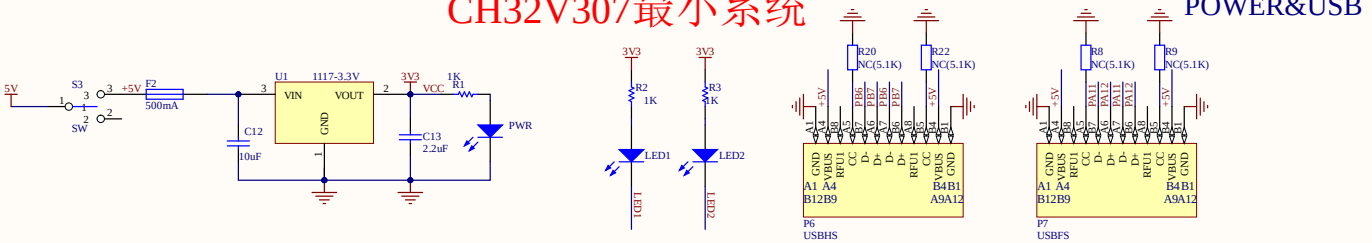
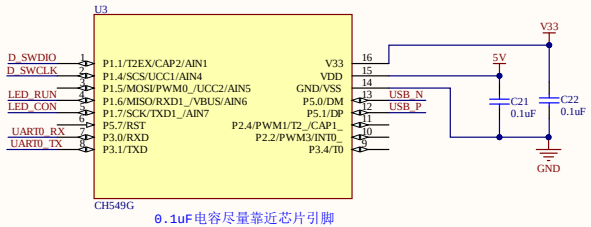
CH32V307最小系统

POWER&USB



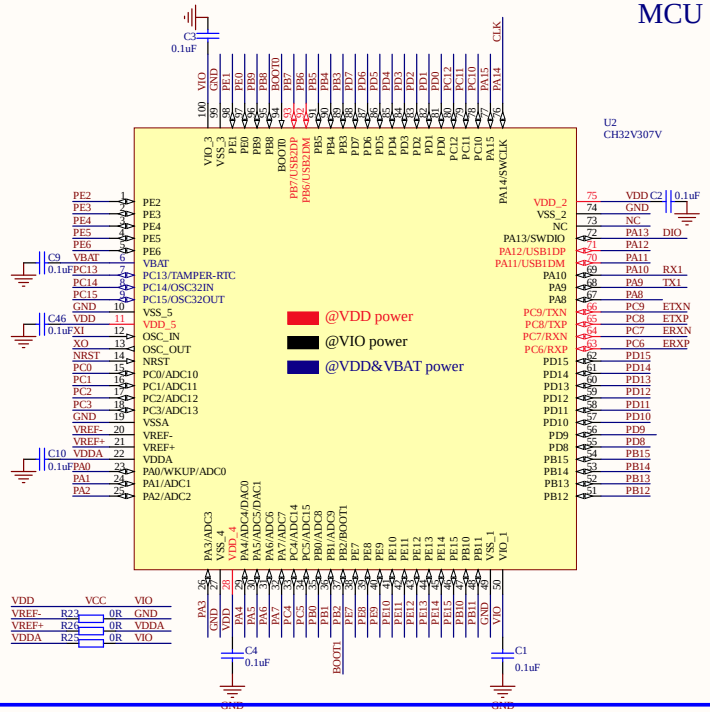
MCU

WCH_Link

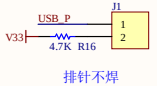


XTAL

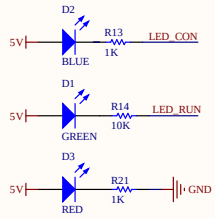
MCU



BOOT



LED



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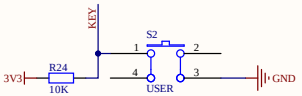
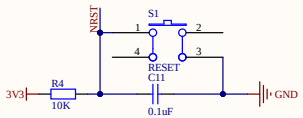
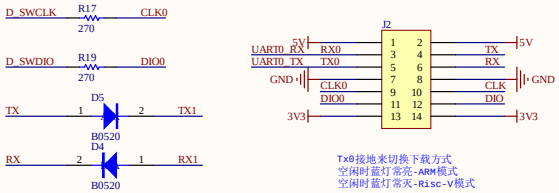


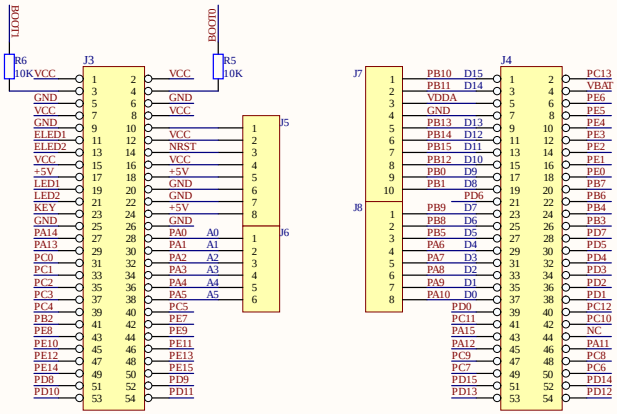
RST



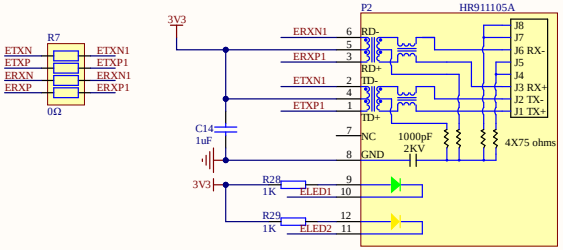
SWD&UART



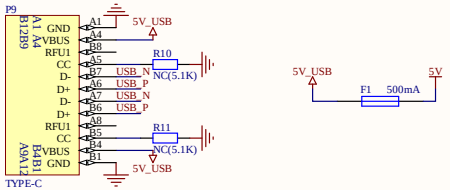
ARDUINO



ETH

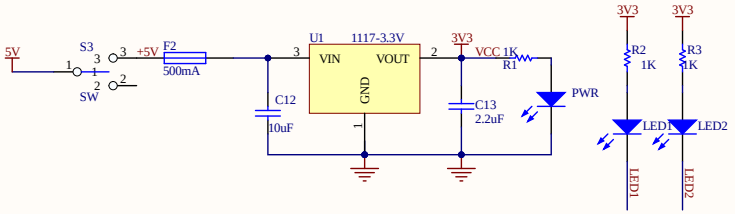


POWER&USB



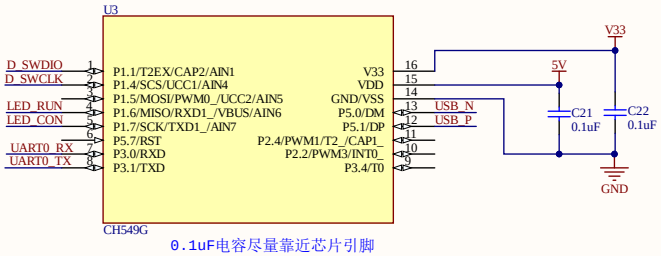
CH32V307/305/303R最小系统

POWER&USB

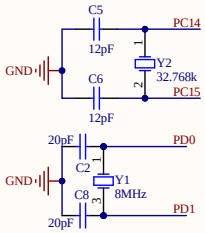


WCH_Link

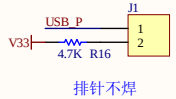
MCU



XTAL

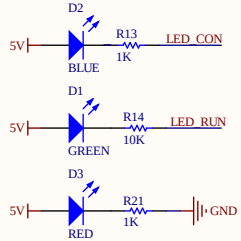


BOOT

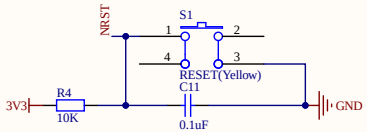


排针不焊

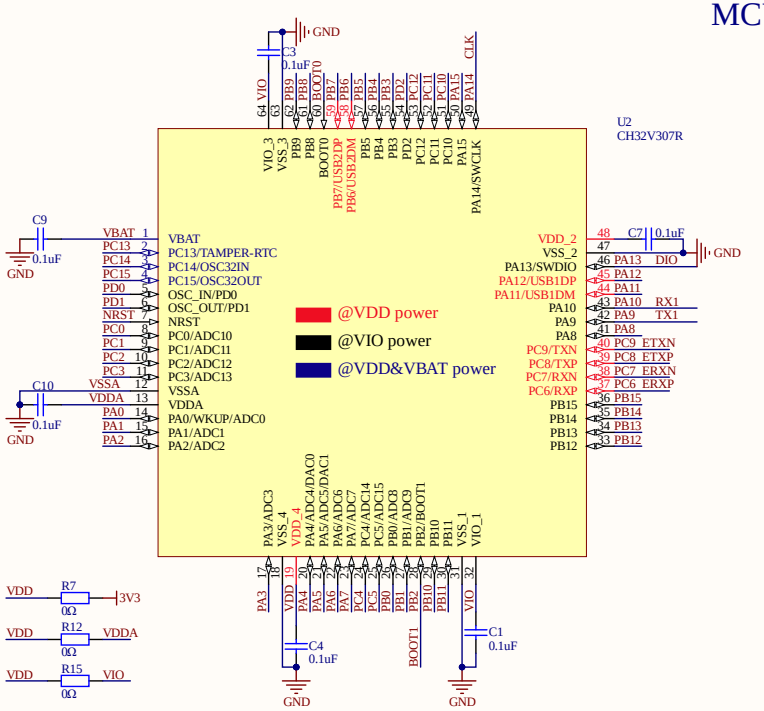
LED



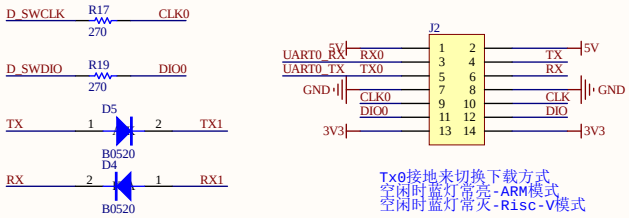
RST



MCU

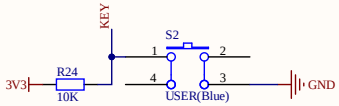


SWD&UART

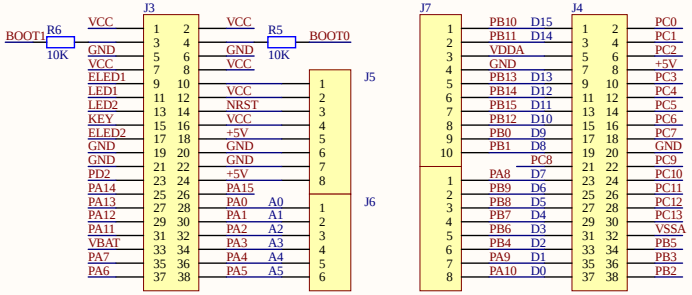


Tx0接地来切换下载方式
空闲时蓝灯常亮-ARM模式
空闲时蓝灯常灭-Risc-V模式

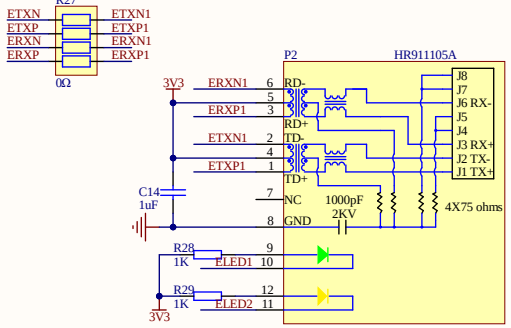
KEY



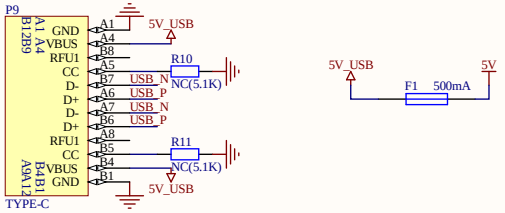
ARDUINO



ETH

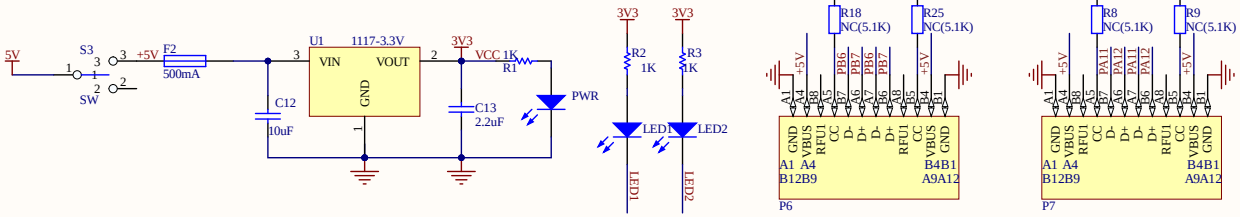


POWER&USB



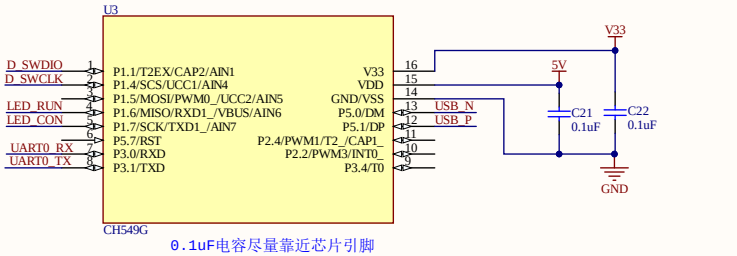
CH32V307/305/303R最小系统

POWER&USB

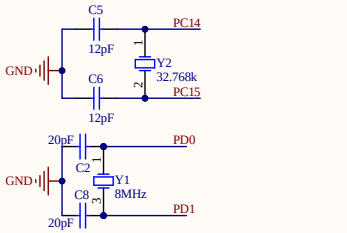


WCH_Link

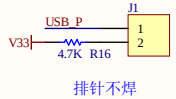
MCU



XTAL

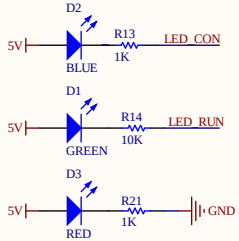


BOOT

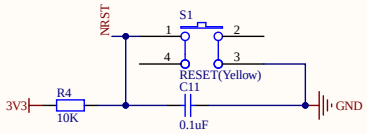


排针不焊

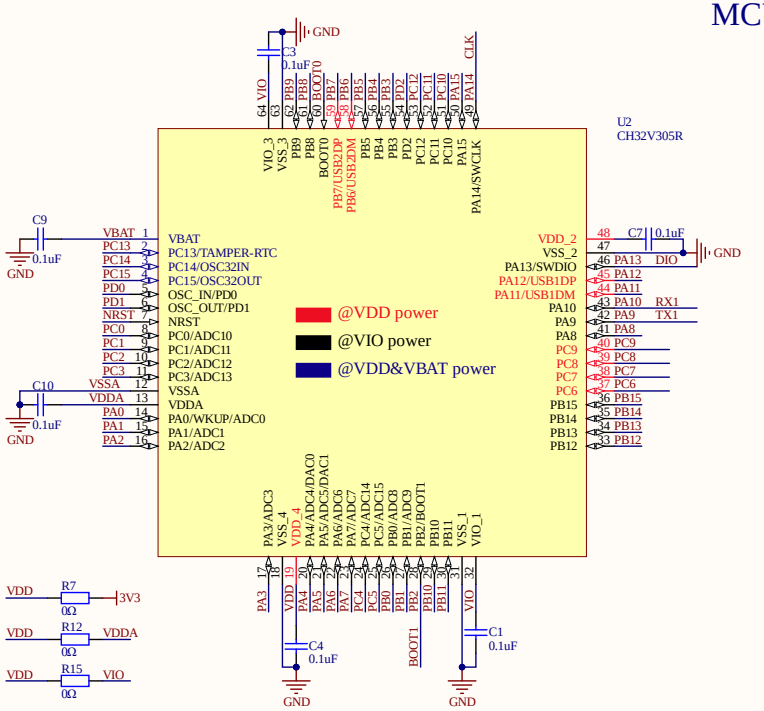
LED



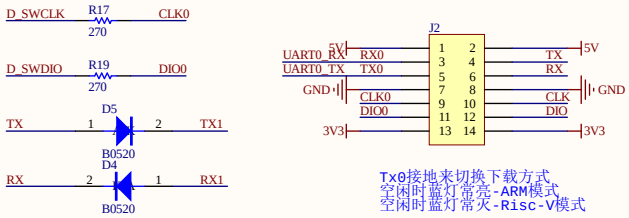
RST



MCU

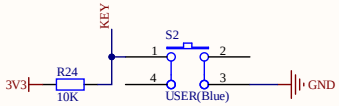


SWD&UART

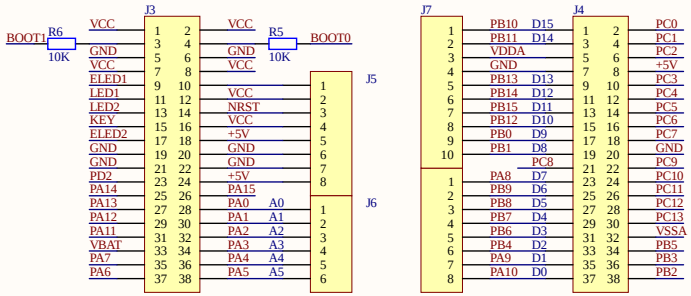


Tx0接地来切换下载方式
空闲时蓝灯常亮-ARM模式
空闲时蓝灯常灭-Risc-V模式

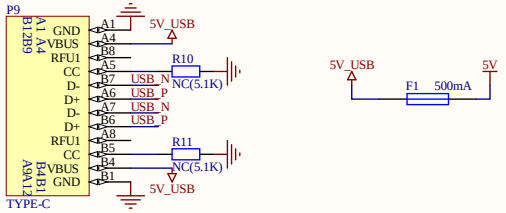
KEY



ARDUINO

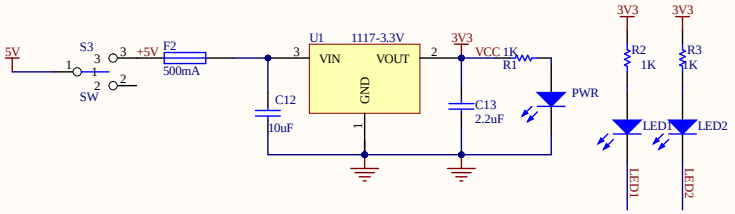


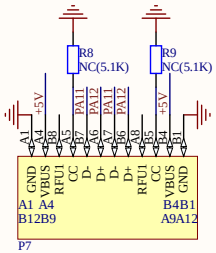
POWER&USB



CH32V307/305/303R最小系统

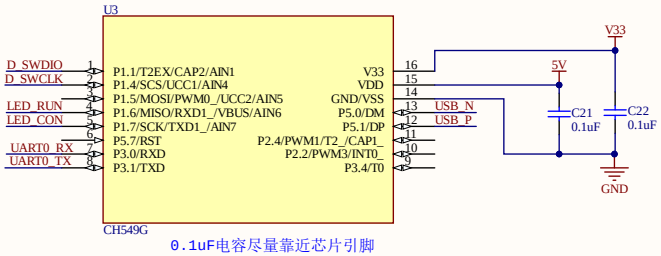
POWER&USB





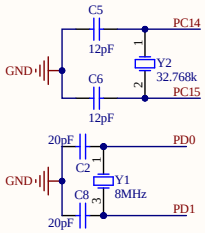
WCH_Link

MCU

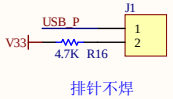


0.1uF电容尽量靠近芯片引脚

XTAL

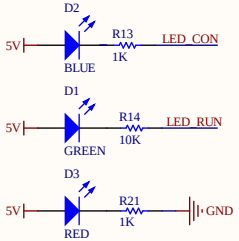


BOOT

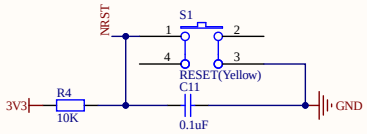


排针不焊

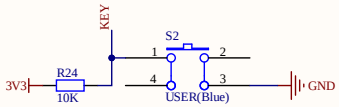
LED



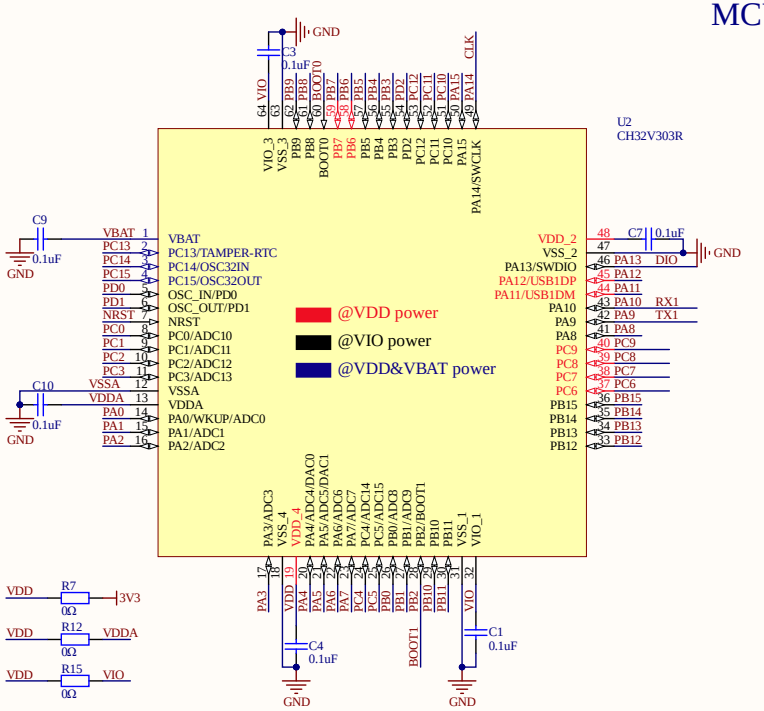
RST



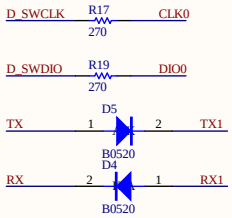
KEY

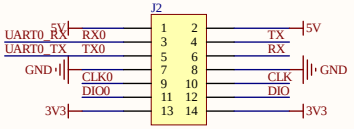


MCU



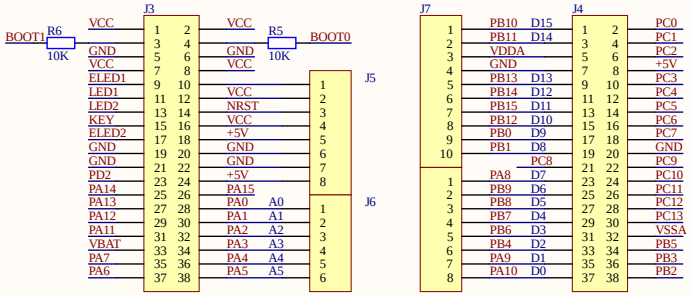
SWD&UART



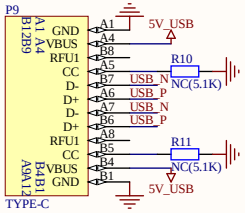


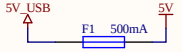
Tx0接地来切换下载方式
空闲时蓝灯常亮-ARM模式
空闲时蓝灯常灭-Risc-V模式

ARDUINO



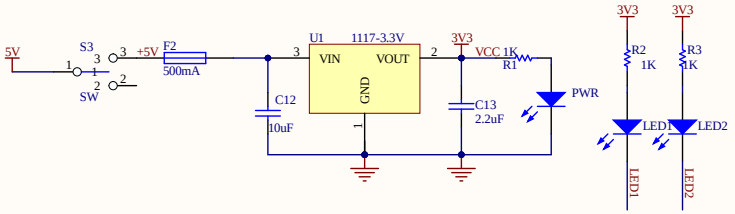
POWER&USB

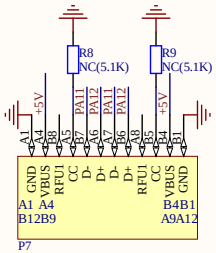




CH32V307/305/303R最小系统

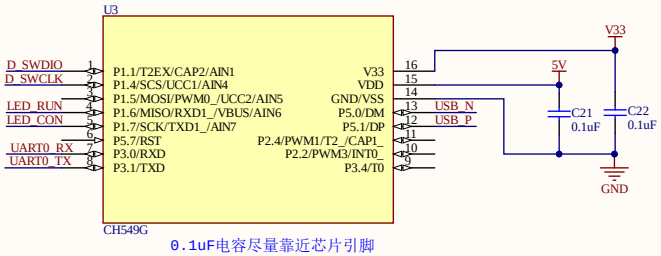
POWER&USB





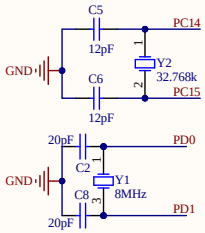
WCH_Link

MCU

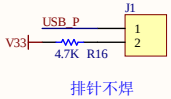


0.1uF电容尽量靠近芯片引脚

XTAL

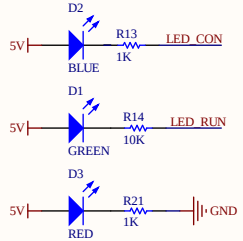


BOOT

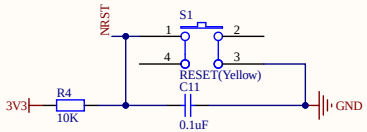


排针不焊

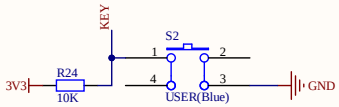
LED



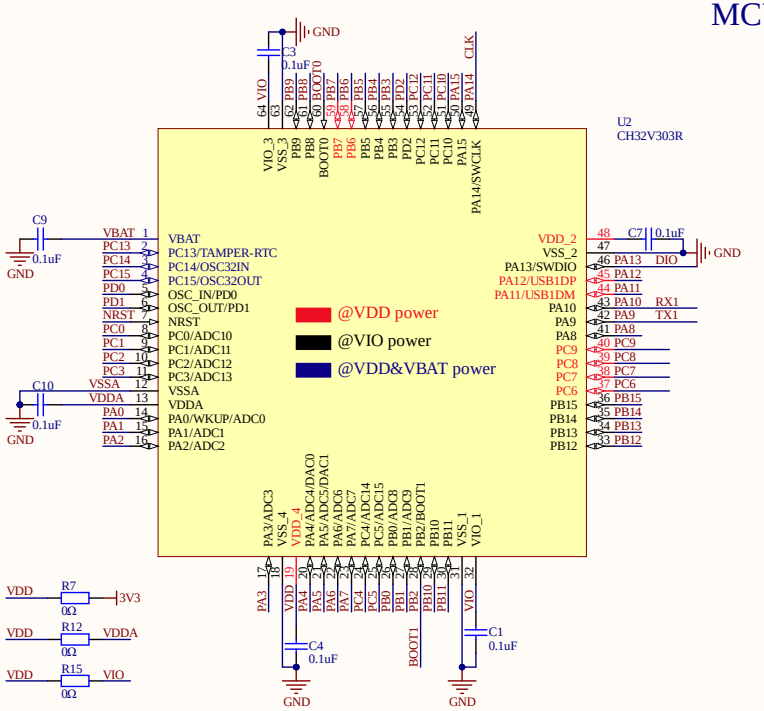
RST



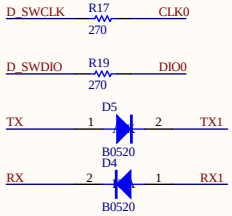
KEY

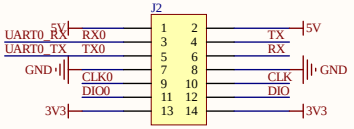


MCU



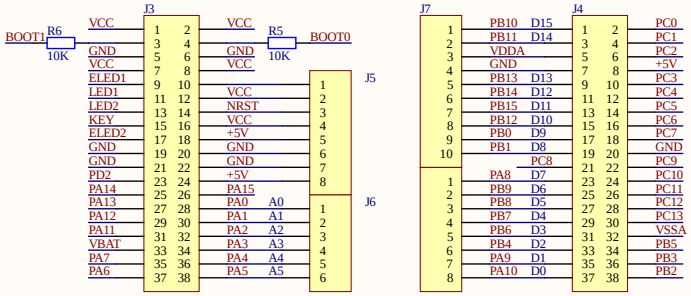
SWD&UART



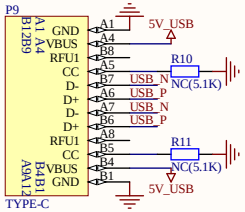


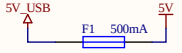
Tx0接地来切换下载方式
空闲时蓝灯常亮-ARM模式
空闲时蓝灯常灭-Risc-V模式

ARDUINO

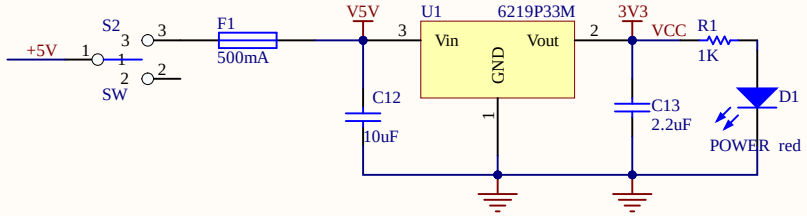


POWER&USB

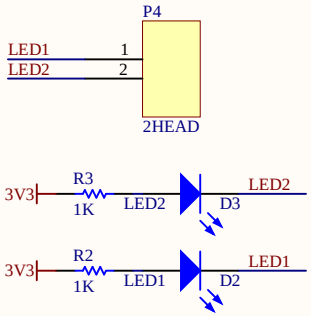




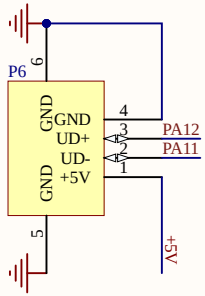
POWER



LED

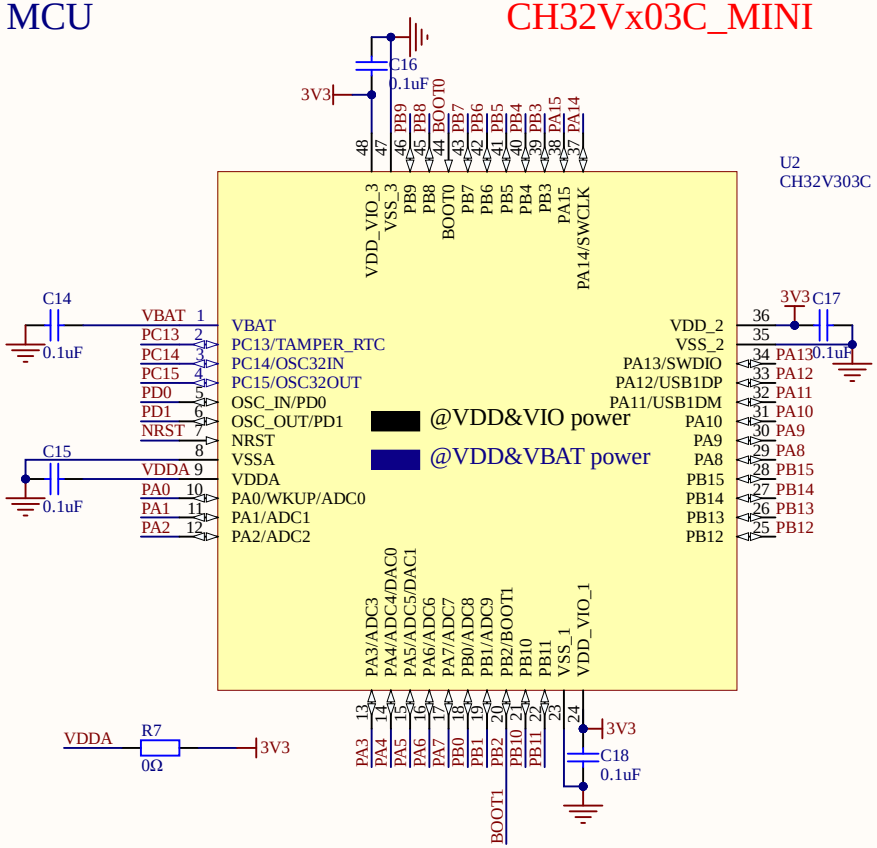


USB

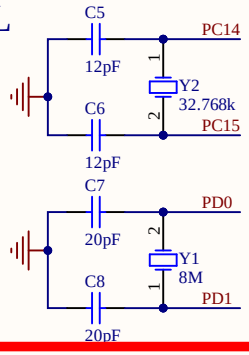


MCU

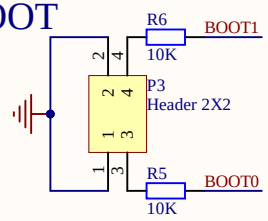
CH32Vx03C_MINI



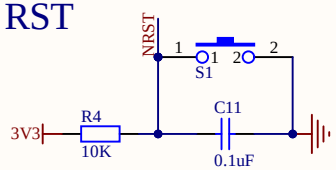
XTAL



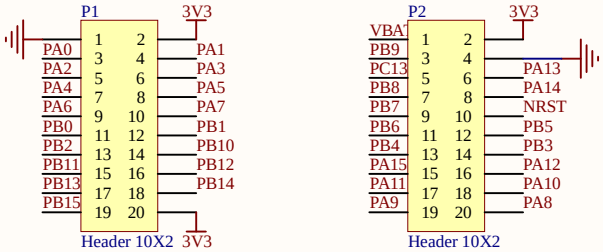
BOOT



RST

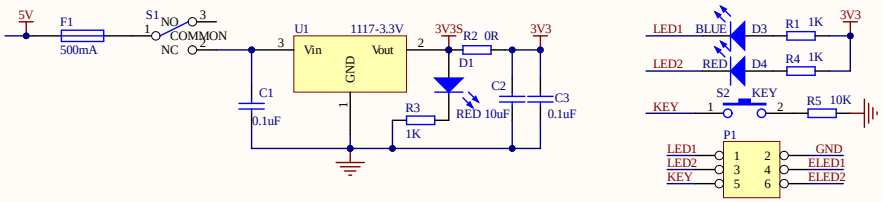


PIN

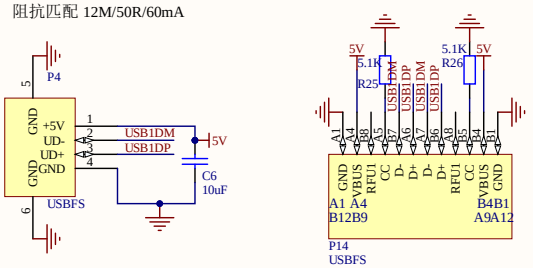


CH32xx0xV_EVT

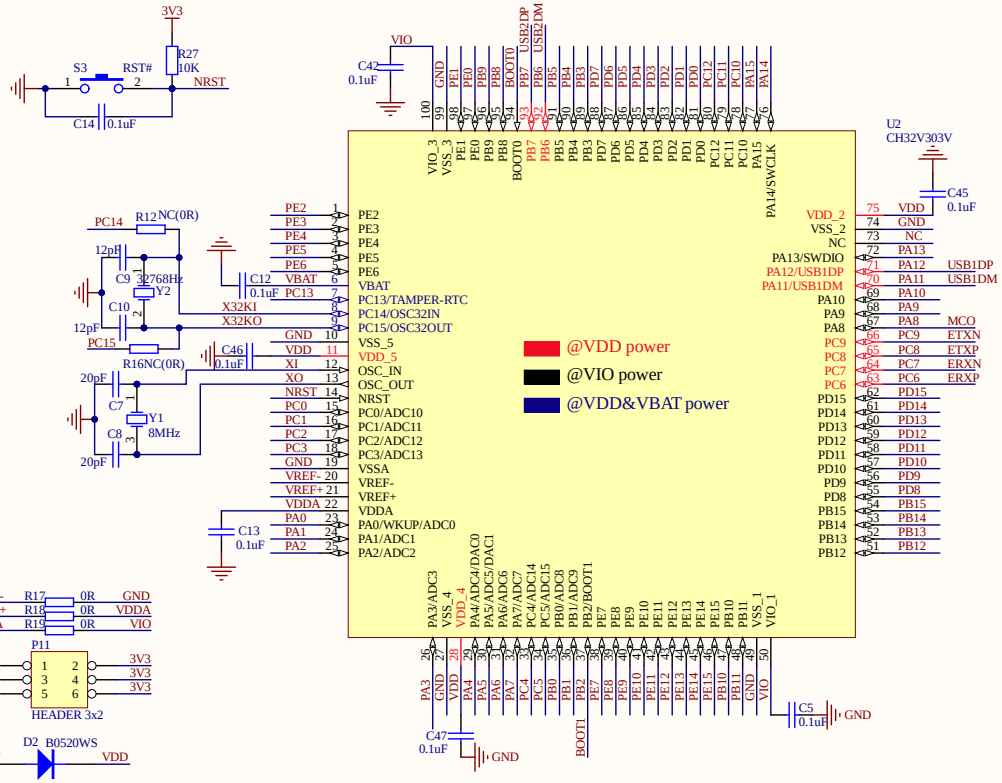
POWER



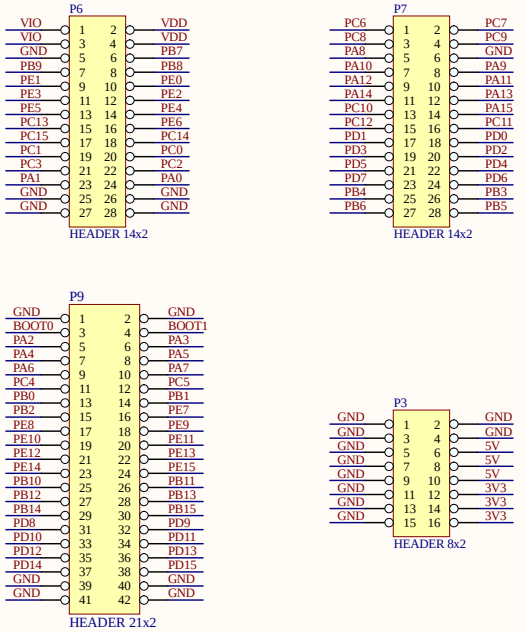
USB



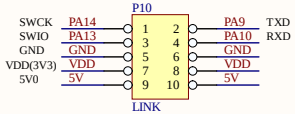
MCU



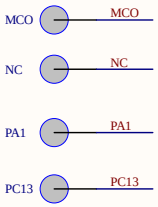
PIN



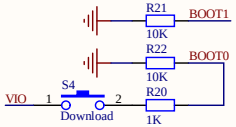
DEBUG

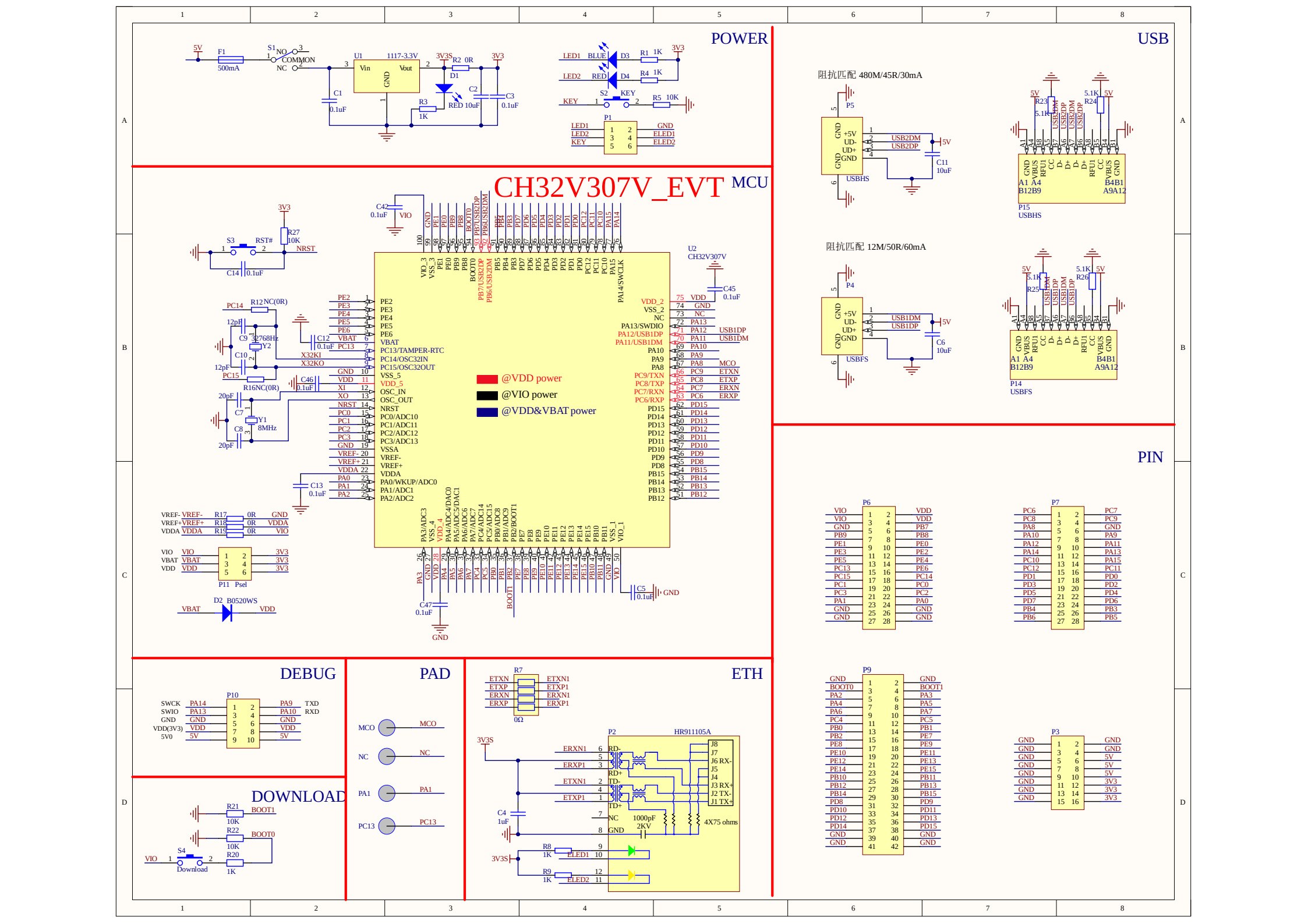


PAD



DOWNLOAD




POWER
USB
CH32V307V_EVT
MCU
@VDD power
@VIO power
@VDD&VBAT power
阻抗匹配 480M/45R/30mA
阻抗匹配 12M/50R/60mA
USBHS
USBFS
PIN
DEBUG
PAD
ETH
DOWNLOAD
Download
HR911105A

IO全引出

Boot Config

Debug Port

SPI口屏幕

Crystals

Reset

U5

W25Q32JV

USB Full Speed

阻抗匹配 12M/Zd:100R/60mA

USB High Speed

阻抗匹配 480M/Zd:100R/30mA

CH32V307VCT6

Risc-V v4f
IMAFC
144MHz
128KB RAM
192KB ROM

@VDD power
@VIO power
@VDD&VBAT power

LDO

Power Input

DC-DC on Chip

Decoupling Capacitor need to be closed to PHY pin

LDO on Chip

RGMII Power
Use external RGMII power by default
Remove R63 if you do not use 3.3V as RGMII power.

Clock Source&Clock Output

Crystal is used as the clock source of the PHY by default

PHY Interrupt Output

PHY interrupt is not used by default
Solder R36 if you want to use PHY interrupt

MDIO Pullup

Forward Mode Config

Configure as UTP by default

Regular on_chip reference Resistance

PHY Reset

MDI interface

Differential impedance :100Ω

RGMII interface

Characteristic impedance:50Ω
Equal length wiring

TX&RX

UTP

HR911130C

LED

The Power of RTL8211FS

Decoupling Capacitor need to be closed to PHY pin

RGMII Voltage Config

Configured RGMII power to use external 3.3V by default

PHY Address Config

The PHY address is configured as 0x01 by default

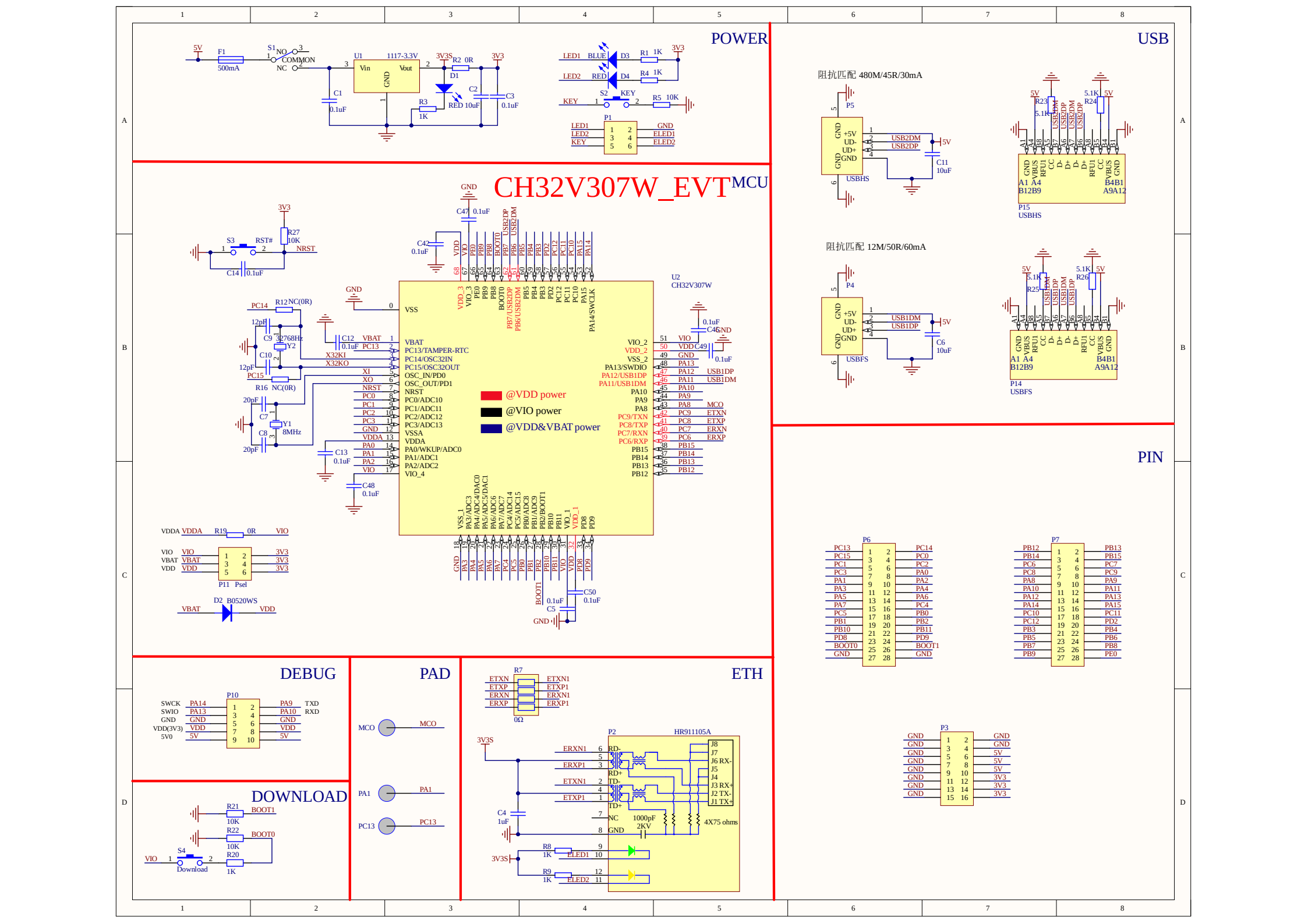
千兆PHY(RGMII)

SD卡座,设计最大供电：100mA,最大频率72MHz
不提供IO电平变换的功能

摄像头（DVP-8bits）,设计最大供电：100mA

应焊接排座，针脚排布兼容正点原子摄像头

IO Remap 统一50欧姆阻抗


POWER
USB
CH32V307W_EVT
MCU
PIN
DEBUG
PAD
ETH
DOWNLOAD
阻抗匹配 480M/45R/30mA
阻抗匹配 12M/50R/60mA
@VDD power
@VIO power
@VDD&VBAT power
U2
CH32V307W
P15
USBHS
P14
USBFS
P10
P6
P7
P3
P2
HR911105A
Download