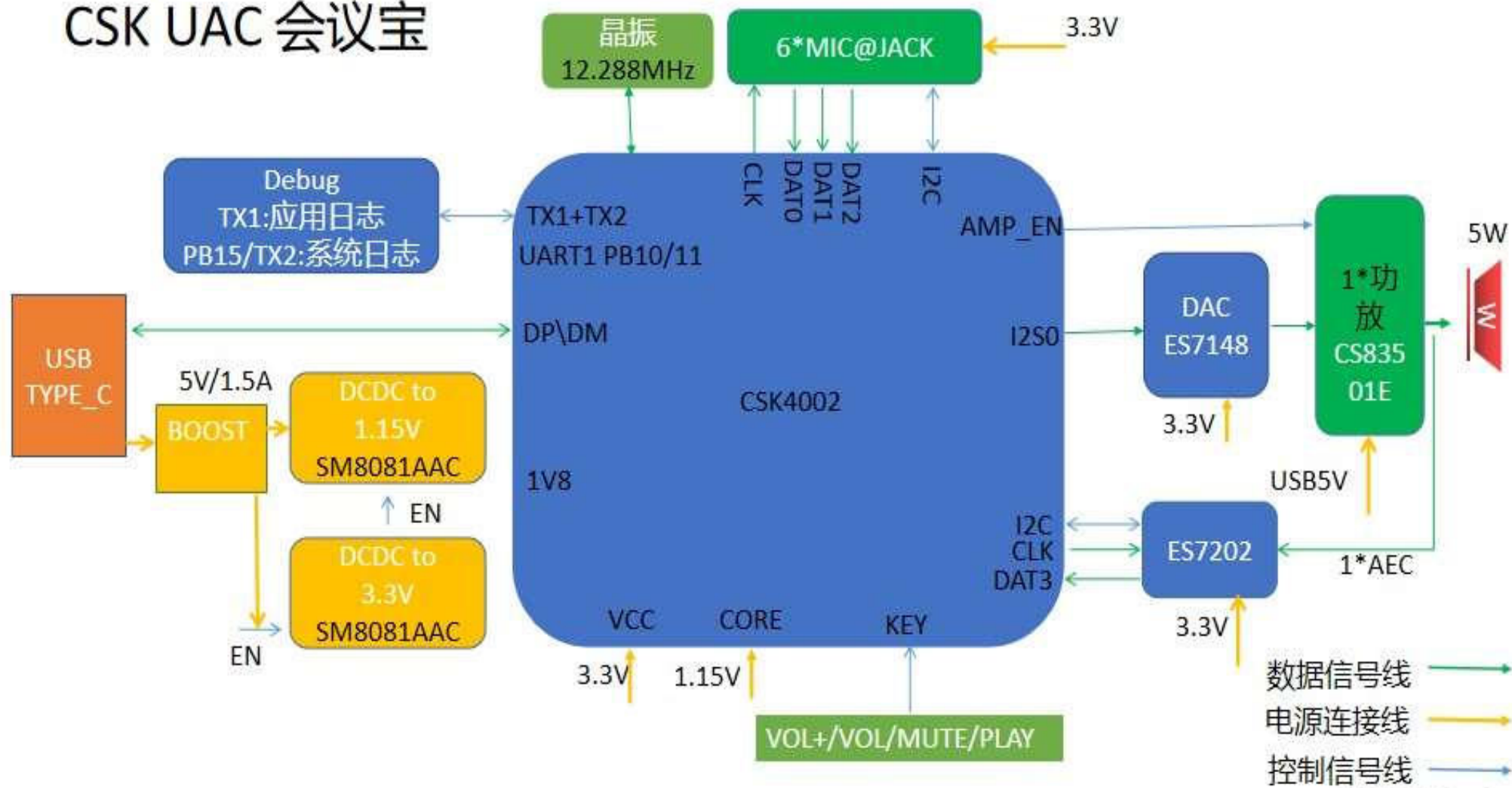


Ver.	VERSION HISTORY	DATE
V01	初版设计	2021.10.12
V02	增加BOOST电源	2021.11.02
V03	带HUB芯片手动烧录事项	2021.11.25

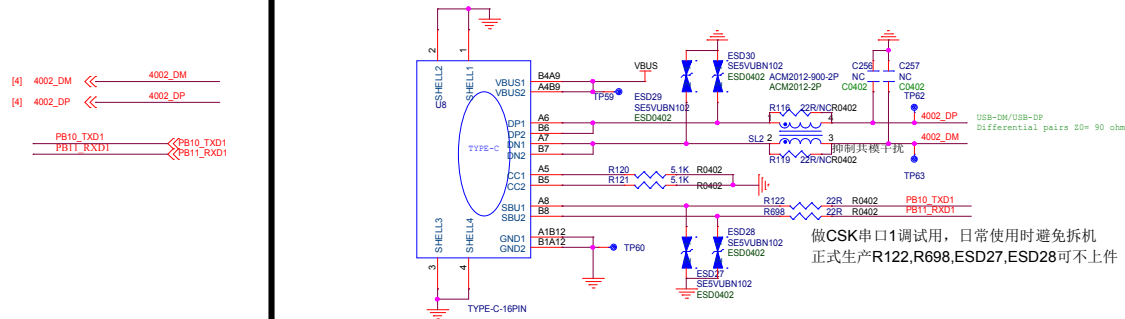
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UAC-CSK-ES7202		
Size	Document Number	Rev
A	<Doc>	1.0
Date:	Friday, November 26, 2021	Sheet 1 of 7

CSK UAC 会议宝

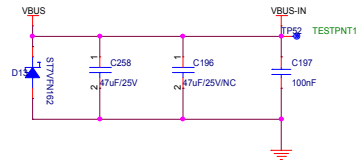


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<Title>		
Size	Document Number	Rev
A	<Doc>	<RevCode>
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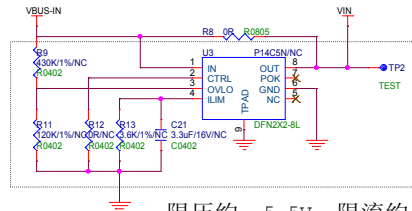
USB IN:



USB使用TYPE C连接座



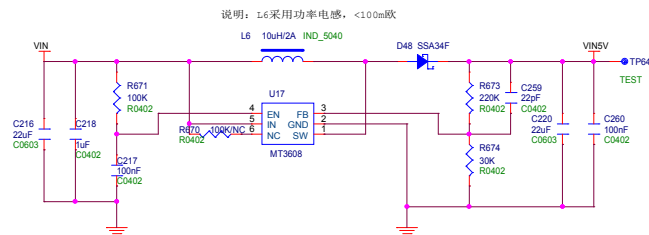
OVP:



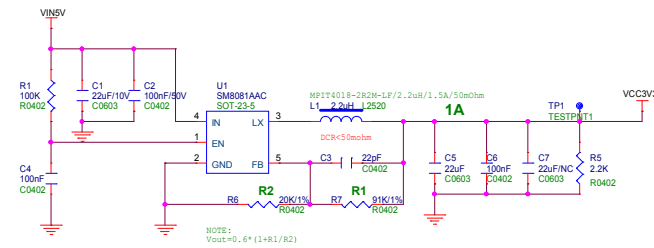
限压约：5.5V，限流约：1.5A

过压、过流保护电路,用于高可靠性产品要求,
根据客户需求进行添加

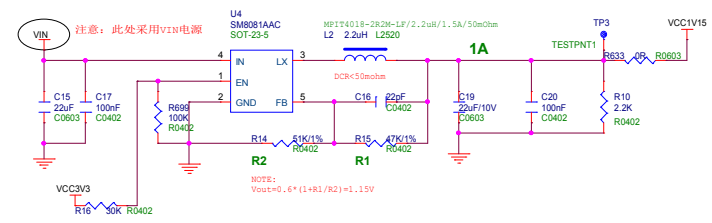
BOOST:



PWR3V3:



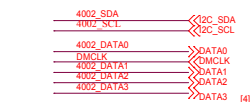
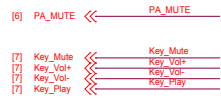
PWR1V15:



上电顺序：VCC3V3 -> VCC1V1

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Castor DSP:

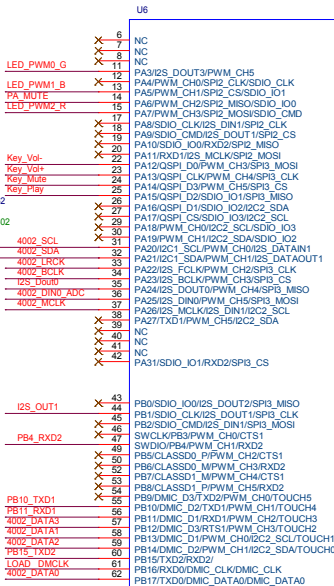


CSK4002的IO:

默认内部上拉模式，
上电默认高电平

注意事项：客户会议机板设计中如带有HUB芯片，首次在CSK空片板载手动烧录时，板子需要注意预留的测试点：**1、USB VBUS 5V**供电口点 **2、CSK 4脚DP 3、CSK 5脚DM 4、GND**。通过以上4个测试点，直接给CSK供电和连接CSK USB口来进行烧录，防止CSK空片情况下，HUB芯片带来的干扰影响烧录，烧录成功一次后，后续HUB芯片不会引发干扰，可以直接通过USB来进行烧录。本设计中不带HUB芯片，客户扩展使用HUB时需要注意。

Pin60 TXD2 for system BOOT log output

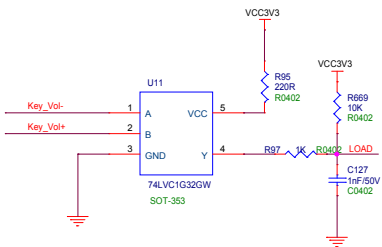


CSK4002/CSK3002/CSK3001

4002

CSK4002

逻辑门:



$$Y = A \text{ or } B$$

整机状态下，用于CSK芯片烧录

按键拉低PB16,不用拆机

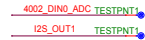
TEST POINT



For USB Download:
Pull down RXD0_LOAD (Short to GND).
Force Download from USB_DP/DM



For UART Debug
TXD2 for BOOT log output
TXD1 for APP log output



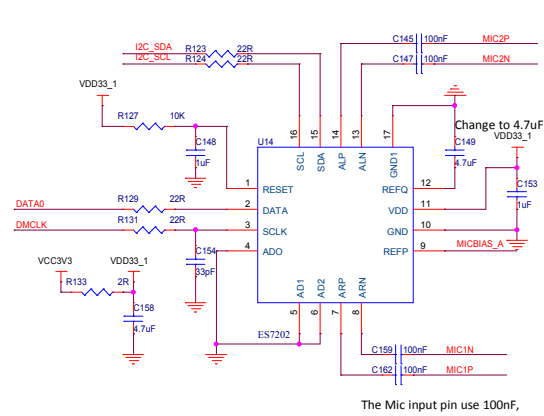
Debug con

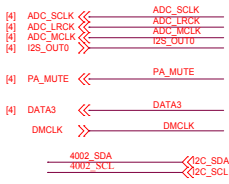


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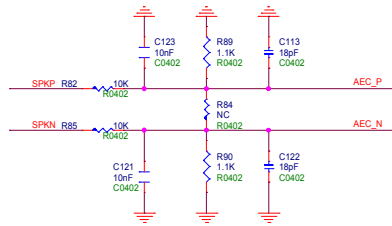
ADC:ES7202 FOR MIC

I2C_SDA I2C_SCL
DATA0 DMCLK
DATA1
DATA2





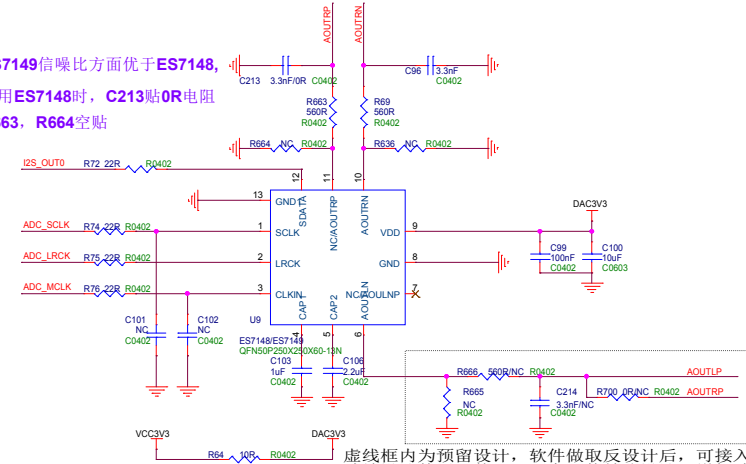
AEC:



DAC:

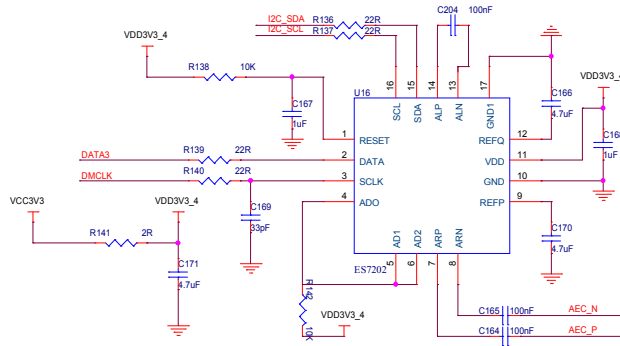
In the layout ,chip is treated as an analog device

ES7149信噪比方面优于ES7148,
使用ES7148时, C213贴0R电阻
R663, R664空贴



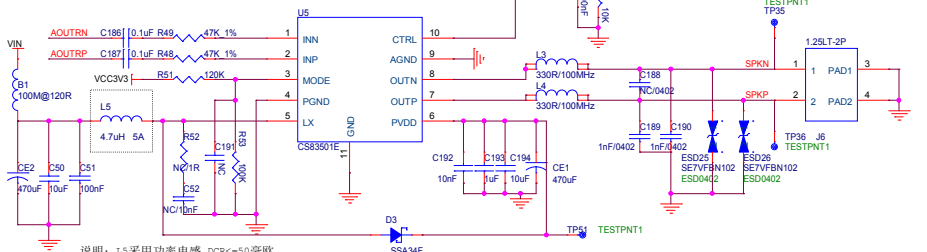
虚线框内为预留设计, 软件做取反设计后, 可接入单喇叭功放设计使用, 使ES7148实现伪差分设计, 增加功放输出信噪比, 待软件打通验证实现。前期根据产品信噪比需要选择使用ES7148单端或者ES7149实差分。

ES7202 FOR AEC:



PA:

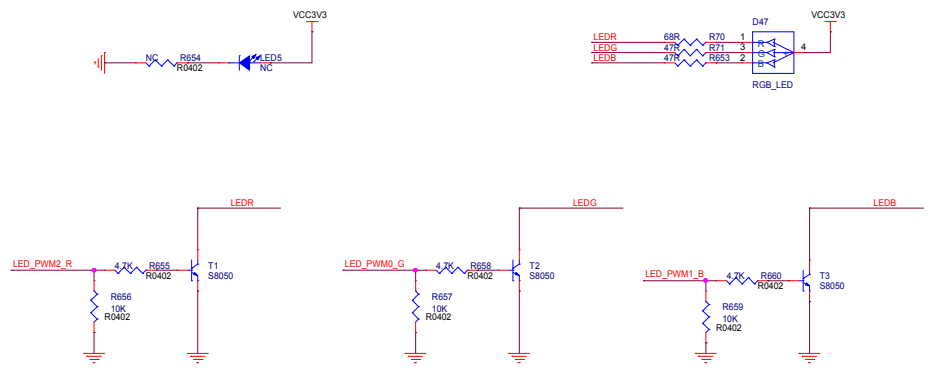
2.5V-5.5V: Recommended APA CS83501E



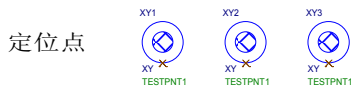
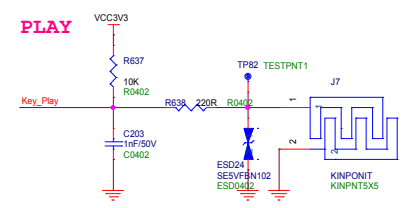
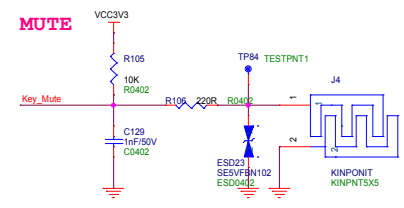
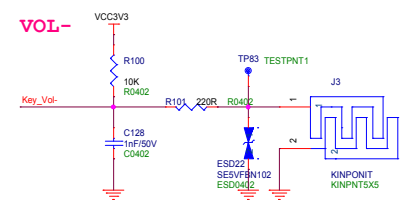
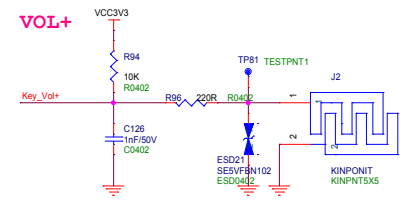
LED:

- [4] Key_Mute << Key_Mute
- [4] Key_Vol+ << Key_Vol+
- [4] Key_Vol- << Key_Vol-
- [4] Key_Play << Key_Play

- [4] LED_PWM2_R << LED_PWM2_R
- [4] LED_PWM1_B << LED_PWM1_B
- [4] LED_PWM0_G << LED_PWM0_G



KEY:



板载按键或普通开关按键，根据产品需求

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