#### 4. Buzzer whistle

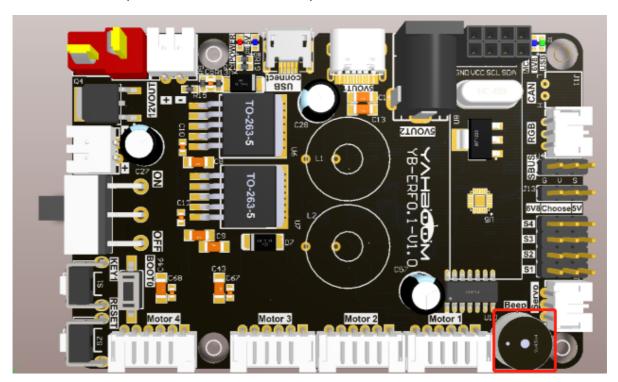
- 4. Buzzer whistle
  - 4.1. Experimental goal
  - 4.2. Experiment preparation
  - 4.3. Experimental operation and phenomenon
  - 4.4. Program source code

### 4.1. Experimental goal

Control the buzzer switch on the expansion board, the whistle time is 100ms, 300ms, 1s, etc.

## 4.2. Experiment preparation

The red box in the picture is the buzzer on the expansion board.



The buzzer on the expansion board is an active buzzer, so it is relatively simple to control, please check the following functions.

Rosmaster\_Lib library functions needed to control the buzzer:

```
set_beep ( on_time )
```

Parameter explanation: on\_time=0: turn off, on\_time=1: keep ringing, on\_time>=10: turn off automatically after ringing for xx milliseconds (on\_time is a multiple of 10).

Return value: None.

# 4.3. Experimental operation and phenomenon

Check out the course accompanying video.

# 4.4. Program source code

Power on the robot, and open the browser of the Jetson Nano or remote computer to enter the Jupyter lab editor.

Reference code path: Rosmaster/Samples/4.beep.ipynb