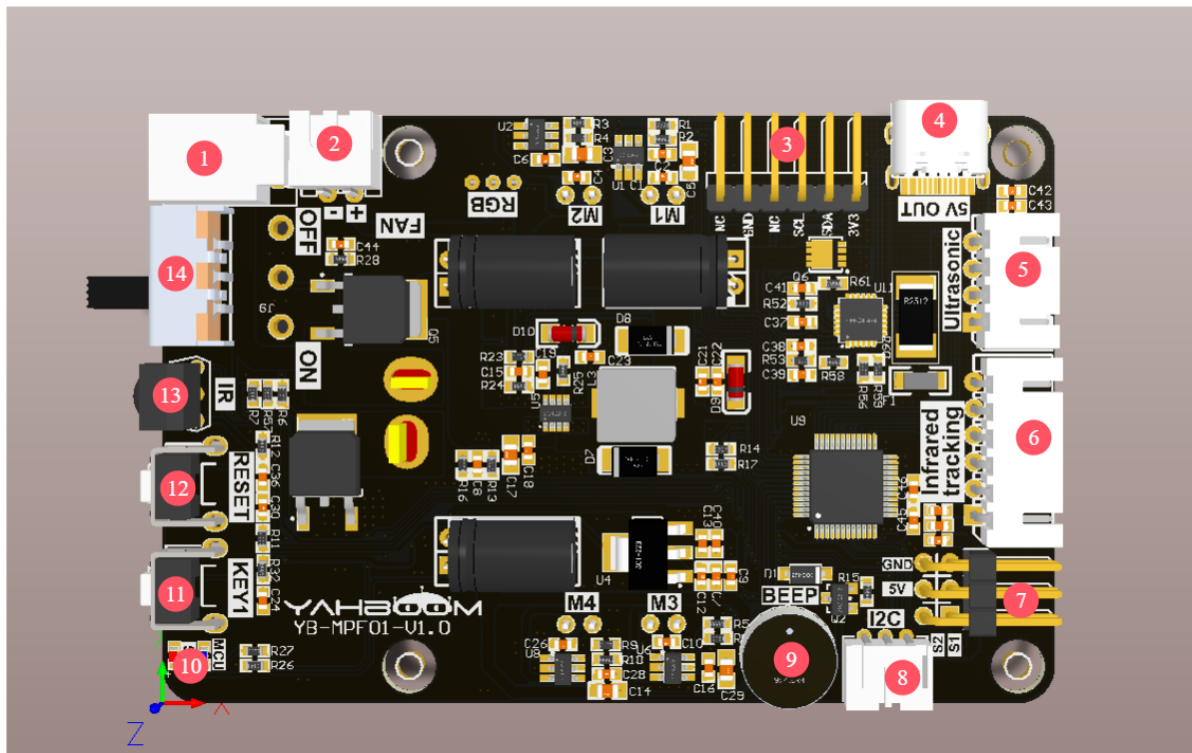


# Expansion board interface distribution

## Expansion board interface distribution

1. Component distribution diagram on the front of the expansion board
2. Component distribution diagram on the back of the expansion board

### 1. Component distribution diagram on the front of the expansion board

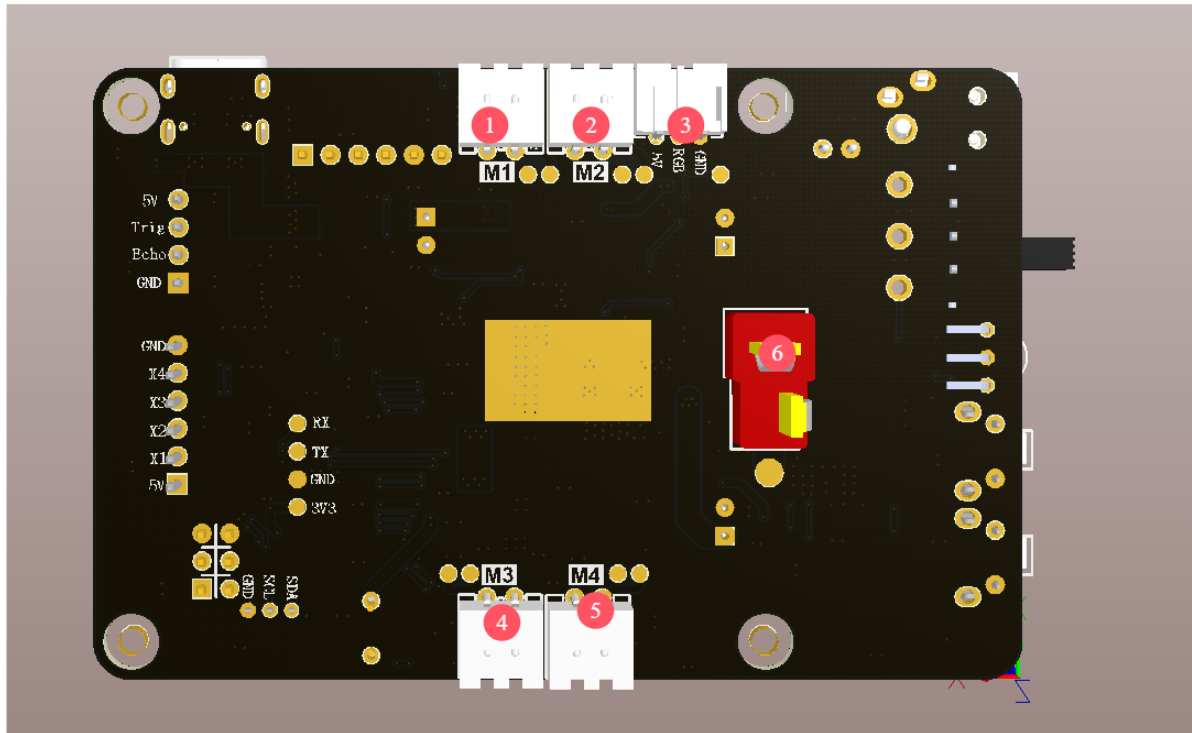


- ①Charging port: Connect to the matching 8.4V charger
- ②Cooling fan interface: connect to cooling fan
- ③OLED screen interface: connect to OLED screen
- ④Type-C interface: Provides DC 5V to the outside, supports the Raspberry Pi 5 power supply protocol, and provides 5.1V/5A power supply for the Raspberry Pi 5. It can only provide power but not communication.
- ⑤Ultrasonic interface: connect to ultrasonic sensor module
- ⑥Four-way line patrol module interface: connect to four-way line patrol module
- ⑦PWM servo interface: connect two PWM servos
- ⑧I2C接口: I2C interface: used to communicate with the Raspberry Pi 5 motherboard
- ⑨Buzzer: Active buzzer
- ⑩Power indicator and MCU indicator: Indicate the current status of the product.
- ⑪Key KEY1: User function key, which can realize custom functions through programming.
- ⑫Button RESET: Onboard microcontroller reset button

⑬Infrared receiver: used to receive infrared signals and used with the matching infrared remote control

⑭Power switch: main power switch

## 2. Component distribution diagram on the back of the expansion board



①Motor M1 interface: connect to the upper left corner TT DC motor

②Motor M2 interface: connect to the TT DC motor in the lower left corner

③RGB colorful light strip interface: connect the RGB colorful light strip.

④Motor M3 interface: connect to the TT DC motor in the upper right corner

⑤Motor M4 interface: connect to the TT DC motor in the lower right corner

⑥T-type DC 8.4V power input interface: as the main power input of the expansion board, connected to a DC 8.4V power supply or an 8.4V battery.