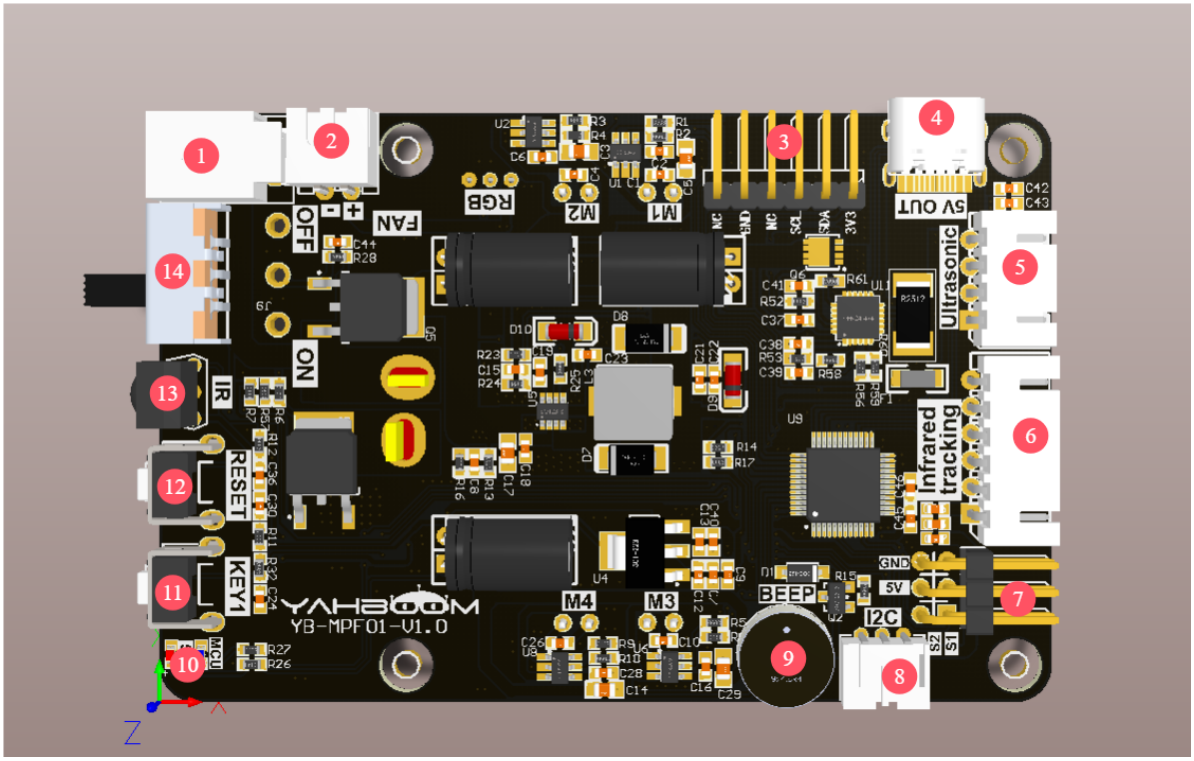
01. Interface distribution of expansion board

1.1. Component distribution diagram of the front of the expansion board



①Charging port: connect to the matching 8.4V charger

②Cooling fan interface: connect to the cooling fan

③OLED screen interface: connect to the OLED screen

④Type-C interface: provide DC 5V to the outside, support the Raspberry Pi 5 power supply protocol, provide 5.1V/5A power supply for the Raspberry Pi 5, only power supply can not communicate.

⑤Ultrasonic interface: connect to the ultrasonic sensor module

⑥Four-way patrol module interface: connect to the four-way patrol module

⑦PWM servo interface: connect to two PWM servos

⑧I2C 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.

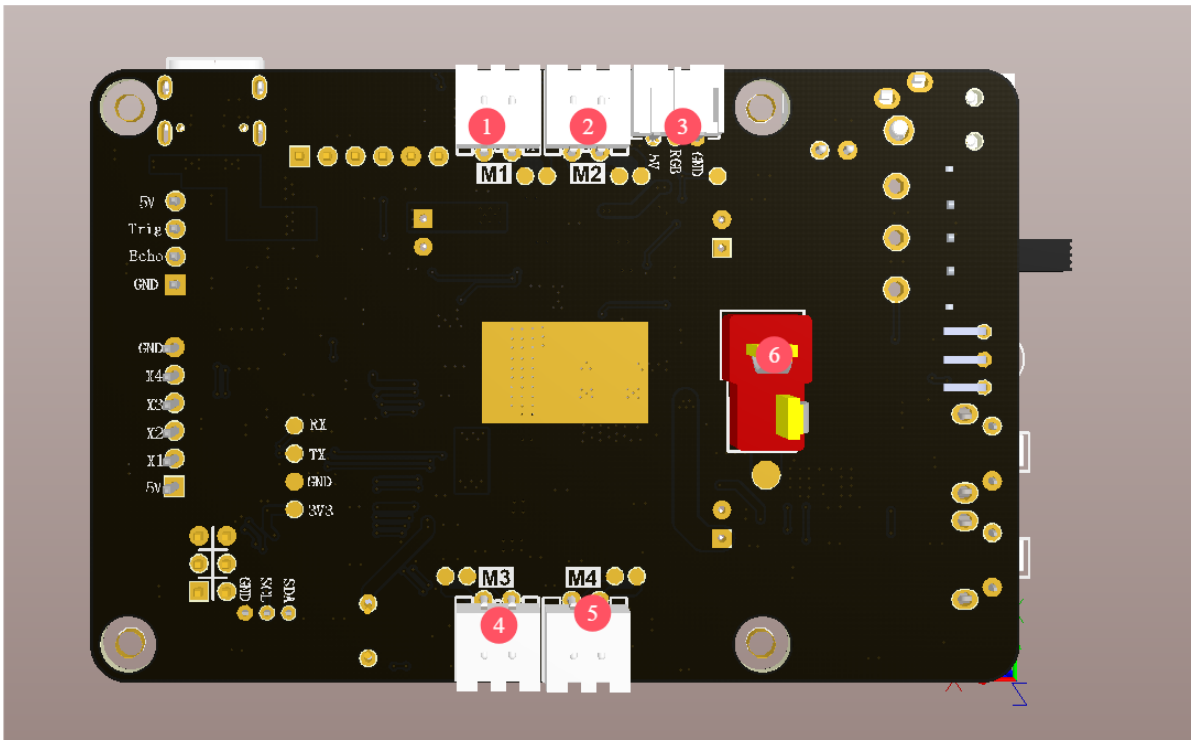
⑪Key KEY1: user function key, which can realize custom functions through programming.

⑫ Button RESET: Onboard MCU reset button

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

⑭ Power switch: main power switch

1.2. Component distribution diagram on the back of the expansion board



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

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

③ RGB colorful light bar interface: connected to the RGB colorful light bar.

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

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

⑥ T-type DC 6.5V~8.4V power input interface: as the main power input of the expansion board, connected to a DC 6.5V~8.4V power supply or a 6.5V~8.4V battery.