

1、初版原理图，兼容板卡设计，I O口采用软件配置的 规格_07106；

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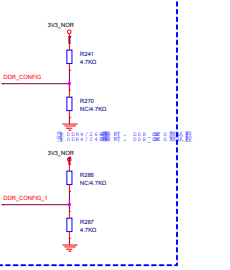
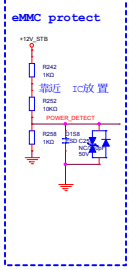
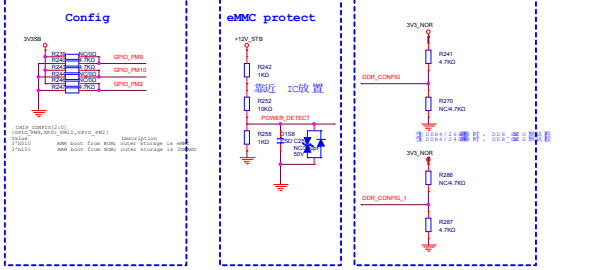
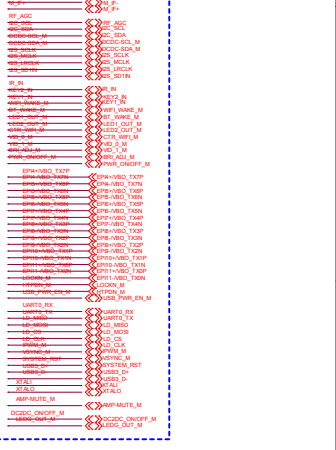
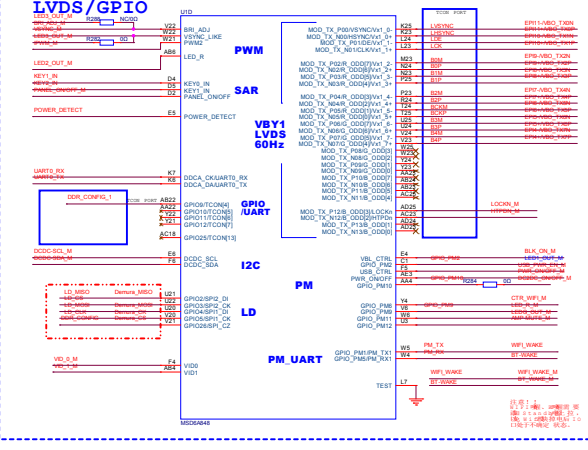
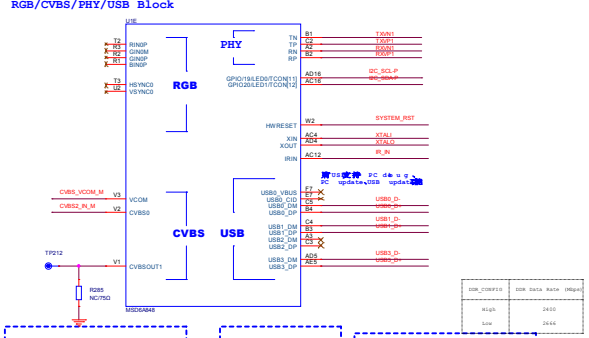
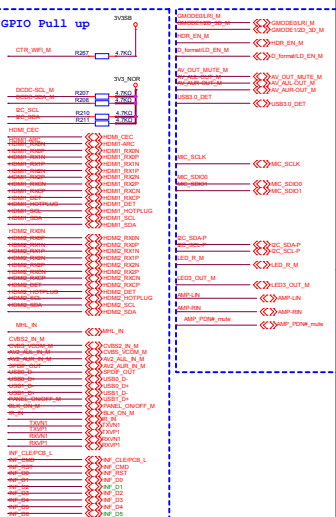
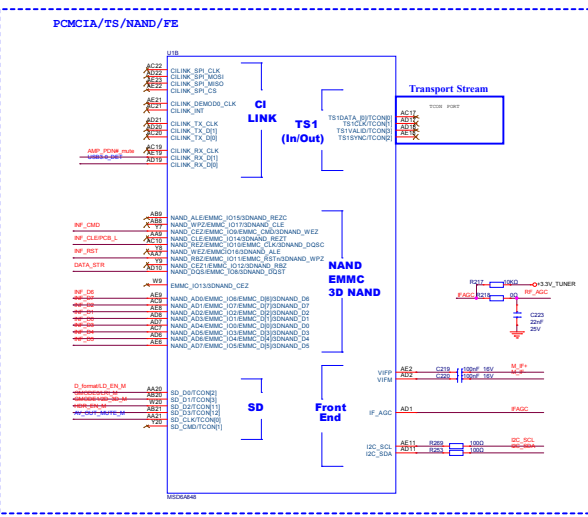
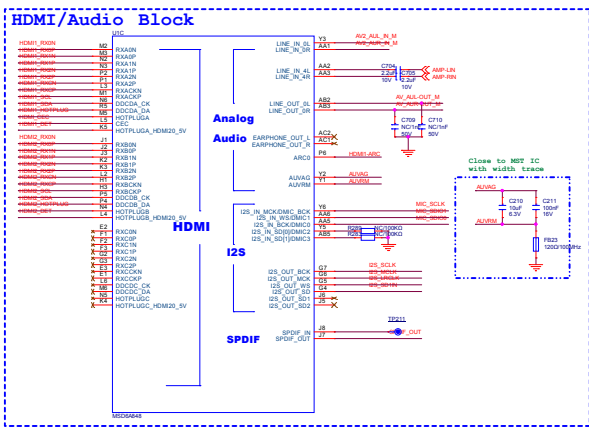
B

B

A

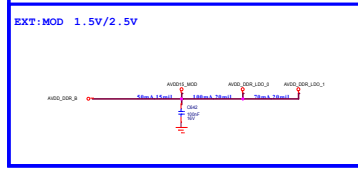
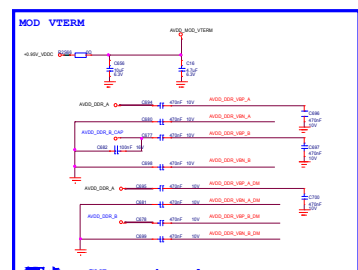
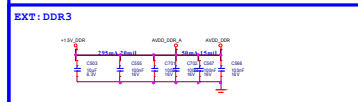
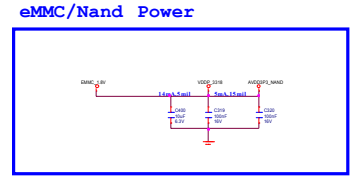
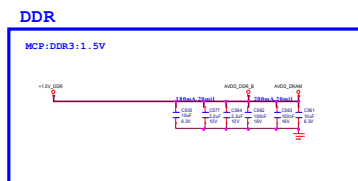
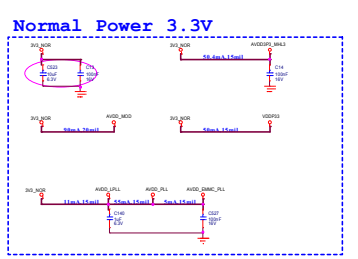
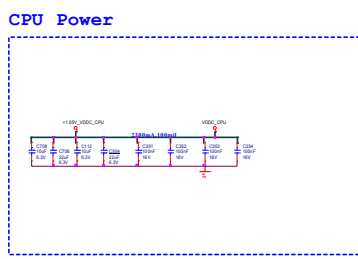
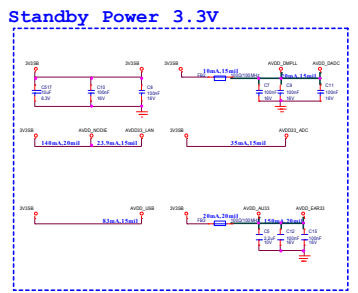
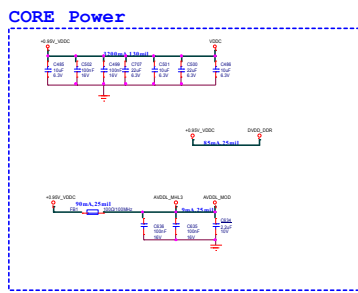
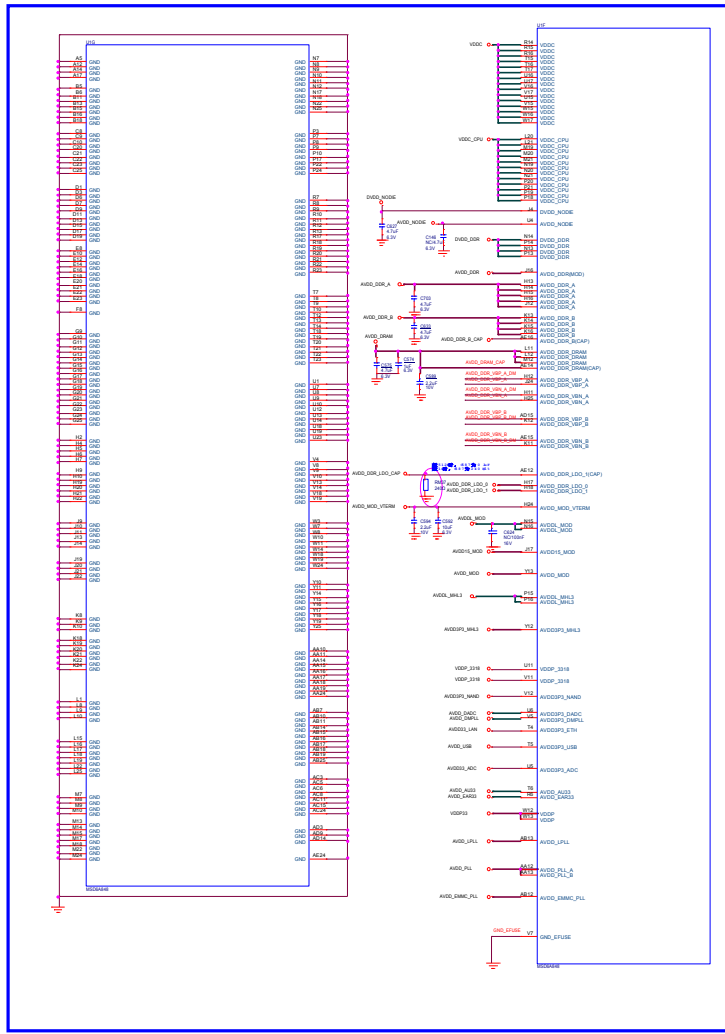
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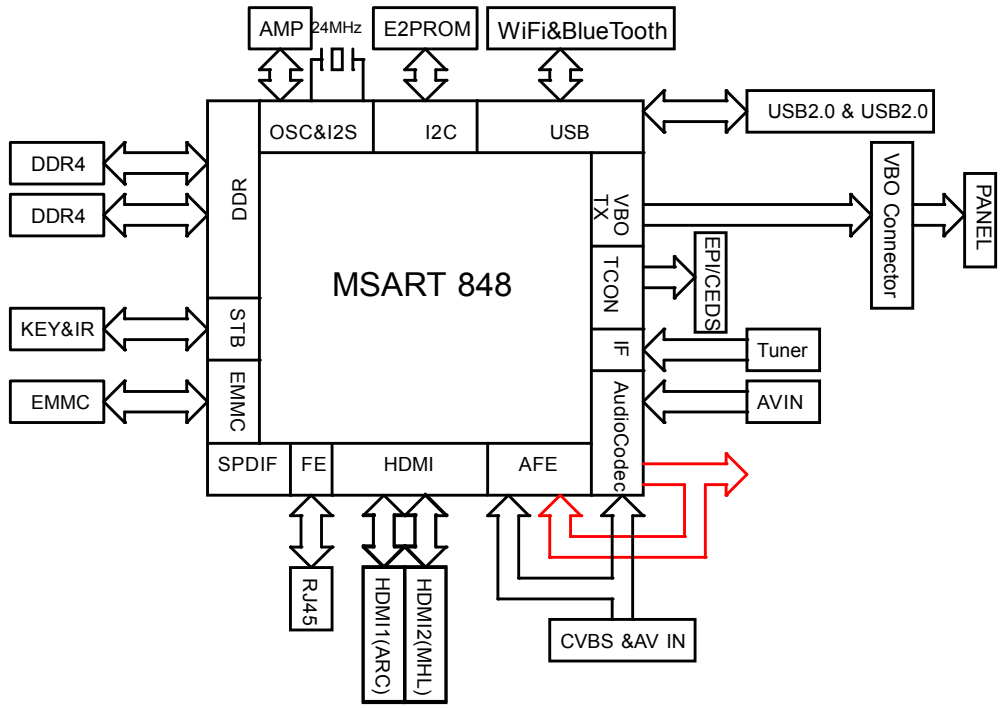
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low	2400	low	2400
low	2404	low	2404

DIR_CONFID	DIR DATA RATE (Mbps)	DIR_CONFID	DIR DATA RATE (Mbps)
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low	2404	low	2404



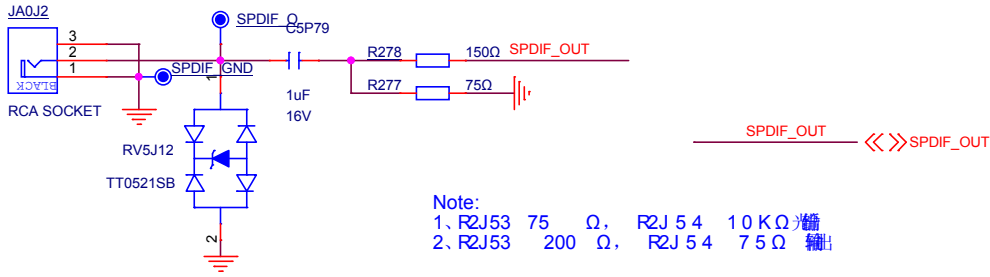
注意：CML mode 下，VDD_MOD VTERM 引脚 C 电压，使用 CML mode 需要 2 端接源

BLOCK_DIAGRAM



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图号: 6100-16011001 70



卧式同轴端子

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5、+12V_NO转+5V_NO R

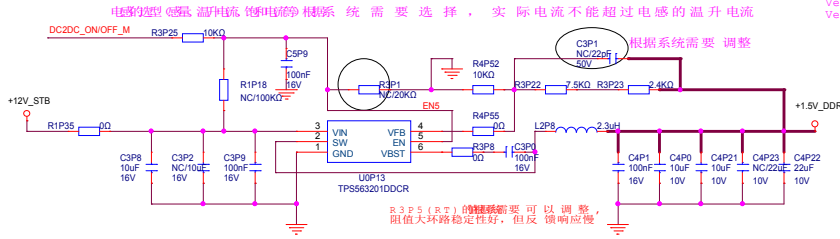
(DC D价格0.076US 标准 称最大3A输入电压4.5V轻载高效 2017年新增优选)

提示: 本型号还没有批量使用, 请先按照小批量、中批量试产流程试产OK后再批量使用

本电路设计参考, 实际使用需要结合系统环境调整参数

注意: EN脚电压及电容, 根据系统需要调整

Ven>1.6V:ON
Ven<0.8V:OFF



输入输出电容的耐压值、容值需要根据系统的实际需要(如电压、电流、温度等)进行调整

1. 该电路前的参数是输出+5V, 如要输出其他电压, 如3.3V, 1.5V可以调整电阻的参数调成和R2的大小就可了
2. PCB板的输入和输出电容尽量靠近PCB板的控制脚, 要尽量靠近IC
3. 逐步增大输入和输出电容的容量可以减小纹波的大小, 选择小ESR值的电容也可以减小纹波的大小
4. 输入输出线的材质推荐使用x5或等效, 不能使用5V材质, 注意耐压值
5. 成本仅供参考, 受元器件价格及汇率影响会有变化
6. EN脚的电压脚实际使用的需要可以进行调整
7. 如果纹波动态变化较大的话, 适当加大输出电容

复用小心 重复: 同一个模块复用时 请注意 R值的更改, 避免重复

$$V_{out} = 0.768 \times (1 + (R1/R2))$$

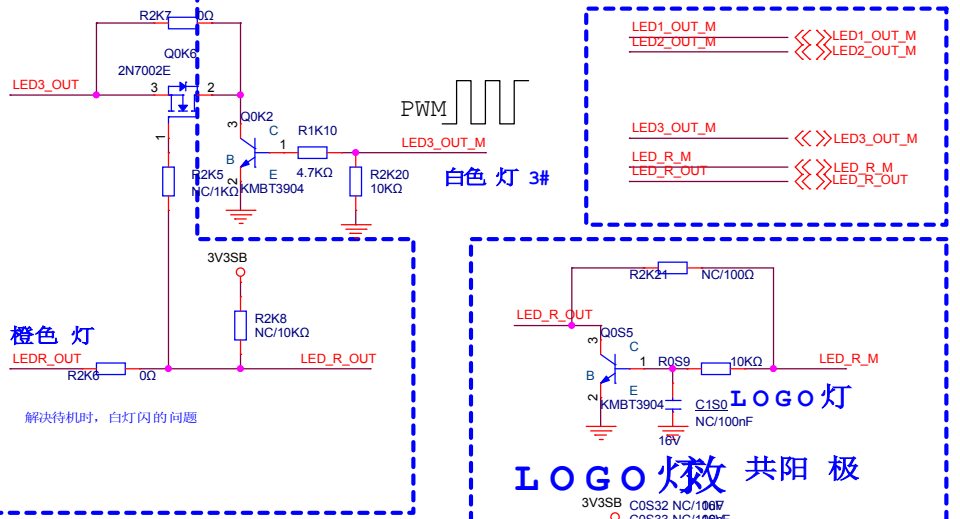
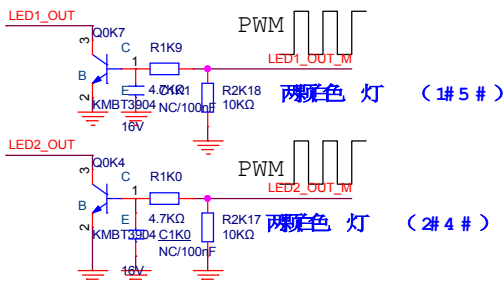
$$R1 = R3P3 + R3P4 \quad R2 = R3P2 \quad R_t = R3P5 \quad L = L0P5$$

R1 (阻值号)	R2 (阻值号)	Rt (阻值号)	Vout	L (阻值号)	最大负载
1100-CA1100-2200 (1.5k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.0V	8800-811000-AS80 (1.0uH)	2.4A
1100-CA3030-2200 (3.0k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.3V	8800-811000-AS80 (1.0uH)	2.4A
1100-CA3030-2200 (3.0k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.6V	8800-811000-AS80 (1.0uH)	2.5A
1100-CA1030-2200 (1.0k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.0V	8800-8123A0-B800 (2.3uH)	2.6A
1100-CA7530-2200 (1.5k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.0V	8800-8123A0-B800 (2.3uH)	2.7A
1100-CA5620-2200 (5.6k)	1100-CA1030-2200 (1.0k)	1100-CA0000-PT (0Ω)	5.2V	8800-8123A0-B800 (2.3uH)	2.8A

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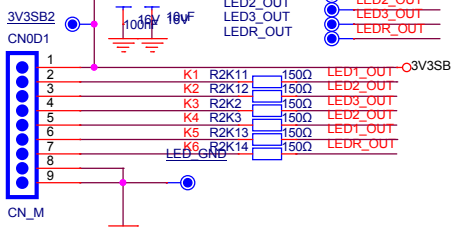
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	Custom<Doc>			
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光效灯接口

共阳极



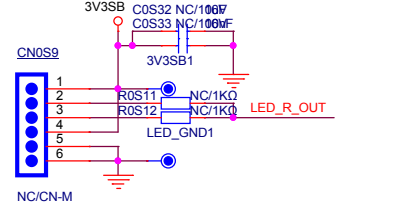
插座选择立式或者卧式请主 板根据实际 选用

7 位卧式贴片插座

解决待机时, 白灯闪的问题

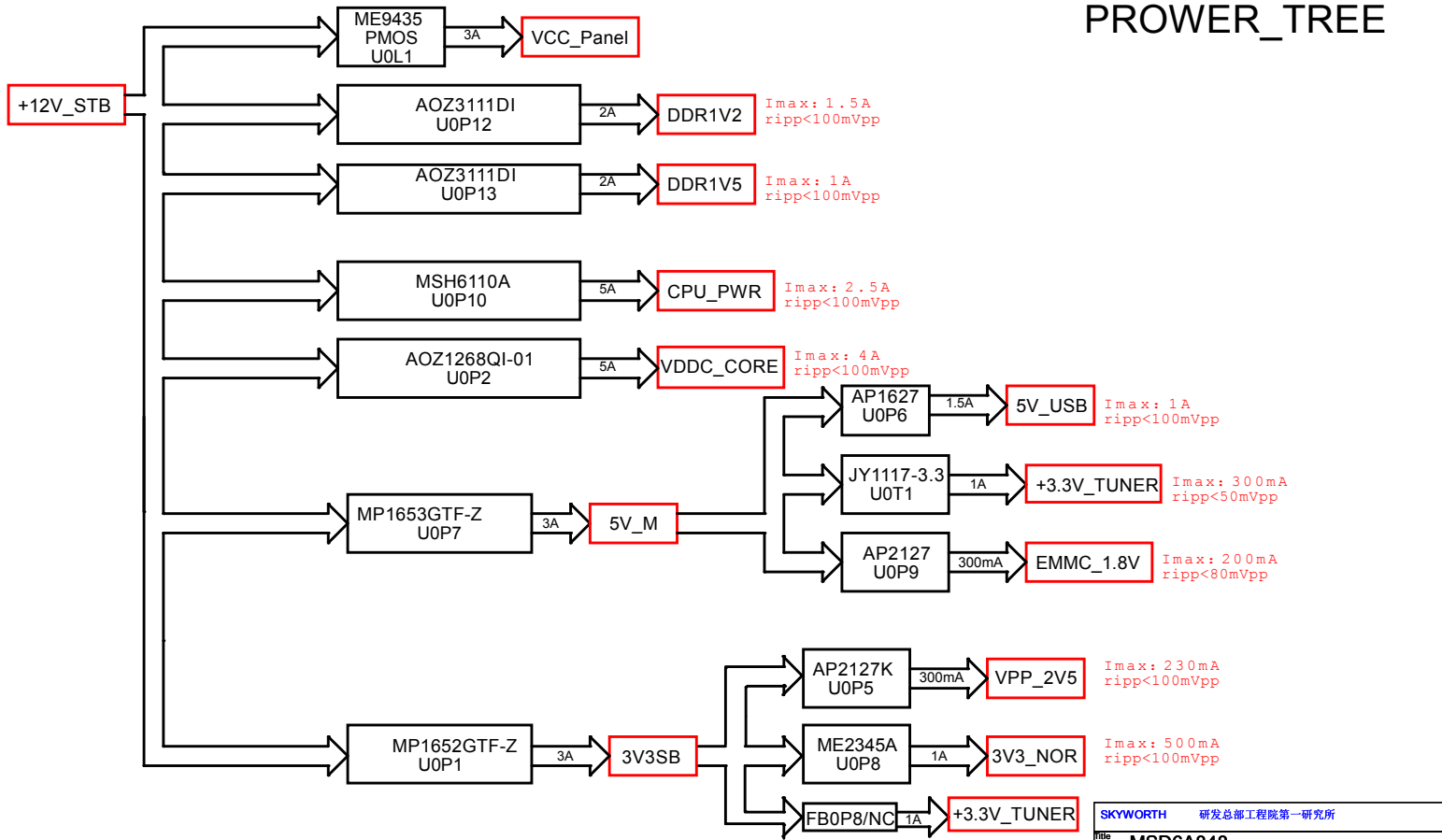
- LED_R 扫描橙色灯
- LED3 扫描白色灯, 要 接口
- LED2 扫描白色灯 (1# 4#), 要 PWM
- LED1 扫描白色灯 (1# 5#), 要 PWM

LOGO灯 共阳极



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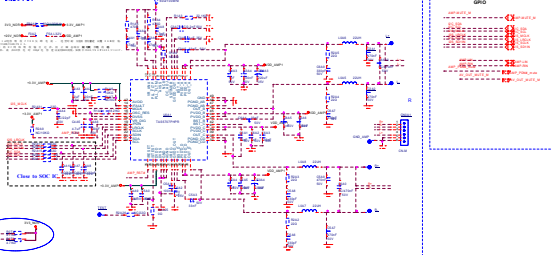
PROWER_TREE



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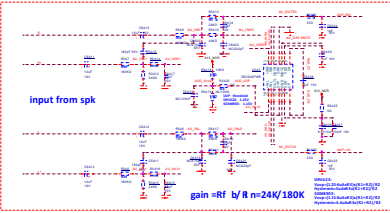
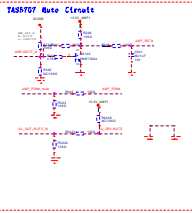
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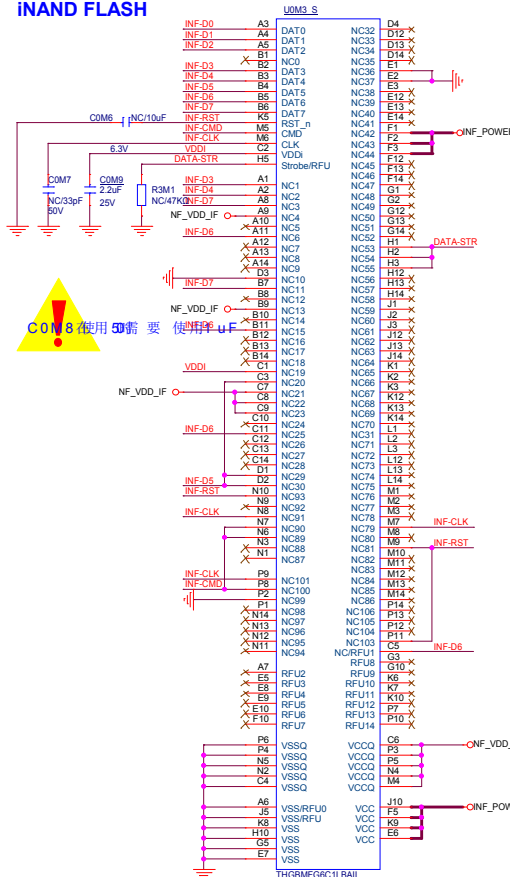


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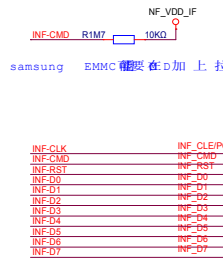
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9	10K	RES
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100	10K	RES



INAND FLASH



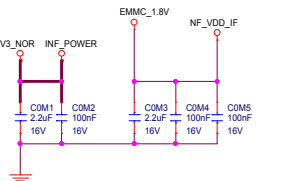
CON8 使用印需要 使用 1uF



samsung EMMC 需要在 D 加上拉



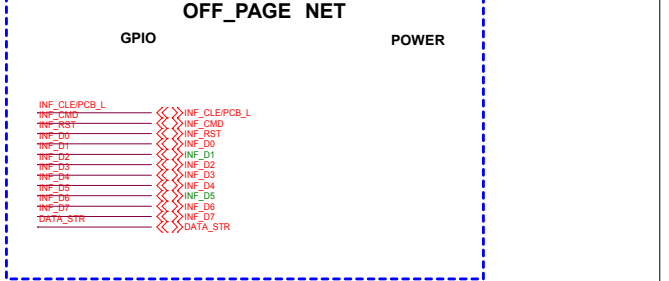
R1M9 默认使用 27.0kΩ 电阻 根据不同厂家的 EMMC 调整, R3M39 上需要上件



3.3V3_NOR 电容 如果 用 8.2uF 电容 使用 NF_VDD_INF 电容 1.8 电容 电容 电容 电容 电容 3.3V 即可

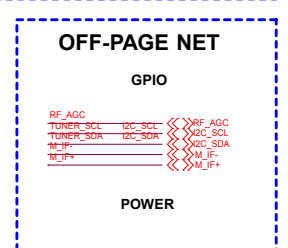
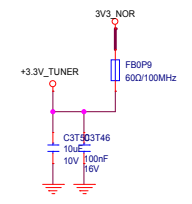
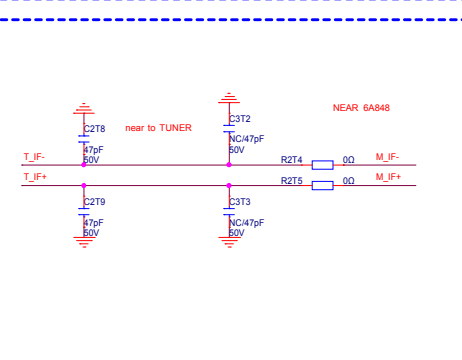
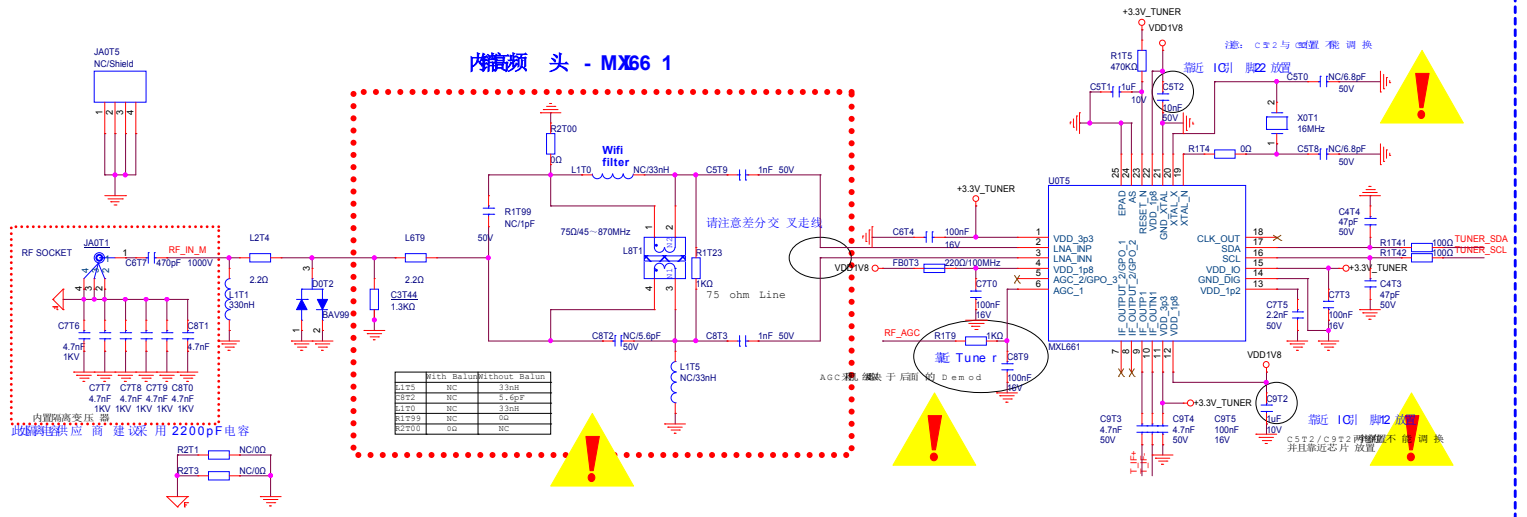
特别注明 本板适用于三星, 美光的 451 以及 5.0 颗粒, 东芝 50 也可以兼容

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内频头 - MX66 1

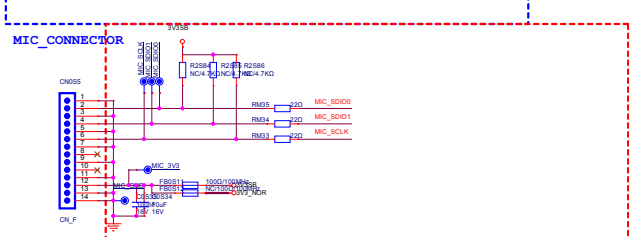
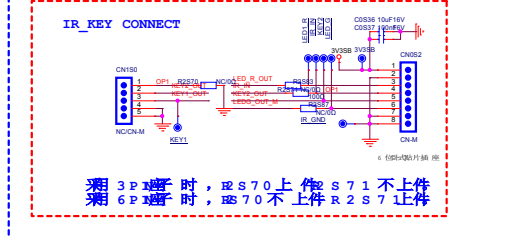
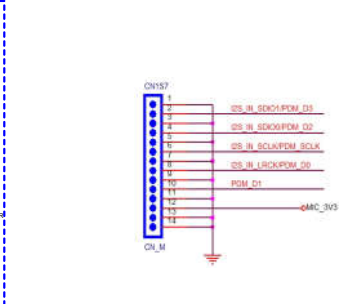
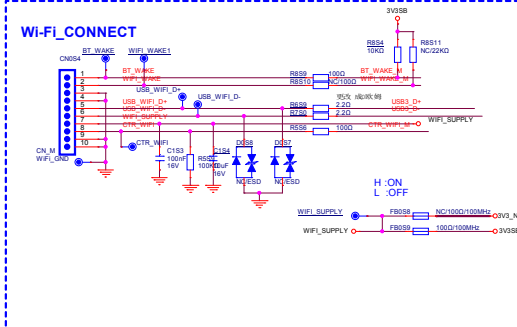
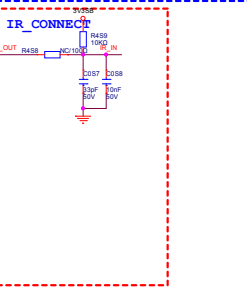
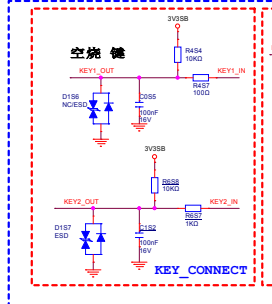
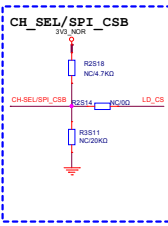
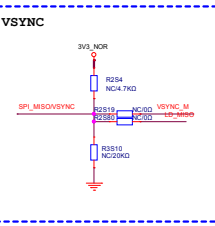
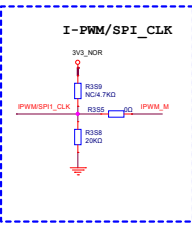
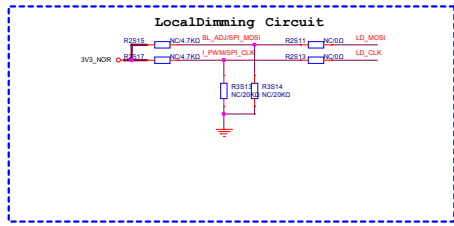
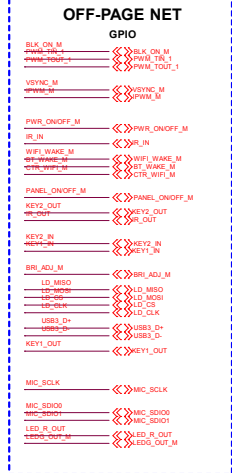
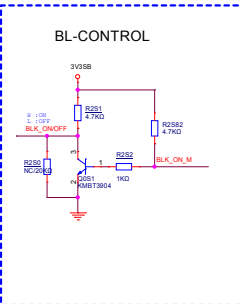
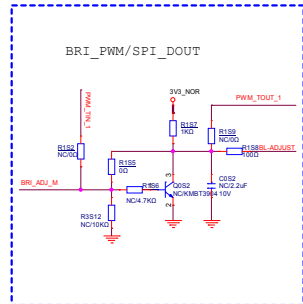
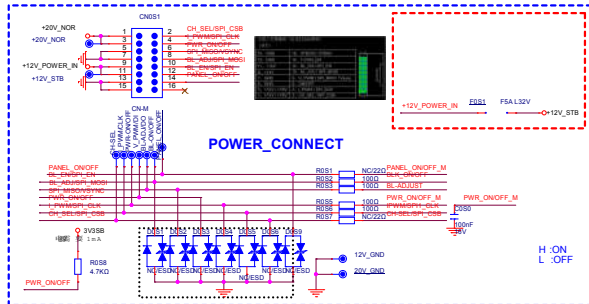


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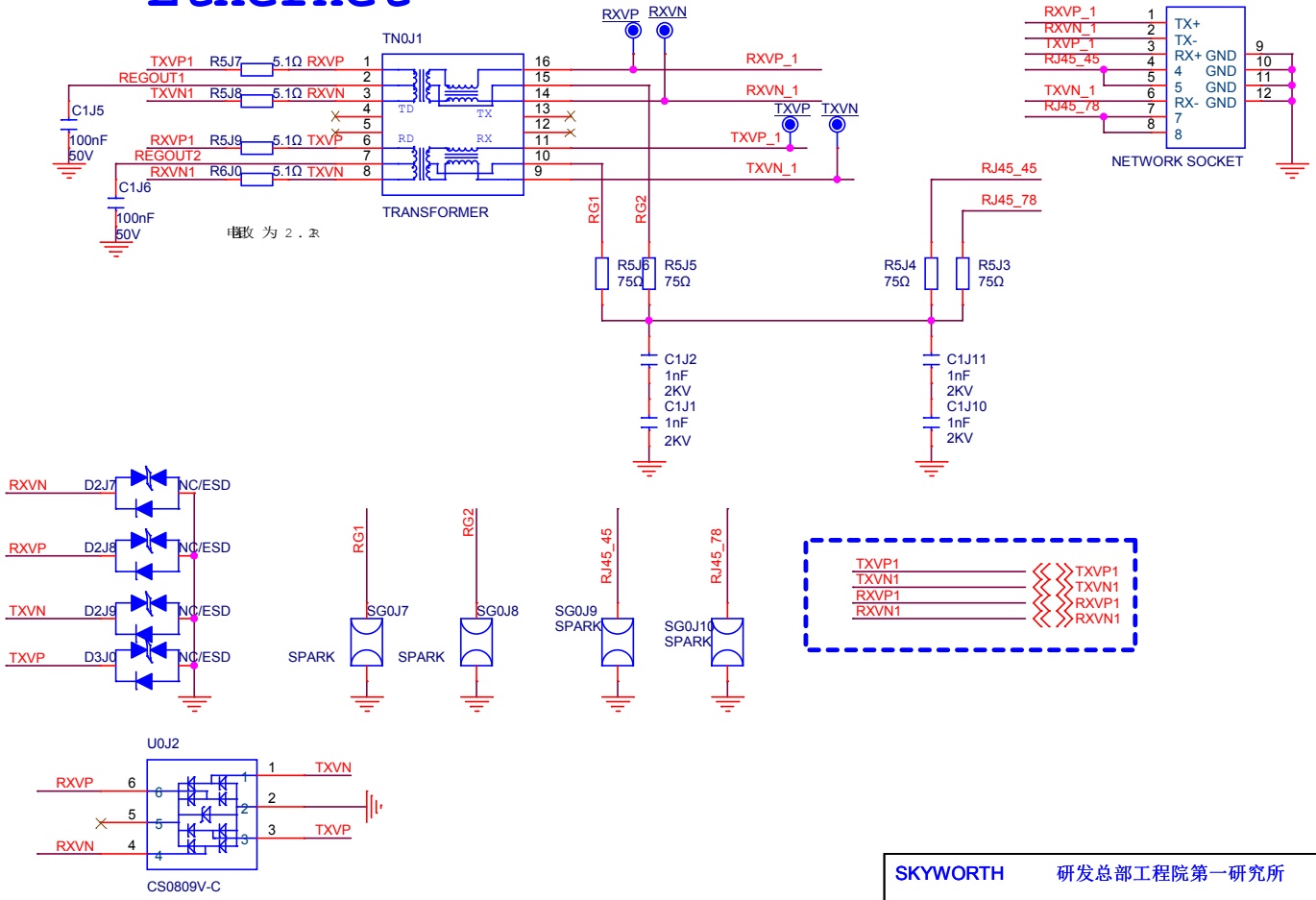
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Ethernet

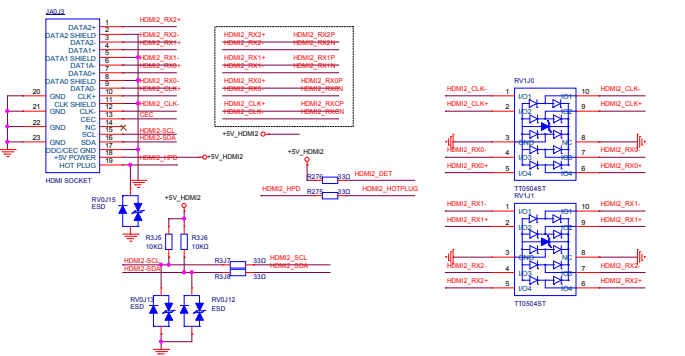
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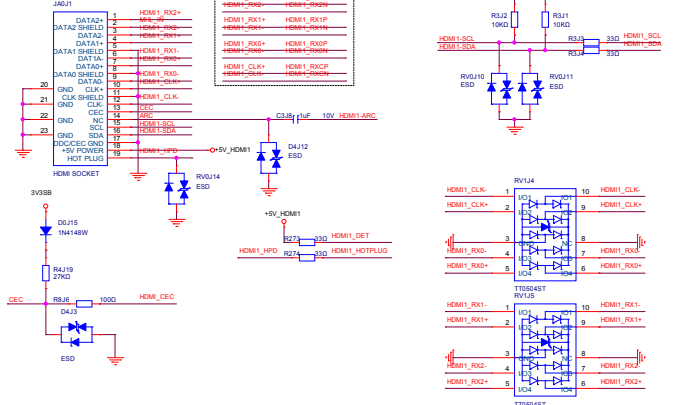
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HDMI2 HDMI2.0

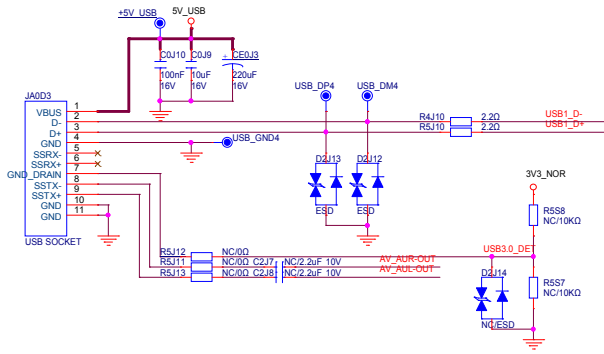
靠近端子放置



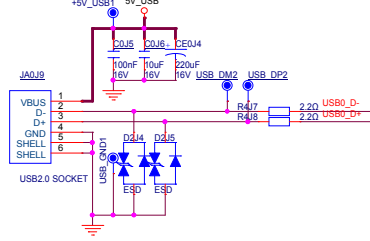
HDMI1/ARC HDMI2.0 靠近端子放置



USB2.0-1

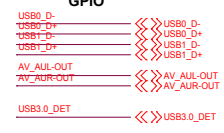


USB2.0-2



- 1 试式 USB2.0: 6100-089110-0 41 0
- 2、ESD 器件已选择目前原理图所用型号 4100-L18002-T0, 18V2P 封装
- 3、C5J6 C5J6 现在使用。
- 4、R1J74 R1J74 用的是 0 欧。

OFF_PAGE NET



USB POWER SWITCH

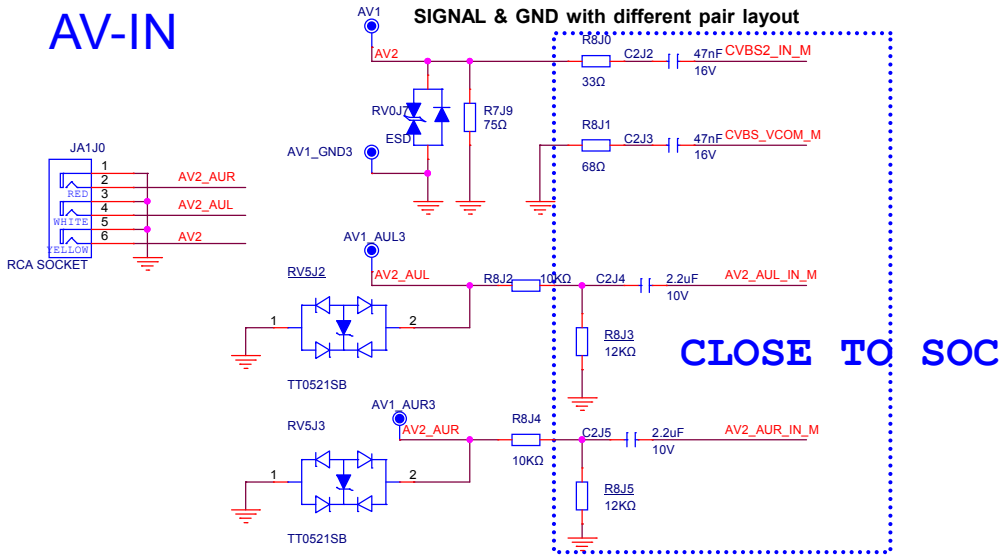


EN: ON>2V
OFF<0.8V
Current Limit:2.2A

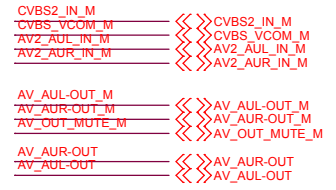
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AV-IN

SIGNAL & GND with different pair layout



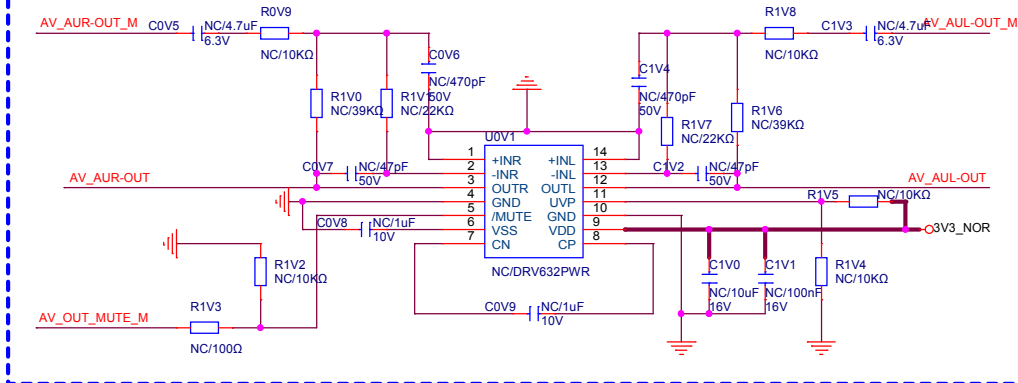
OFF-PAGE NET



AV-OUT

AUDIO OUT MUTE AUDIO OUT OP

AVOUT_LR_MUTE:
H -> NORMAL
L -> MUTE



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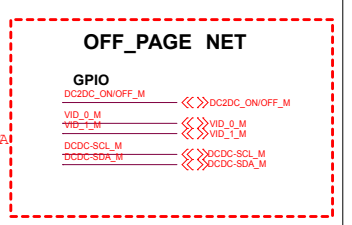
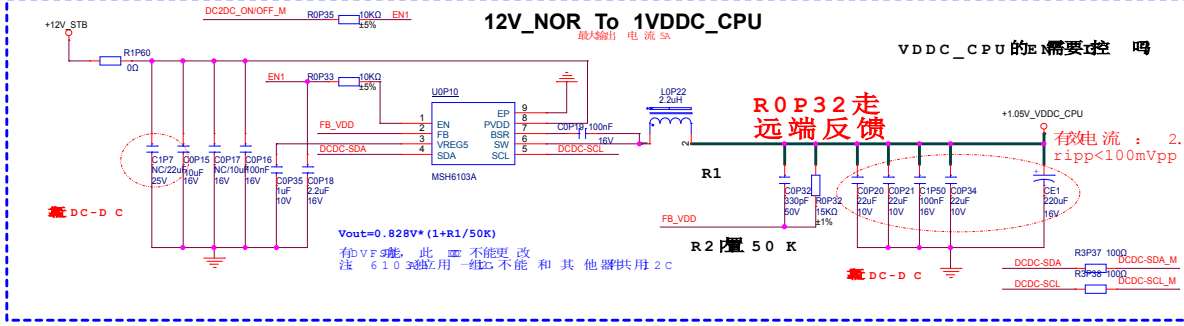
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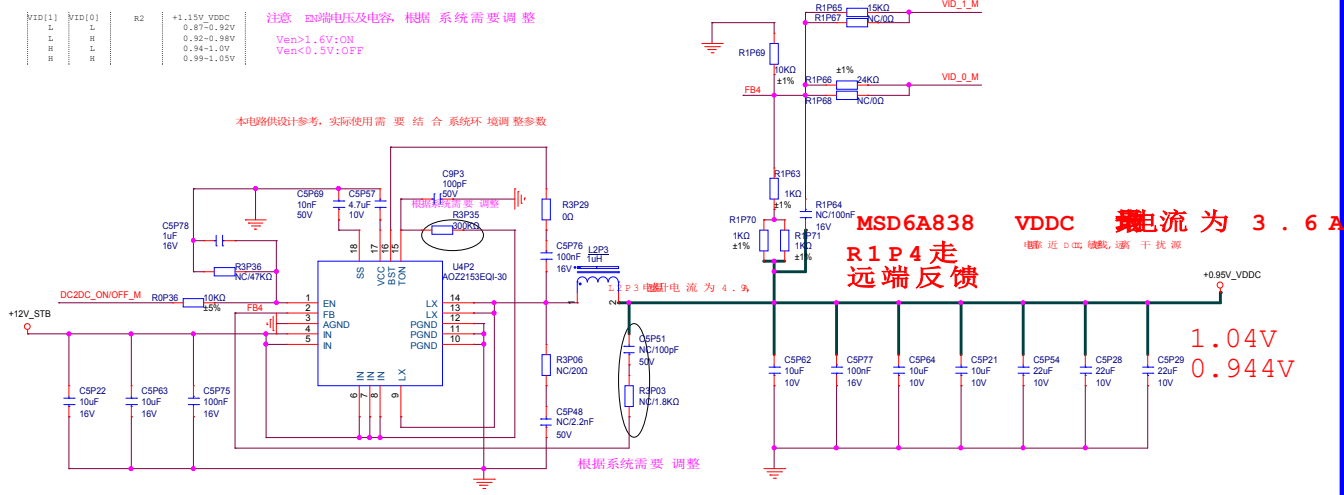
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16. +12V_NO转+1.1V_NO
 (DCDC规格: 2.0USD 满载最大8A 输入电压范围8V 2017年优选新物料)
 提示: 本型号还没有批量使用, 请先按照小批量、中批量试产流程试产OK后再批量使用



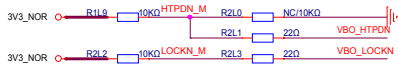
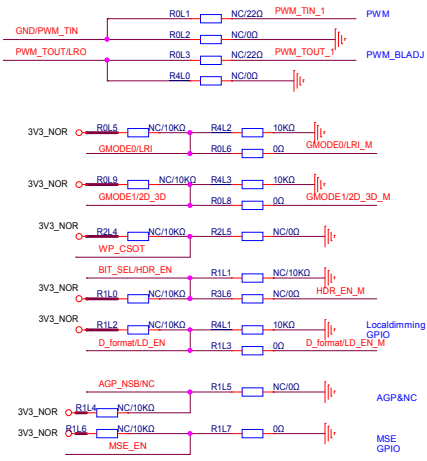
本电路设计参考, 实际使用需要结合系统环境调整参数
 特别说明:
 规格书称最大值是规格书里注明的, 理论上可以达到的最大负载, 受最大电流对输出电压(输出电压)、散热面积、PCB布局及走线及功率电感的选择等因素
 表格里的最大负载是基于模块的测试, 供参考

$V_{out} = 0.8x(1 + (R1/R2))$
 $R1 = R2P94 + R3P00$ $R2 = R2P97$ $L = L2P3$ $R_{ON} = R3P35$

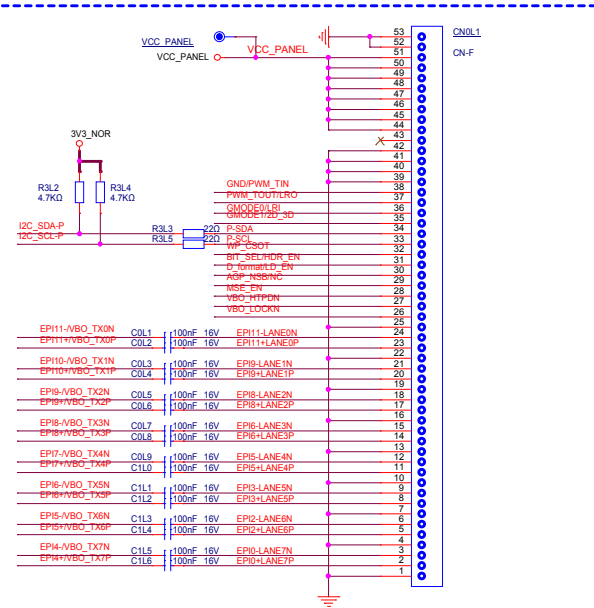
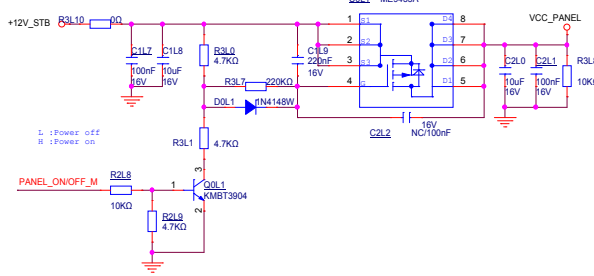
R1 (电阻号)	R2 (电阻号)	Vout	L (电感号)	最大负载
4100-CA130-2200(1.35k) + 4100-CA1820-2200(11.8k)	4100-CA1030-2200(100k)	0.924V	8800-S122A0-ASB0(2.2uH)	1.2A
4100-CA1930-2200(1.95k) + 4100-CA1320-2200(1.35k)	4100-CA1030-2200(100k)	0.944V	8800-S122A0-ASB0(2.2uH)	0.9A
4100-CA1030-2200(100k) + 4100-CA1320-2200(1.35k)	4100-CA1030-2200(100k)	0.944V	8800-S122A0-ASB0(2.2uH)	0.9A
4100-CA1930-2200(1.95k) + 4100-CA2720-2200(12.75k)	4100-CA1030-2200(100k)	0.916V	8800-S122A0-ASB0(2.2uH)	0.8A
4100-CA7520-2200(7.5k) + 4100-CA1320-2200(1.35k)	4100-CA1030-2200(100k)	0.944V	8800-S122A0-ASB0(2.2uH)	0.8A
4100-CA5120-2200(5.1k) + 4100-CA3000-2200(30k)	4100-CA1030-2200(100k)	0.944V	8800-S122A0-ASB0(2.2uH)	0.8A

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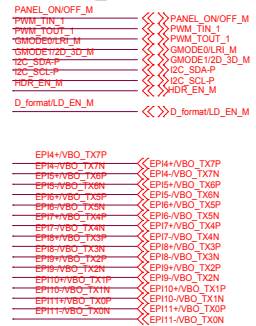
配屏参量



PANEL POWER SUPPLY



OFF_PAGE NET



POWER

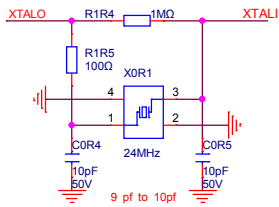
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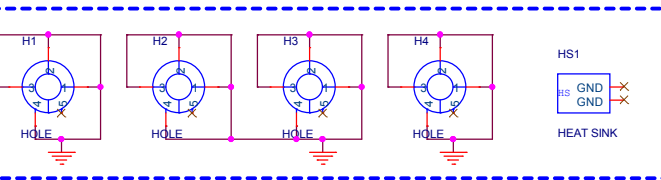
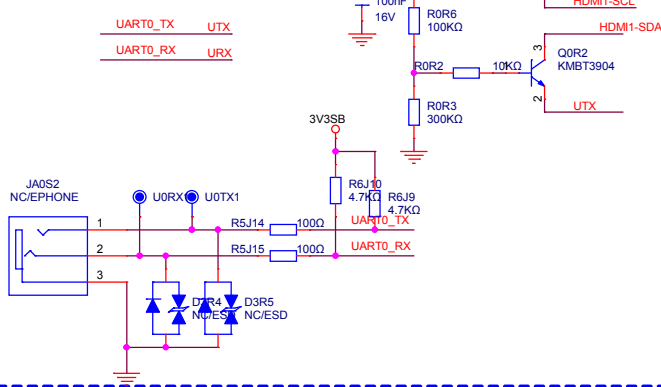
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24M CRYSTAL

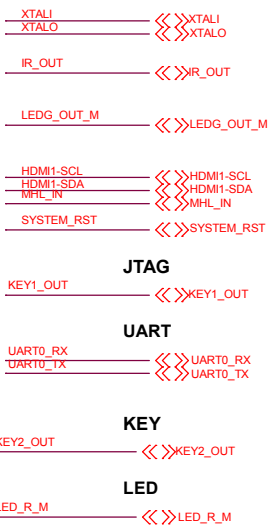


调整电容值以确保频率准确，是否需要调整

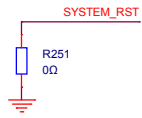
UART0



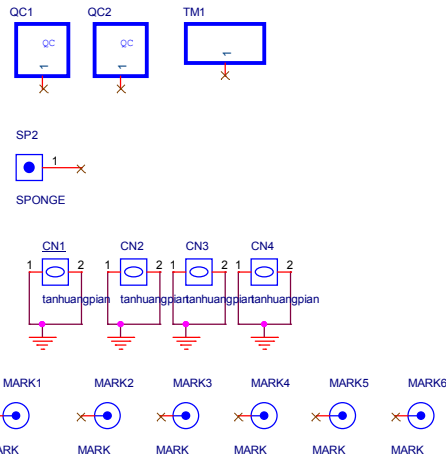
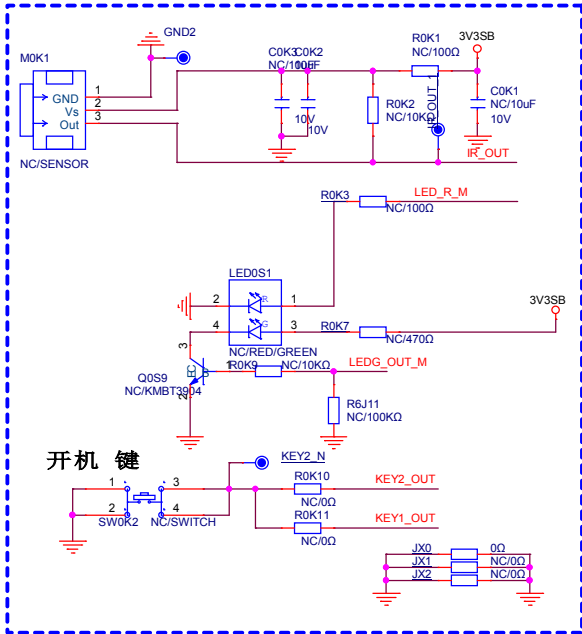
OFF_PAGE NET GPIO



RESET



1505-C0100100-01 FOR U0A1 U0A3



开机键

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