2.1 Product introduction

The Yahboom UNO sensor expansion board is suitable for Arduino UNO R3 board. It has a laminated design and can be easily plugged into the UNO board. All the pins on the UNO board are led out by the expansion board, and each two pins are extended with a set of power interfaces, which do not require separate power supply. The expansion board is equipped with a PH2.0 anti-reverse socket, which reduces the possibility of reverse connection to protect the motherboard and the sensor module. The expansion board also has a power indicator D1, a reset indicator D2, a power switch, a reset button, a passive buzzer, an infrared receiver, and so on. It also specially designed a number of common interfaces, such as OLED display interface, IIC Interface, serial interface, etc. Pin function identification is clear and very easy to use, suitable for beginners.

When we use Arduino to make various creative projects, we often use some commonly used sensors or circuit modules. This sensor expansion board from Yahboom really simplifies the circuit. Beginners no longer have to worry about using breadboards to build tedious and complicated circuit wiring. You only need to use a PH2.0 cable to connect the sensor to the Arduino easily. Since we have designed anti-reverse sockets, users do not have to worry about burning components due to reverse connection.

Since the connection on the hardware is relatively simple, we only need to consider how to write a corresponding program in Arduino to collect the sensor data or let the circuit module realize the function. In addition, we also have a passive buzzer and an infrared receiver on the sensor expansion board, which is suitable for beginners to complete their own creative projects conveniently.

2.2 Pin description

1. On-board anti-reverse I / O

The expansion board lead out all the on-board IOs of Arduino, 2 to 13 are digital pins, and A0 to A5 are analog pins. Among them, A4 and A5 are used as IIC pins, and there is no additional identification. Each two pins are equipped with a set of VCC and GND, and are designed as a set of 4PIN PH2.0 anti-reverse connection interfaces (except some pins), which greatly simplifies the circuit and reduces the probability of reverse connection.

2. On-board LED

Power indicator D1. Reset indicator D2.

3. On-board buzzer

When using the buzzer, jumper caps must be connected at 13 and BUZZER.

4. Infrared receiver

When using the infrared receiver, jumper caps must be connected at 12 and IR.

5. Others

Four anti-reverse I2C interfaces

Serial interface

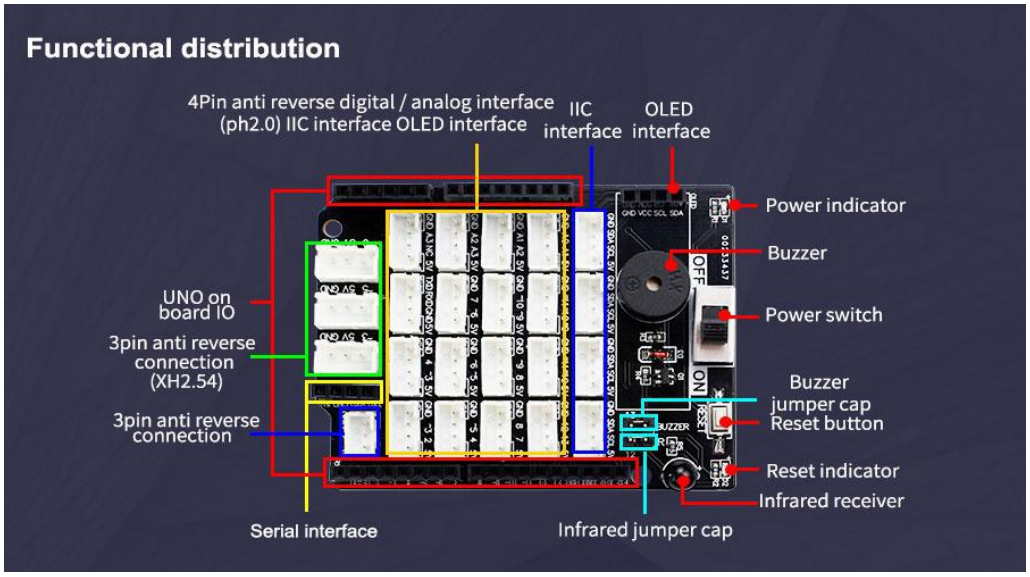
OLED interface

Anti-reverse servo interface

Power switch

RESET button

2.3 Pin function distribution



2.4 Pin interface diagram