

STM32_KIT 学习板

KEYSKING 作者

Table of contents 目录

Sheet 1: Project overview (this page)
Sheet 1: 概述（本页）
Sheet 2: Top & Power
Sheet 2: 顶层框图 & 电源部分
Sheet 3: MCU
Sheet 3: 最小系统
Sheet 4: Peripheral-01
Sheet 4: 功能外设（1）
Sheet 5: Peripheral-02
Sheet 5: 功能外设（2）

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

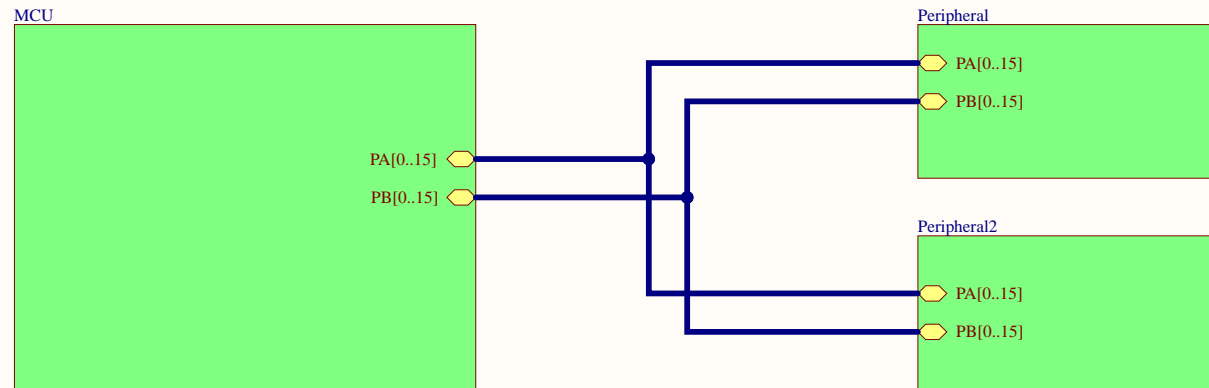
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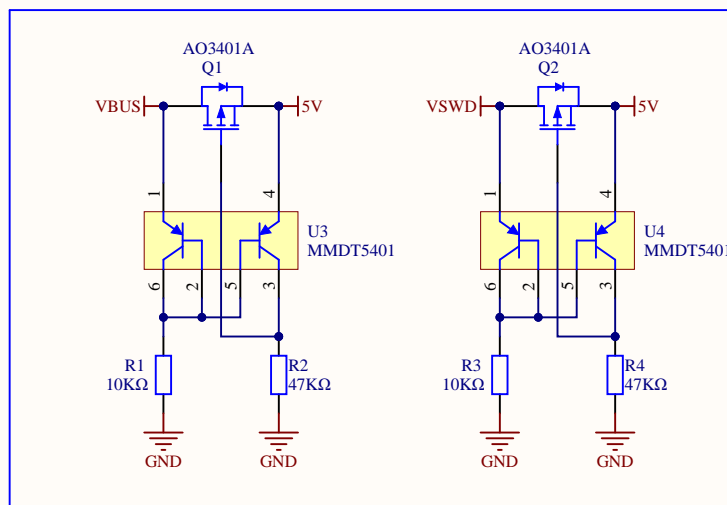
TOP



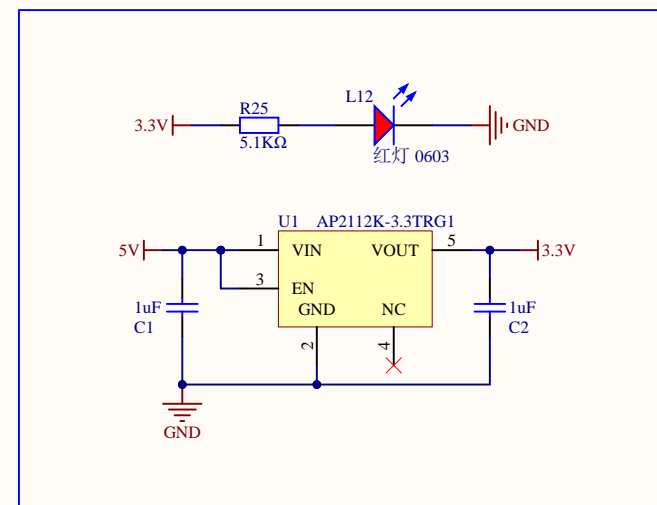
电源和系统框图



电流防倒灌 (实现安全双电源输入)
Anti-backflow protection



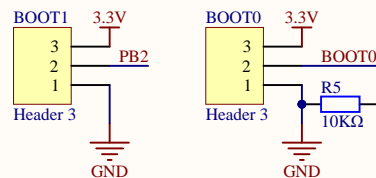
低噪声 3.3V 线性稳压电路
3.3V Power supply



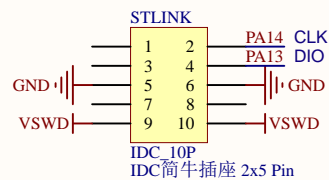
MCU 最小系统

启动模式选择跳线

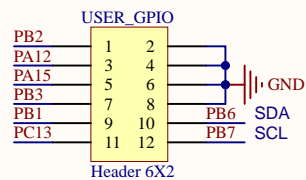
BOOT0 BOOT1 Selector



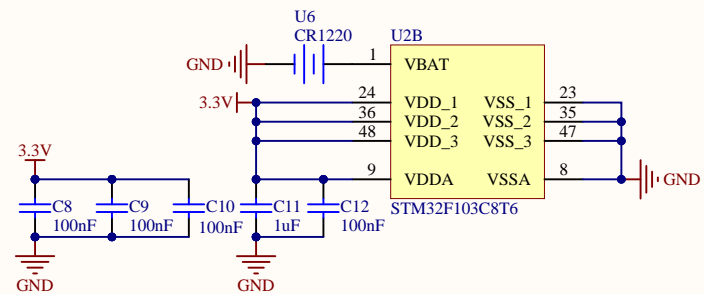
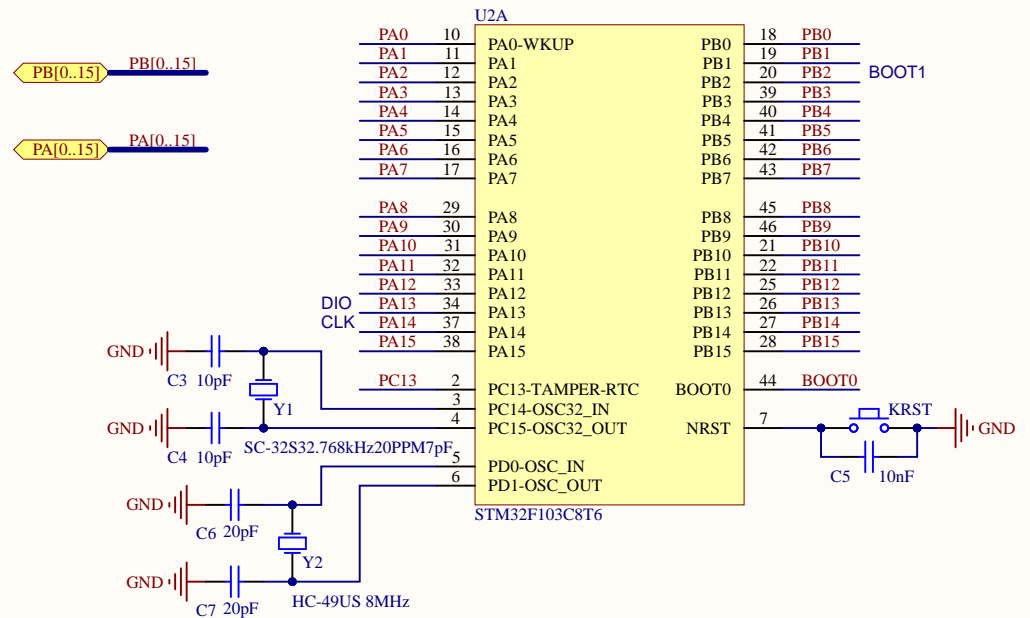
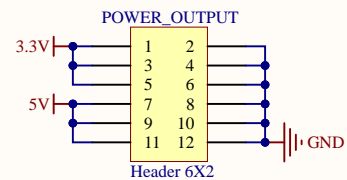
ST-LINK 下载插座
ST-LINK Connector



自定义IO口 USER-DEFINED GPIO



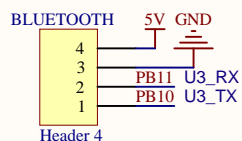
电源插座
POWER OUTPUT



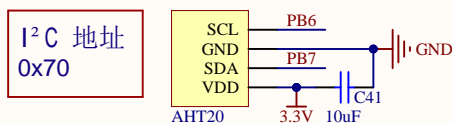
功能外设



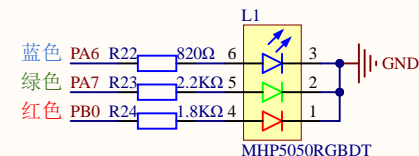
蓝牙 BLE



温湿度传感器 AHT20

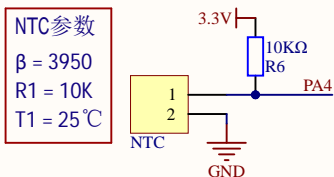


三色灯珠 RGB LED

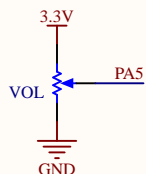


模拟量采集 ADC

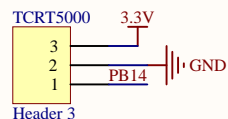
NTC温度线



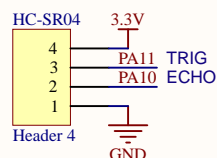
可变电阻（电位器）



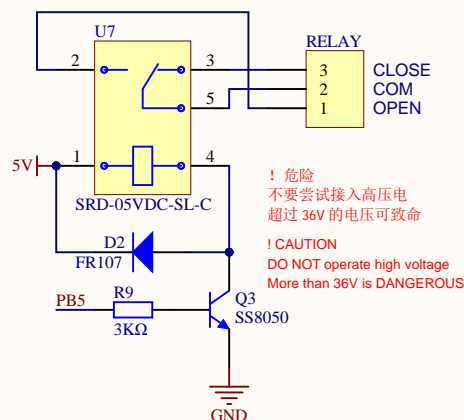
循迹模块 TCRT5000



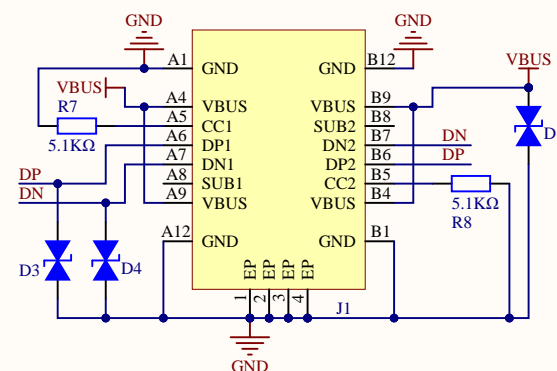
超声波模块 HC-SR04



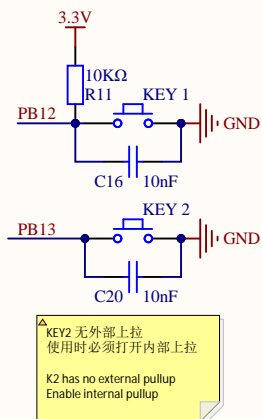
继电器 Relay



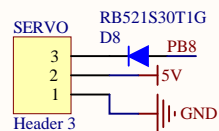
USB接口 TYPE-C



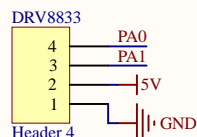
按键 KEYS



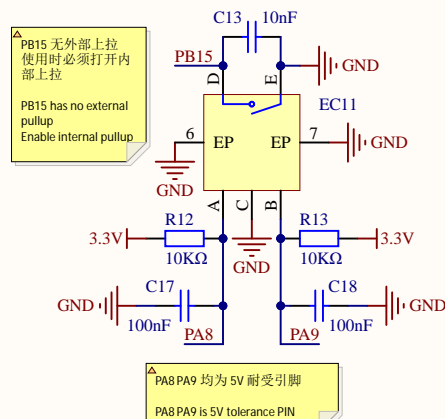
舵机 Servo



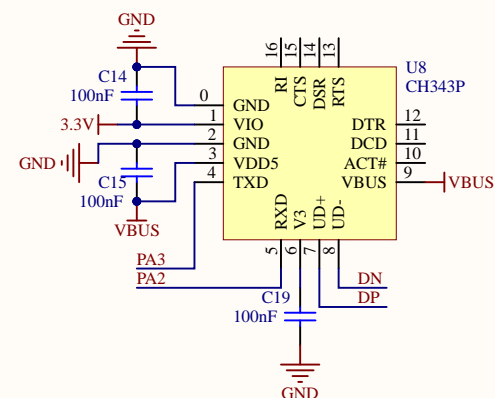
电机驱动 DRV8833



旋转编码器 EC11



USB转串口 CH343P

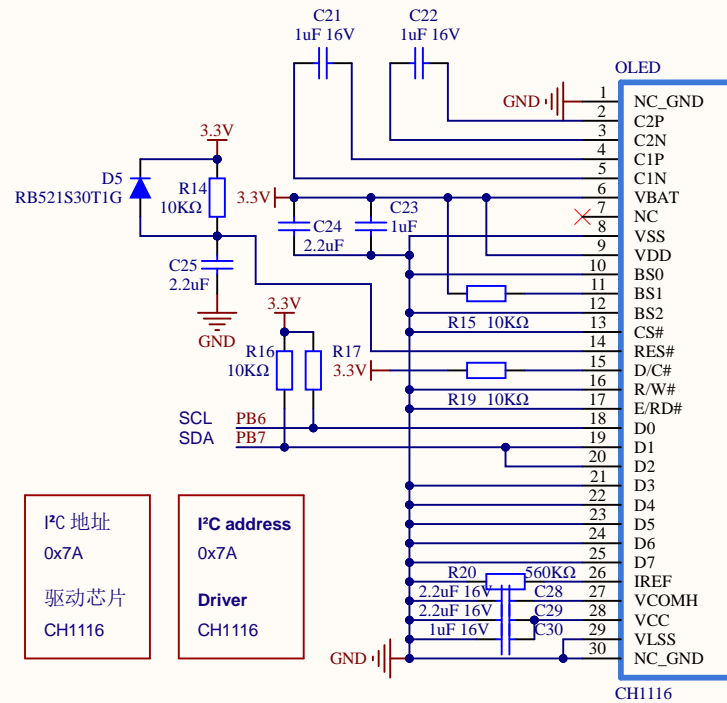


功能外设

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

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

显示屏 OLED SCREEN



I²C 地址

0x7A

驱动芯片

CH1116

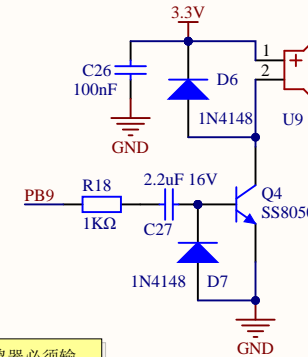
I²C address

0x7A

Driver

CH1116

无源蜂鸣器 Passive Buzzer

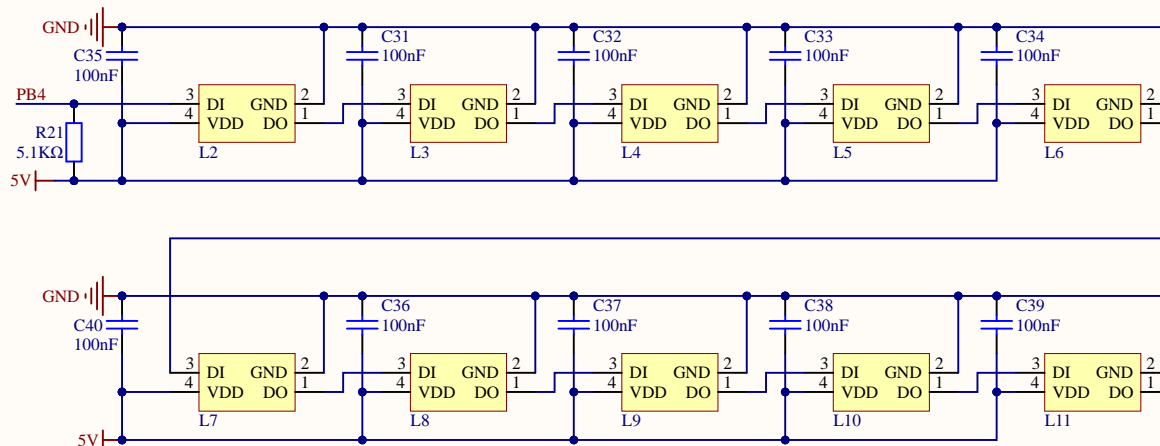


无源蜂鸣器必须输入PWM。直接给高电平不响。

The passive buzzer must be driven by PWM

可寻址彩灯

WS2812C



PB4 为 5V 耐受引脚
使用时，必须配置为「开漏输出」模式

PB4 is 5V tolerance PIN
Set to open-drain output mode