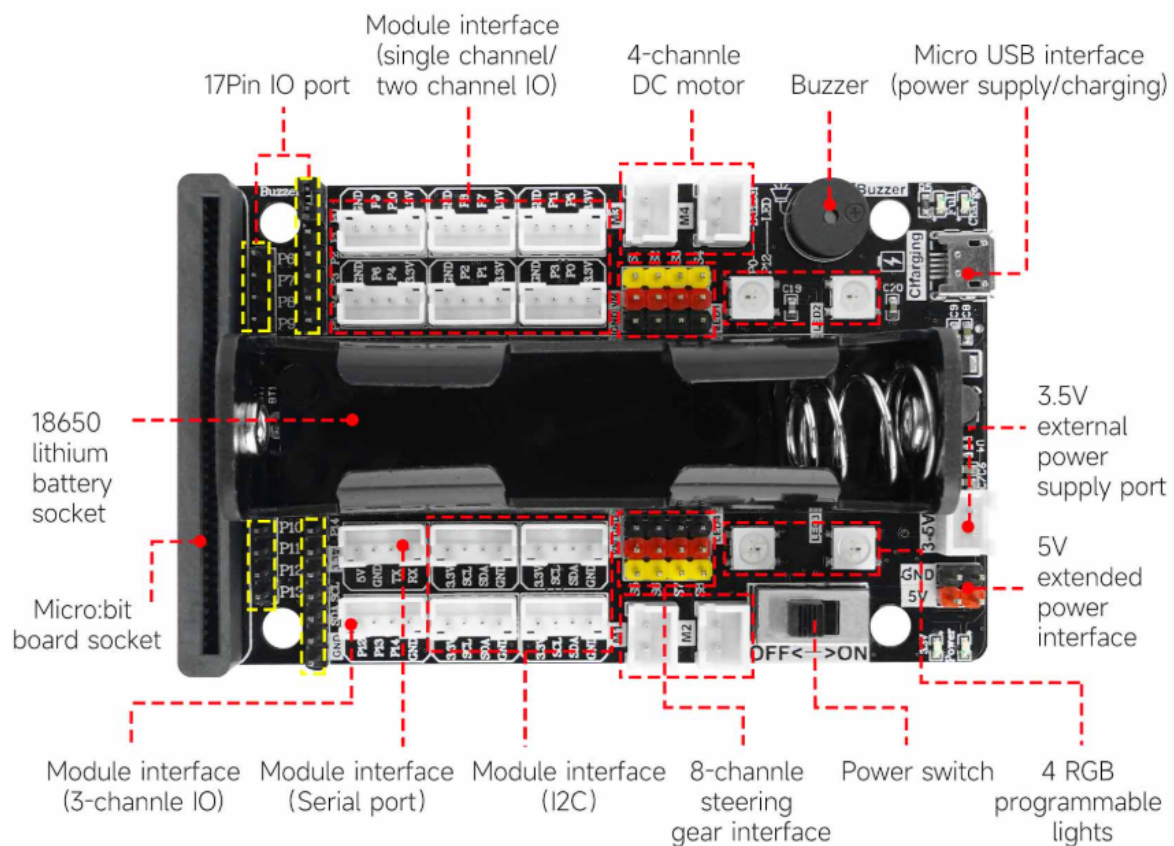
1. Introduction

The Super:bit expansion board adopts a central axis design, which is symmetrical on both sides. It has a micro:bit development board socket, 18650 battery socket, USB power supply interface, 3-5v external power supply interface, four programmable RGB lights, buzzer, I2C interface, WIFI camera serial port, various motor interfaces and other electronic components. It is an expansion board designed specifically for micro:bit. It also has four-way DC motor and eight-way servo interface, and leads to 17 pin header IO ports and multiple sensor module interfaces of micro:bit, which can support our company's micro:bit series sensor modules. In addition, the expansion board also has holes that are compatible with Lego bricks.

2. Hardware distribution and parameters

On board I/O device	Passive buzzer,4 programmable RGB lights	Motor interface	4 channel DC motor (voltage is come from battery, current 1--3A), 2 channel stepper motor
Servo interface	8 channel servo	Expansion interface	17 Pin expansion I0 port, serial port , IIC interface , 10 alligator clip interface
Protection circuit	reverse protection, low voltage protection, over current protection	Special socket	micro:bit gold finger socket
Power supply interface	18650 lithium battery socket, external 3- 5V power supply socket, Micro USB power supply, 5V (MAX: 1A), 3.3V (MAX: 0.5A)		