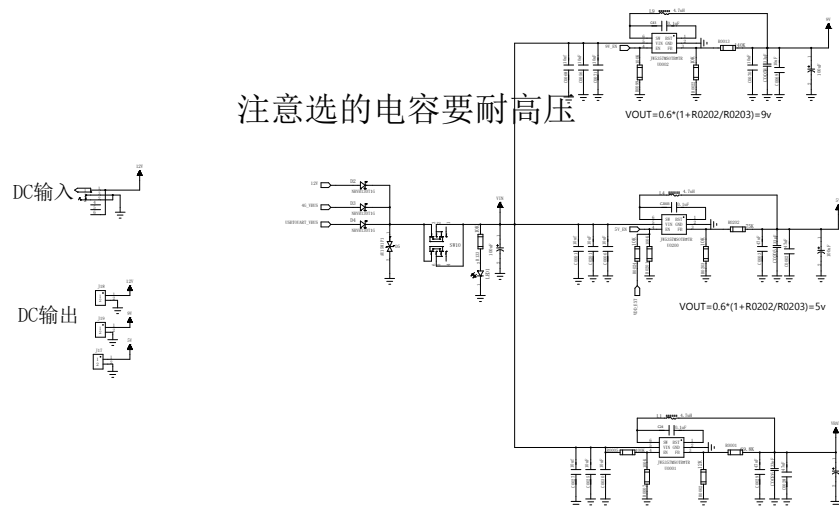
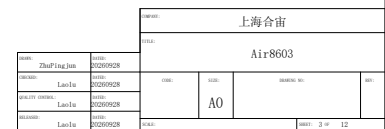
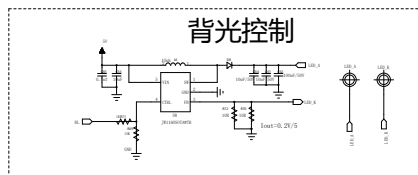


NOTES ON RECORD:			
LINE	REQ NO:	APPROVED:	DATE:

注意选的电容量要耐高压


$$V_{OUT} = 0.6 \cdot (1 + R_{0202}/R_{0203}) = 9V$$
$$V_{OUT}=0.6 \cdot (1+R_{0202}/R_{0203})=5V$$

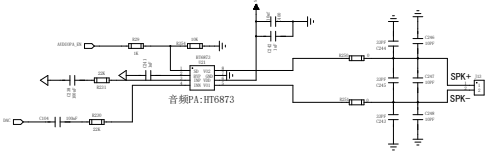


REVISION HISTORY			
NO.	REV. NO.	DESCRIPTION	DATE

音频PA电路

4Ω喇叭/5V供电/THD=10% 下最高输出功率3.5W

Air1603仅支持音频DAC输出，播放音乐或TTS；录音/通话/SIP等功能仅在Air1604系列支持

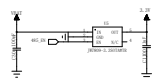


		NAME: 上海合宙			
		TITLE: Air8603			
author: ZhiPingJian	date: 20200928				
reviewer: LiaoJi	date: 20200928	CHNL	SIZE: A0	DRAWING NO:	REV:
quality control: LiaoJi	date: 20200928				
release: LiaoJi	date: 20200928				
		PAGE: 6		TOTAL: 12	

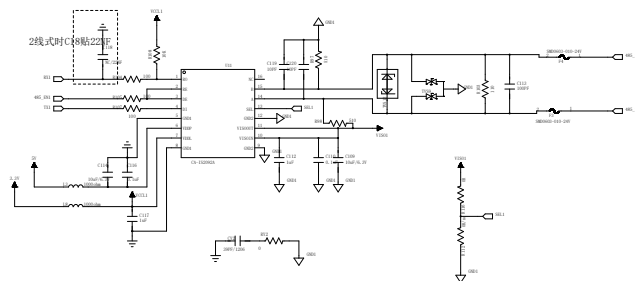
REVISION RECORD			
LINE	REV NO:	APPROVER:	DATE:

485收发器电源

三路收发器共用(两路隔离+一路非隔离)



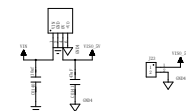
隔离式485收发器1



VISO1电流输出能力较弱
请结合IS2092规格书说明谨慎用于小电流外设

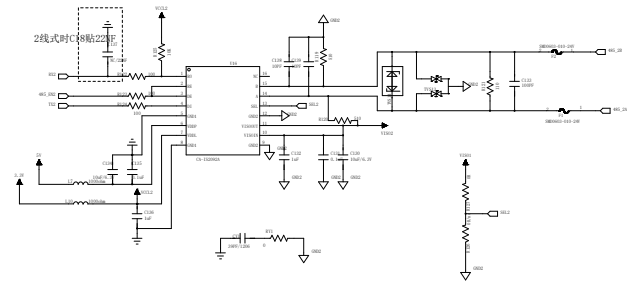
隔离电源输出

大电流隔离电源，预留设计，根据BOM选贴



隔离式485收发器2

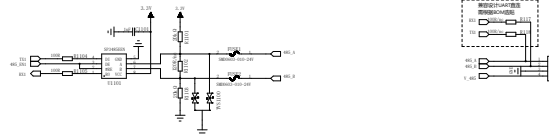
本路485与人脸识别UVC摄像头二选一，不可同时使用



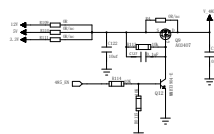
VISO2电流输出能力较弱
请结合IS2092规格书说明谨慎用于小电流外设

非隔离485收发器

与隔离式485收发器1二选一，不可同时使用



外设电源供电控制



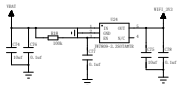
LuatOS已支持Modbus协议
详见扩展库exmodbus中的介绍

		NAME:		上海合宙			
		TITLE:		Air8603			
NAME:	ZhuFengJun	CODE:	20200928				
NAME:	Laolu	CODE:	20200928	ORIG:	SIZE:	DESCRIPTION NO.:	REV:
QUALITY CODE:	Laolu	CODE:	20200928	AO			
RELEASED:	Laolu	CODE:	20200928	DATE:	DATE: 8/30/17		

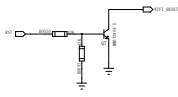
REVISION HISTORY			
NO.	REV. NO.	DESCRIPTION	DATE

4G与WiFi不可同时使用
根据BOM选贴WiFi或4G

WiFi供电3.3V

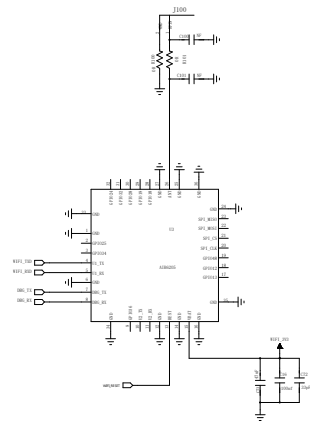


WiFi重启控制



WiFi模组Air6205

Air6205支持板载天线
Air6205A支持IPEX外接天线



上海合宙			
Air8603			
客户: ZhiPingJian	日期: 2024/09/28	A0	
物料: LianGu	日期: 2024/09/28	A0	
物料: LianGu	日期: 2024/09/28	A0	
物料: LianGu	日期: 2024/09/28	A0	

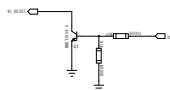
REVISION RECORD			
DATE	REV. NO.	APPROVAL:	DATE

特别提醒！

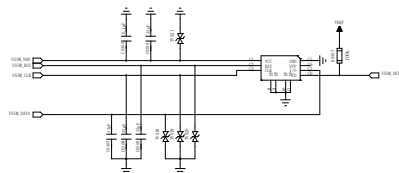
4G与WiFi不可同时使用

根据BOM选贴WiFi或4G

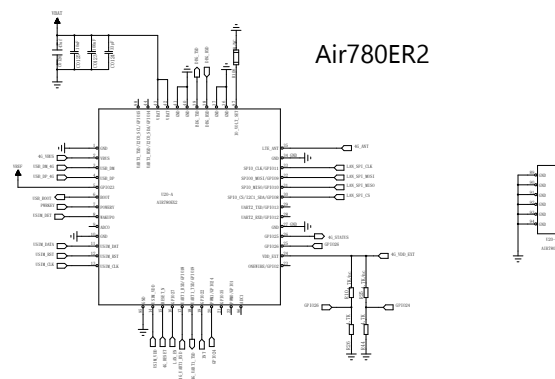
4G重启控制



SIM卡座

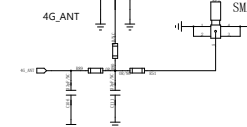


Air780ER2

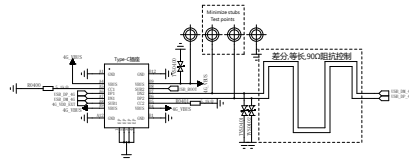


天线

4G_A1

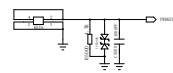


USB

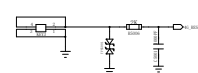


1. USB走线需要严格按照差分线控制，做到平行和等长；
2. USB走线的阻抗需要控制到差分90欧姆；
3. 需要尽可能的减少USB走线的stub，减少信号反射；USB信号的测试点最好直接放在走线上以减少stub
4. 在靠近USB连接器或者测试点的地方添加USB保护管，由于USB的速率较高，需保证选用的TVS保护管的寄生电容小于1pF
5. VBUS作为USB接入检测，必须连接USB电源或者其它外接电源，否则USB无法被检测到，VBUS的检测电压要大于3.3V

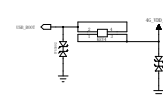
按键开机



RESET_N 复位

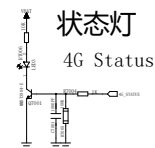


USB下载使能

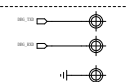


状态灯

4G Status



USB_BOOT 在开机过程中拉高可以进入USB下载模式
建议预留测试点



DGB_UART, 也常备称为UART0, 用作底层日志的抓取
波特率921600bps, 不可更改
不可作为通用UART使用



开机键测试点，设计批量升级夹具时会用到



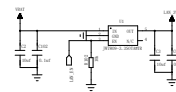
VBAT供电测试点,设计批量升级夹具时会用到

FROM: ZuoJingJian		DATE: 20200928		(NAME): 上海合市 TITLE: Air8603	
THRU: Luolu		DATE: 20200928			
TO: Luolu		CODE:	SIZE:	MARKING NO:	QTY
REMARKS: Luolu		A0			
RELEASED: Luolu		DATE: 20200928			
RECEIVED: Luolu		DATE: 20200928			
TOTAL: 1		TOTAL: 1		TOTAL: 1	

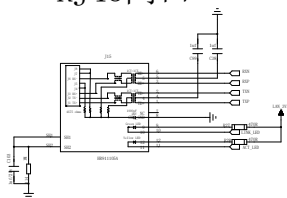
NOTES ON RECORD:			
LINE	REQ NO:	APPROVED:	DATE:

以太网CH390H挂载在4G模组Air780ER2下
主控Air1603没有参与管理和调度
可用于为以太网接口的IPC外设提供通信通道

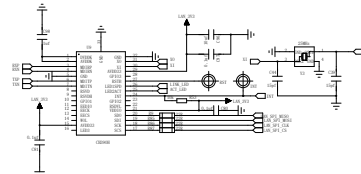
CH390H供电 3.3V



RJ45网口



以太网
SPI接口CH390H



		NAME:		上海合宙	
		TITLE:			
		AIR:		Air8603	
NAME:	ZhuoFangJun	PHONE:	25200928		
NAME:	Laolu	PHONE:	25200928		
QUALITY CONTROL:	Laolu	COLOR:		SIZE:	MARKING NO.:
RELEASE:	Laolu	DATE:	AO		REV:
		SCALE:			MARK: 1/30 1/2