

# STM32\_KIT 学习板

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## Peripheral List

1 × RGB LED

1 × UltraSonic

2 × KEY

1 × Rotary Encoder

1 × TCRT5000

1 × DHT20

1 × Relay

1 × OLED Display

1 × Potentiometer ADC

1 × BLUETOOTH

1 × NTC Temperature Sensor

1 × TYPE-C

1 × DRV8833 Motor Driver

1 × CH343P USART to USB

1 × Servo

1 × WS2812 LED Array

1 × Passive Buzzer

1 × RTC Battery

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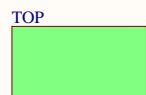
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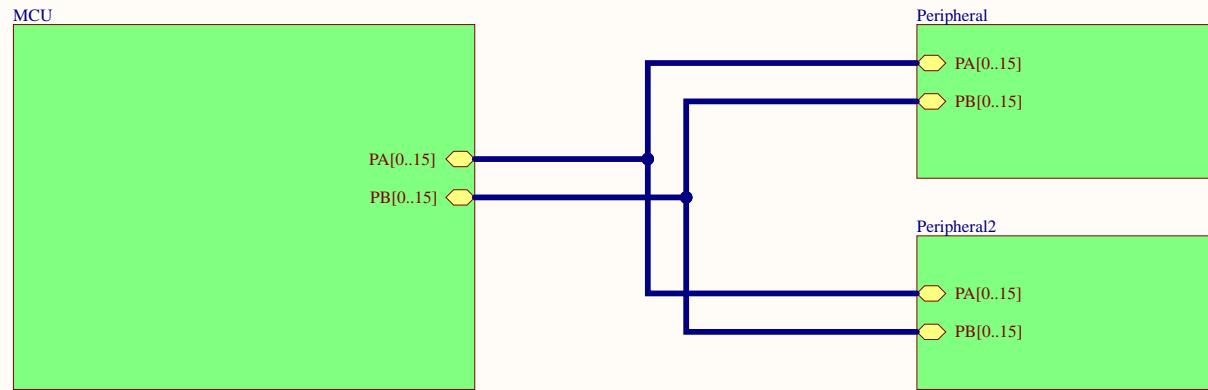
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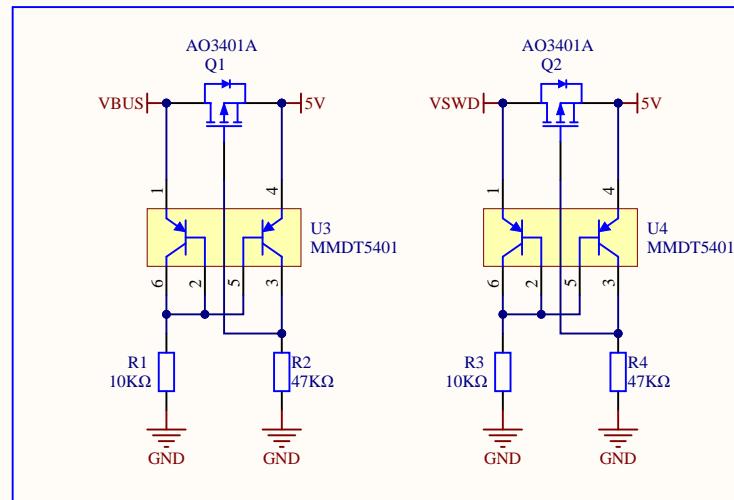


# 电源和系统框图



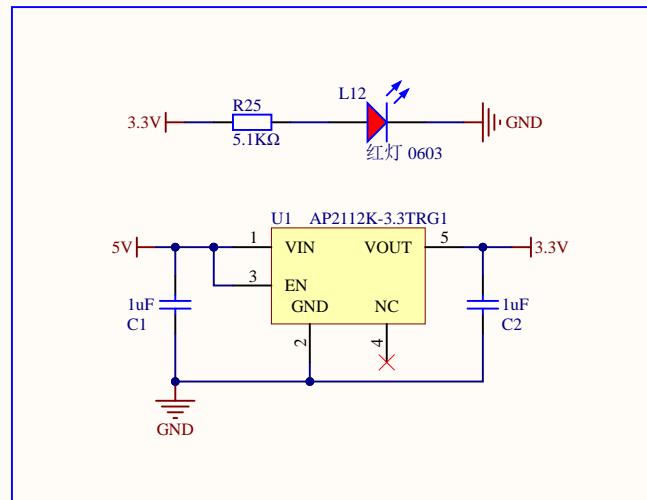
电流防倒灌 (实现安全双电源输入)

Anti-backflow protection

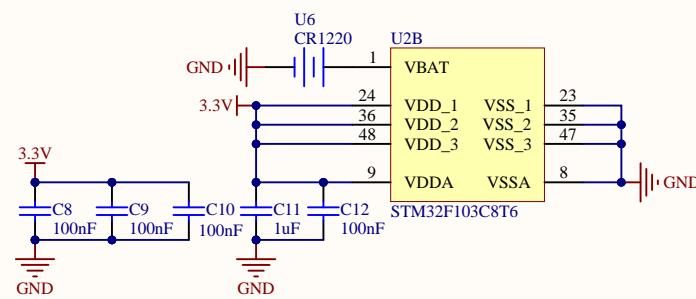
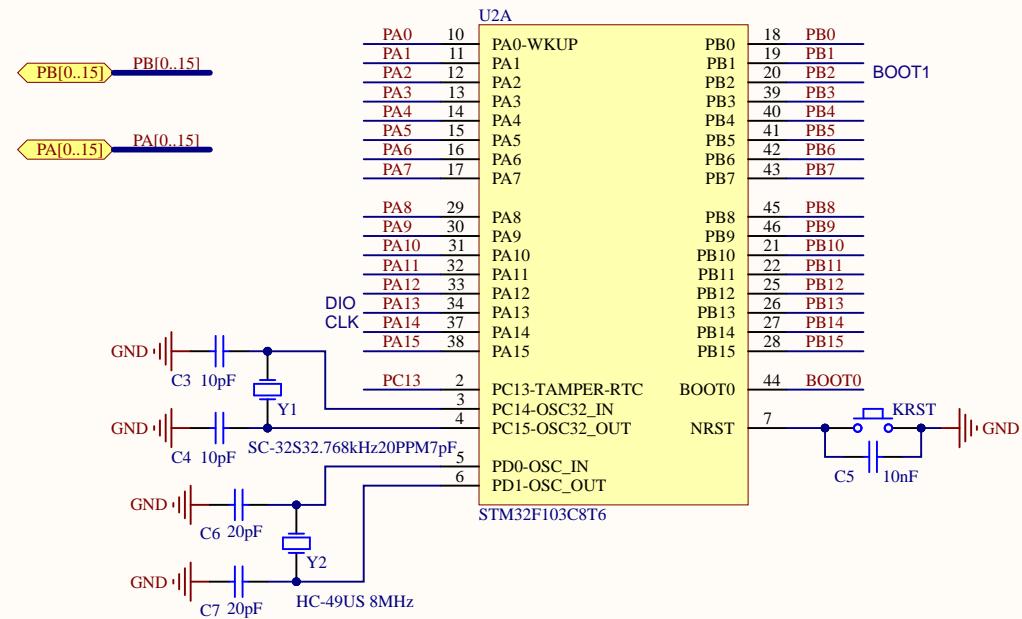
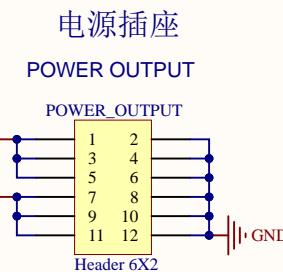
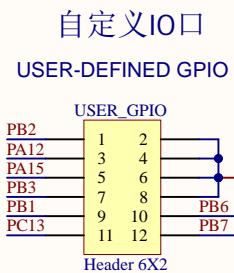
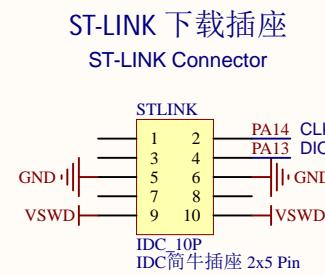
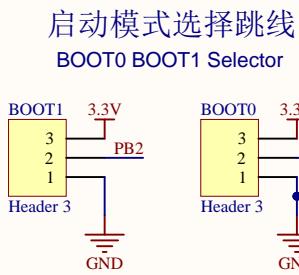


低噪声 3.3V 线性稳压电路

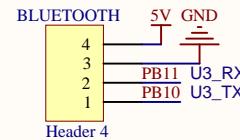
3.3V Power supply



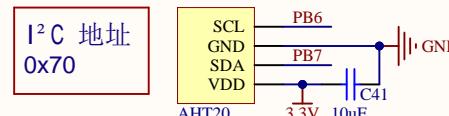
# MCU 最小系统



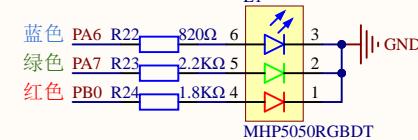
# 功能外设



温湿度传感器 AHT20

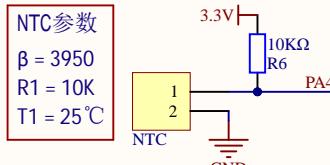


三色灯珠 RGB LED

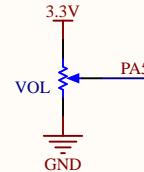


## 模拟量采集 ADC

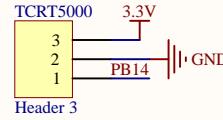
NTC温度线



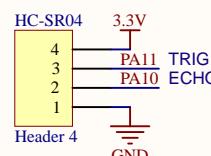
### 可变电阻（电位器）



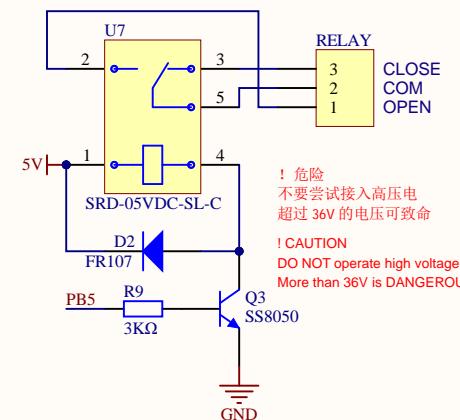
循迹模块 TCRT5000



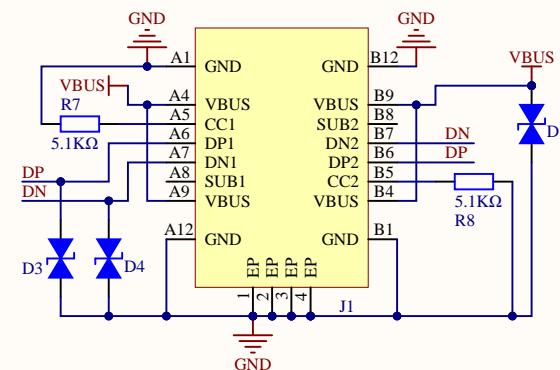
超声波模块 HC-SR04



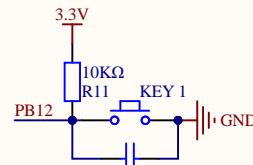
继电器 Relay



USB接口 TYPE-C



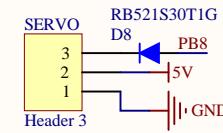
按键 KEYS



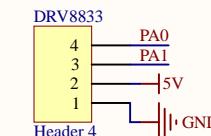
▲ KEY2 无外部上拉  
使用时必须打开内部上拉

K2 has no external pullup  
Enable internal pullup

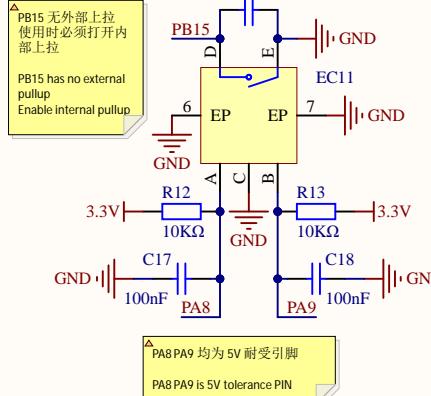
舵机 Servo



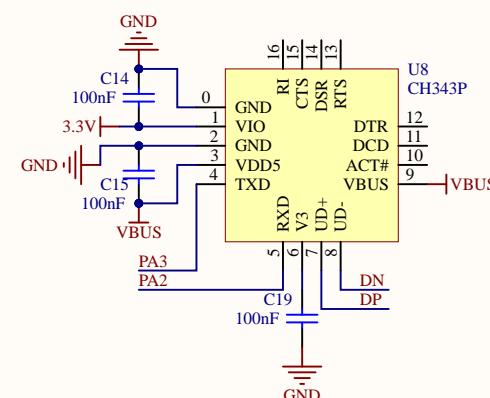
电机驱动 DRV8833



旋转编码器 EC11



USB转串口 CH343P



# 功能外设

PA[0..15] PA[0..15]  
PB[0..15] PB[0..15]

