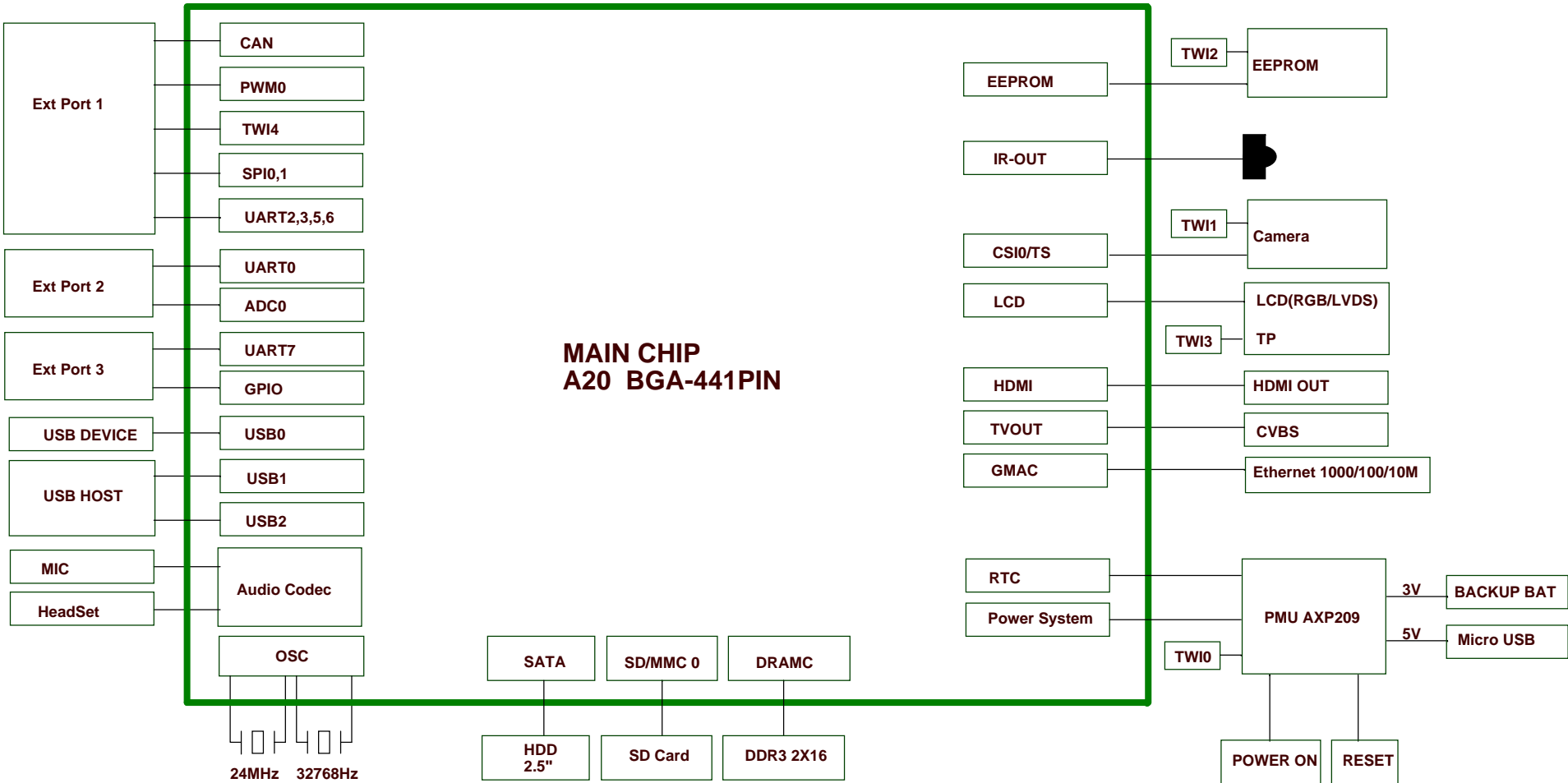


BLOCK



Differential pairs  
Z0= 100ohm +/-5 ohm



Differential pairs  
Z0= 90 ohm +/-5 ohm

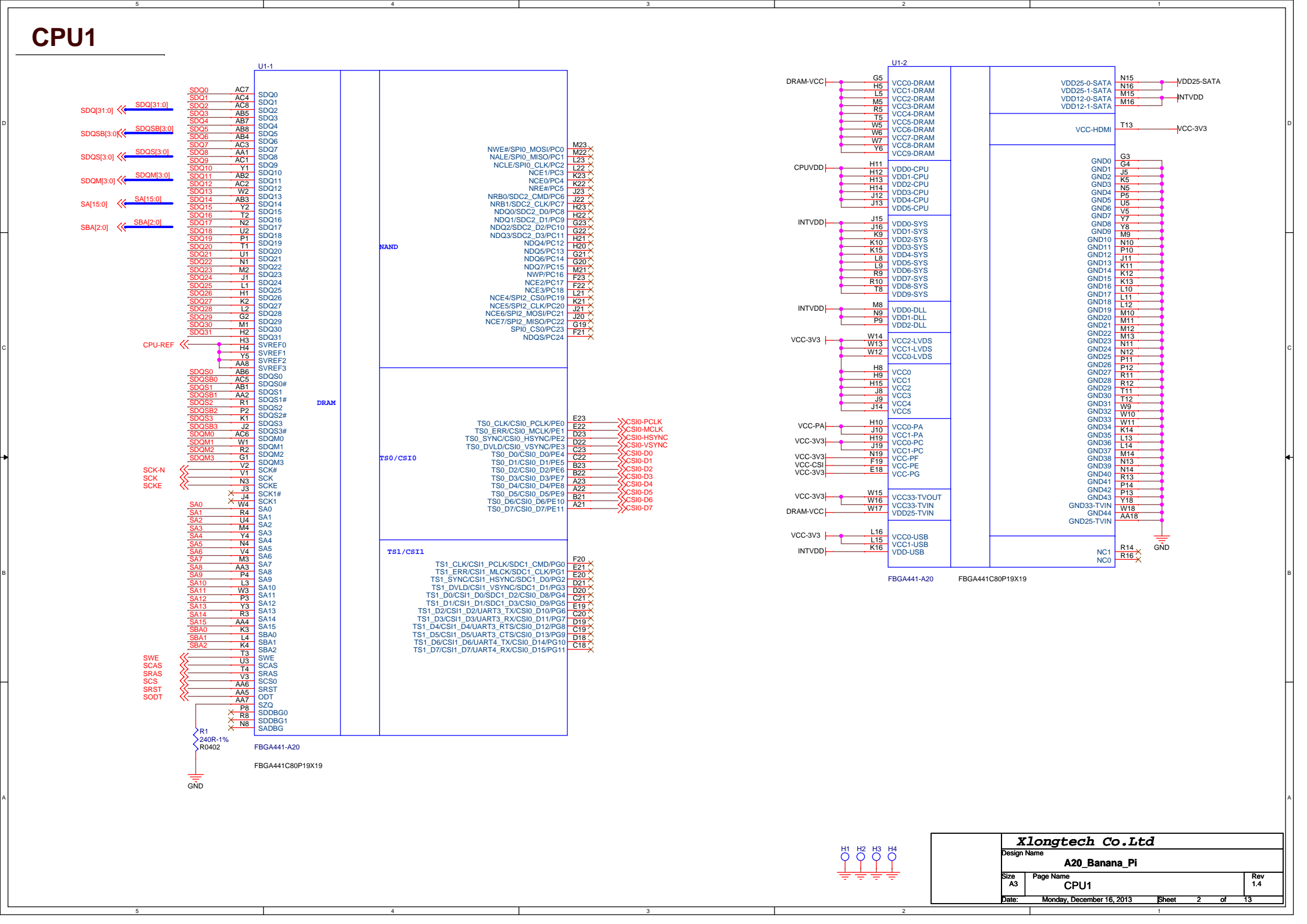


Z0= 50ohm +/-5 ohm

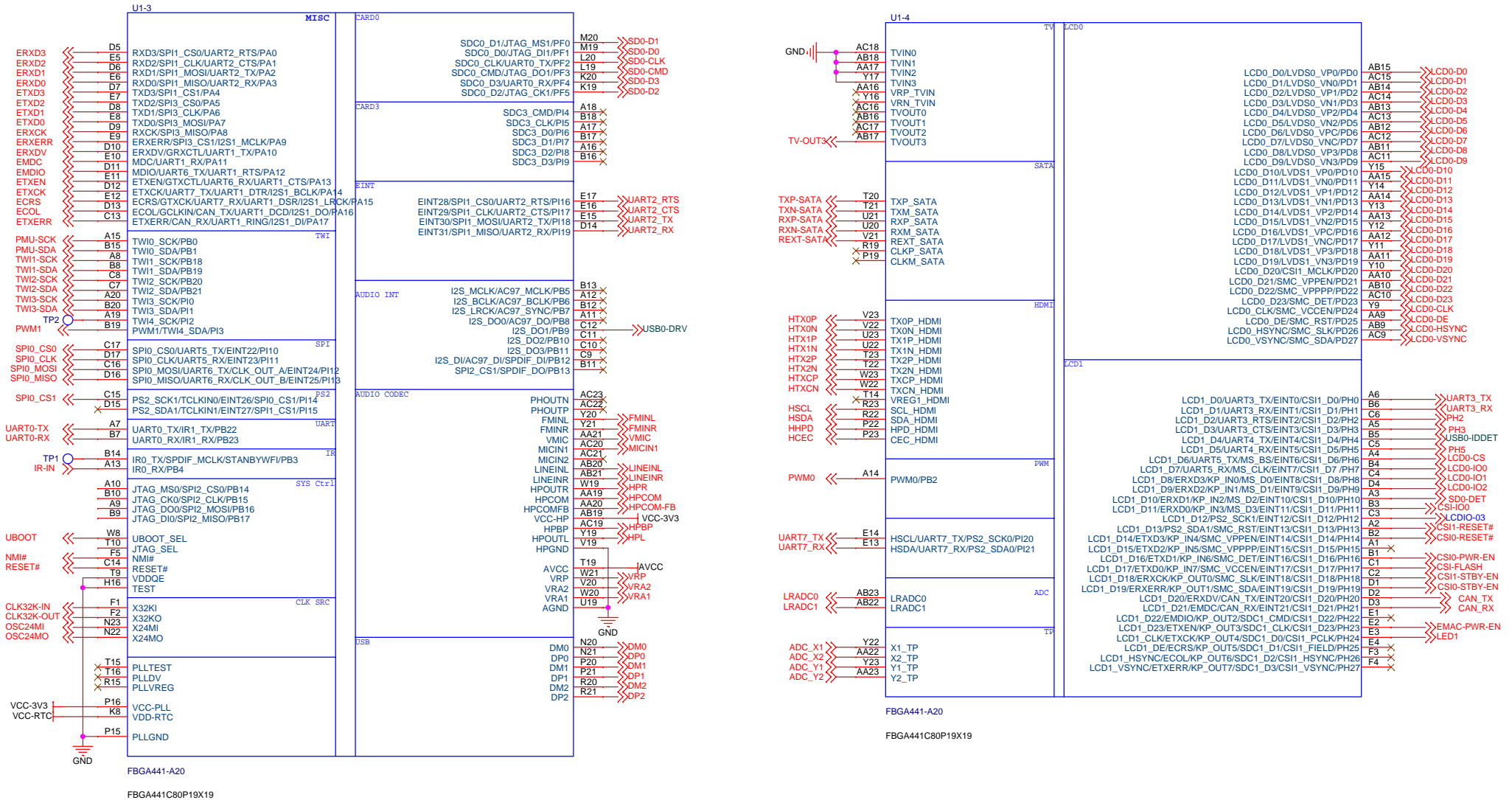


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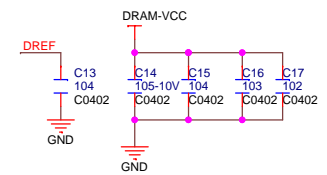
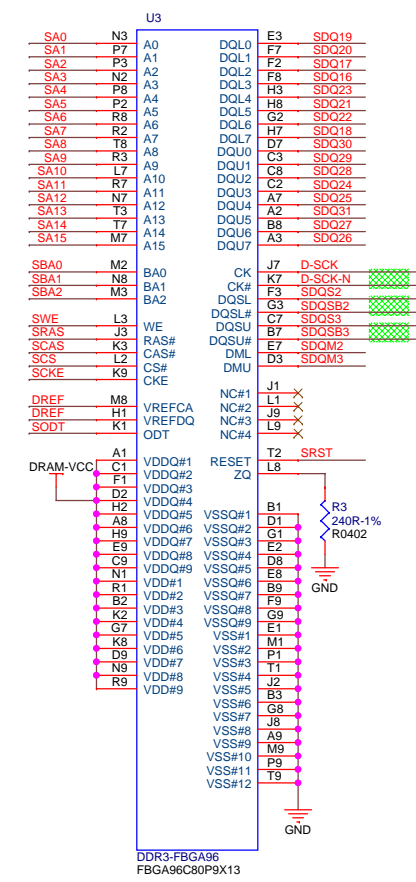
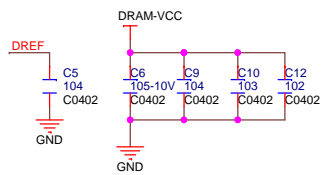
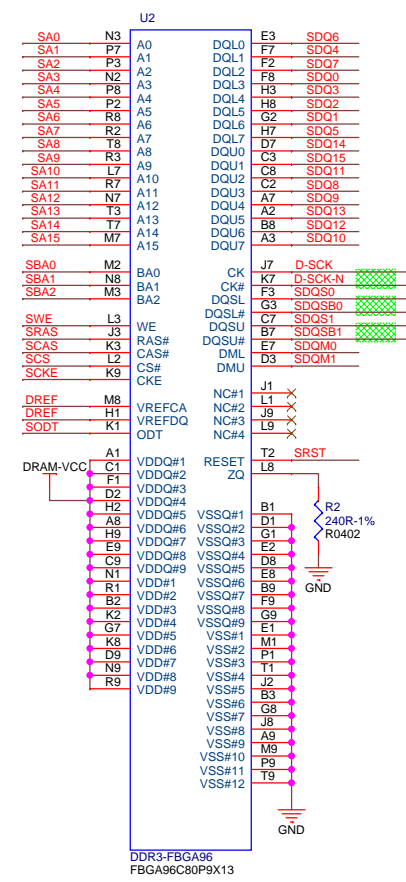
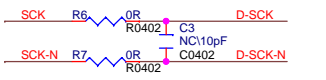
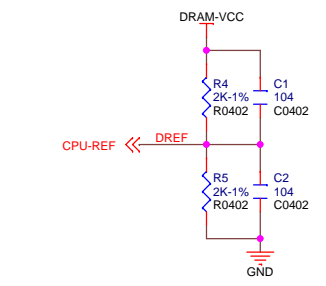
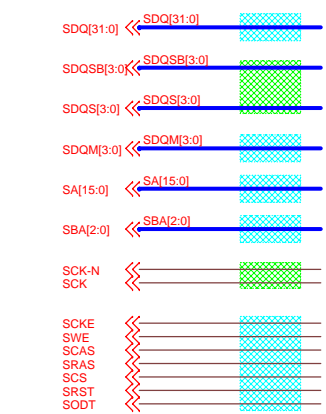
CPU1



## CPU2

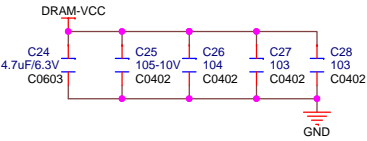


DDR3-16BITX2

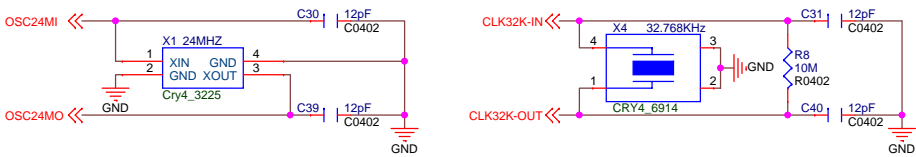


BESIDE CPU

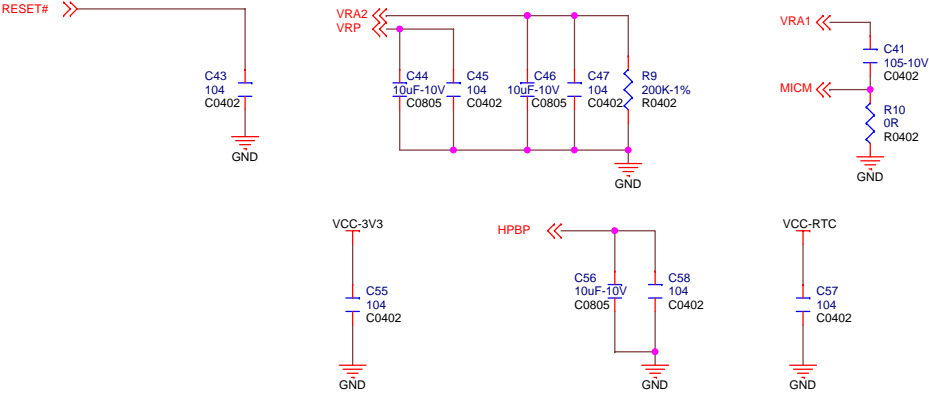
DRAM



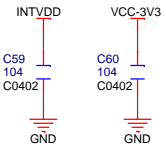
Crystal



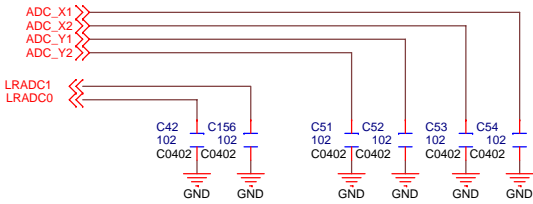
AUDIO&SYS



USB



ADC



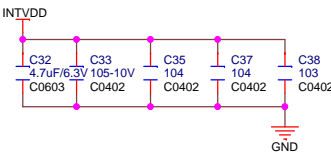
SATA



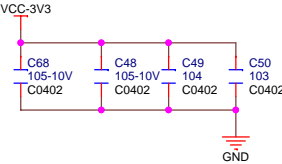
PLL



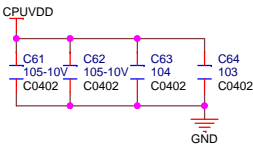
CORE



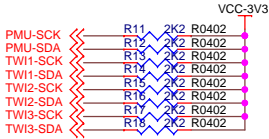
PIO-INTFACE



CPU&TV

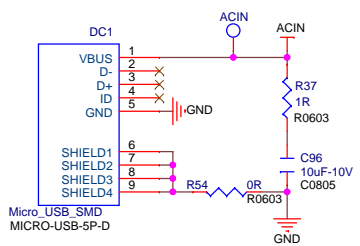


TWI-PULLUP

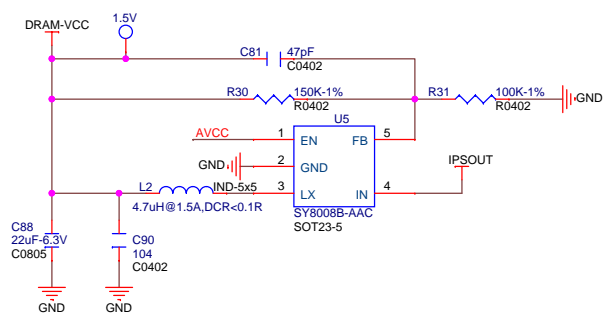


Power

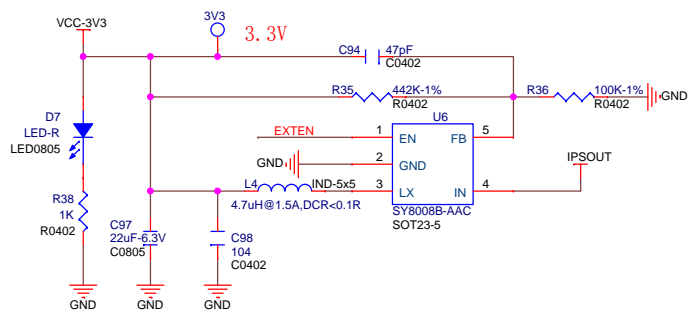
DC-IN



DRAM-VCC

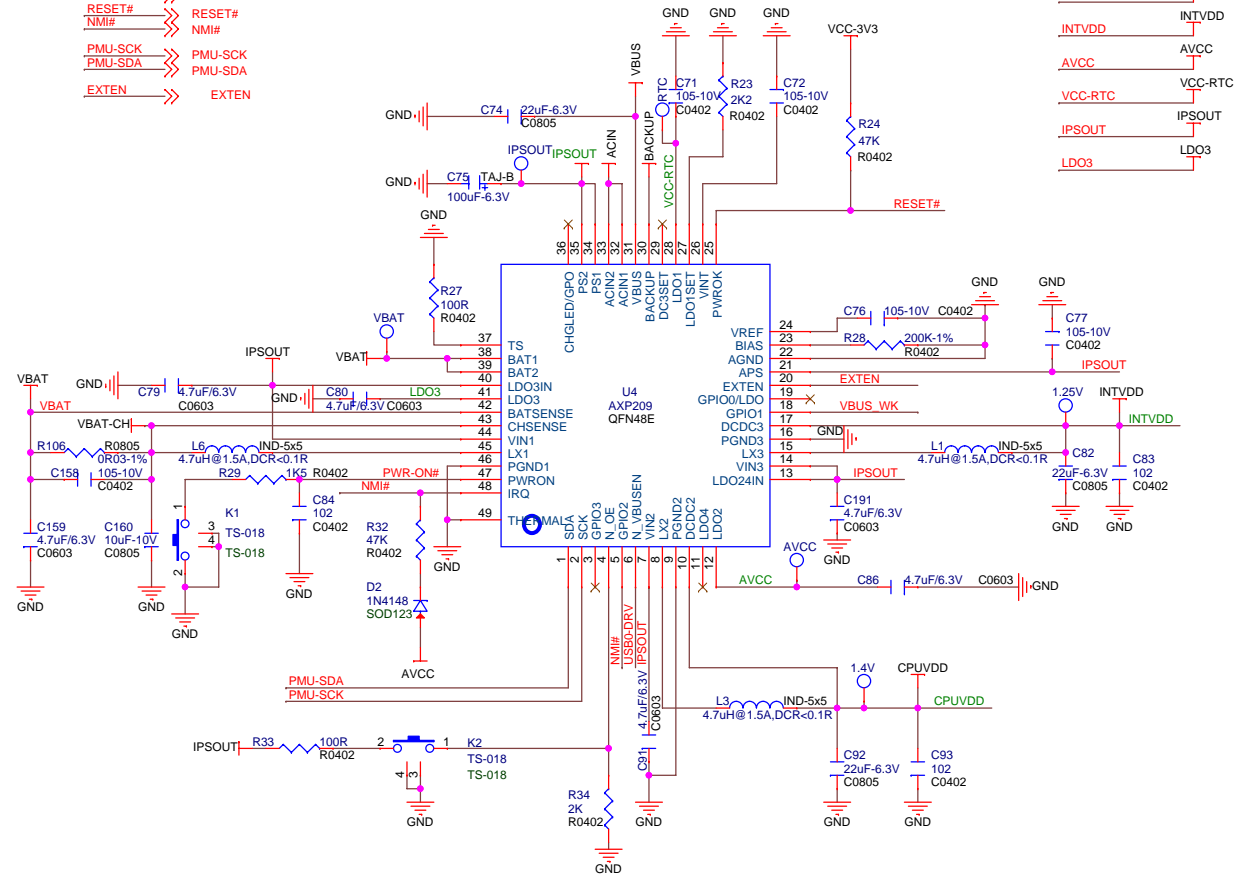


VCC-3V3



PMU-AXP209

- VBUS\_WK >>> VBUS\_WK
- USB0-DRV >>> USB0-DRV
- RESET# >>> RESET#
- NMI# >>> NMI#
- PMU-SCK >>> PMU-SCK
- PMU-SDA >>> PMU-SDA
- EXTEN >>> EXTEN





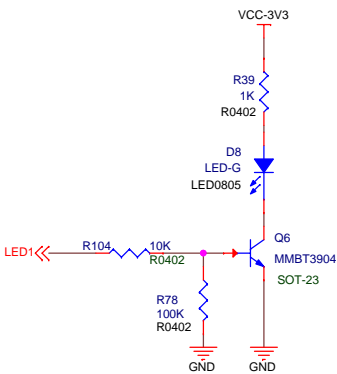
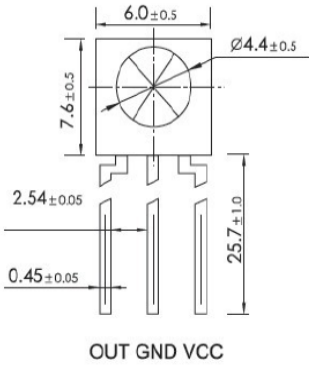
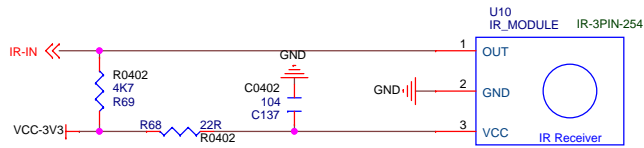




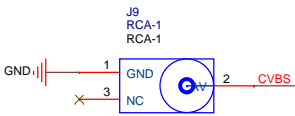
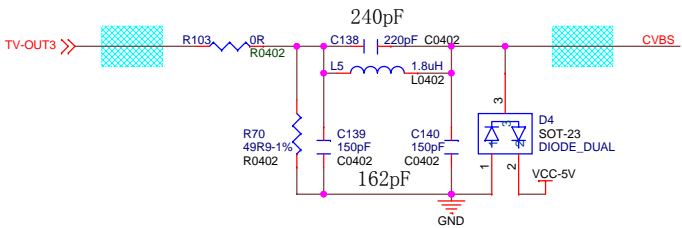
		<b><i>Xlongtech Co.Ltd</i></b>			
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# IR-CVBS-ExtPort

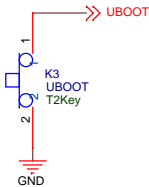
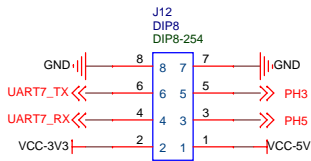
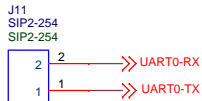
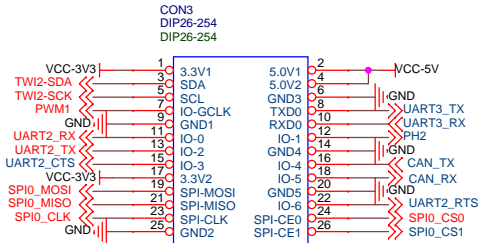
## IR MODULE



## CVBS



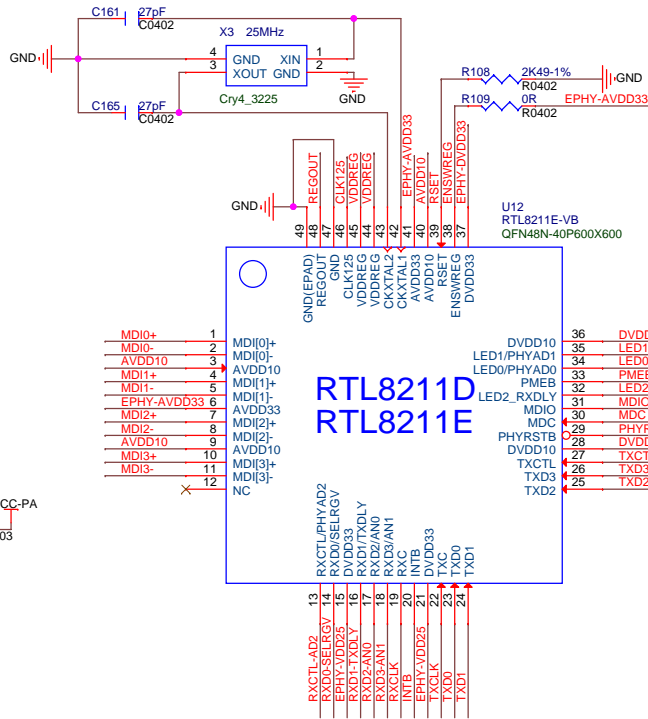
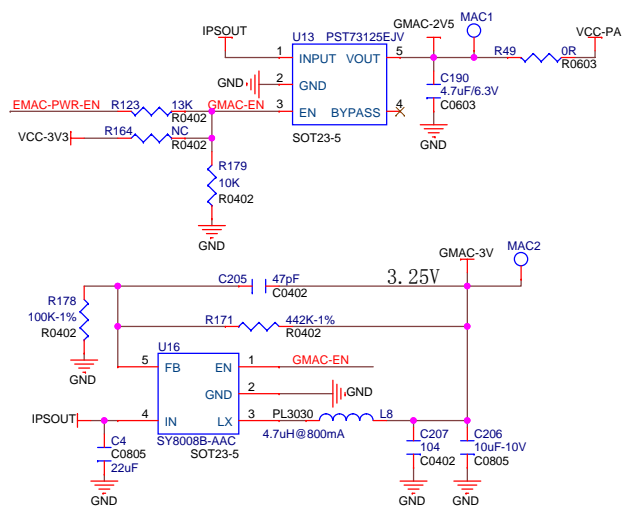
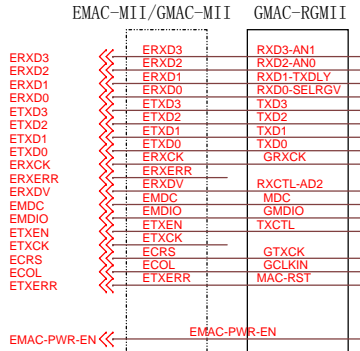
## Ext Port



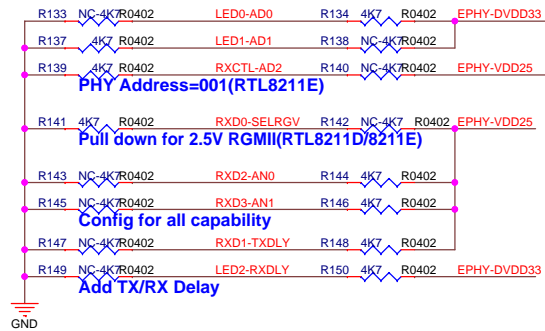
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# GMAC

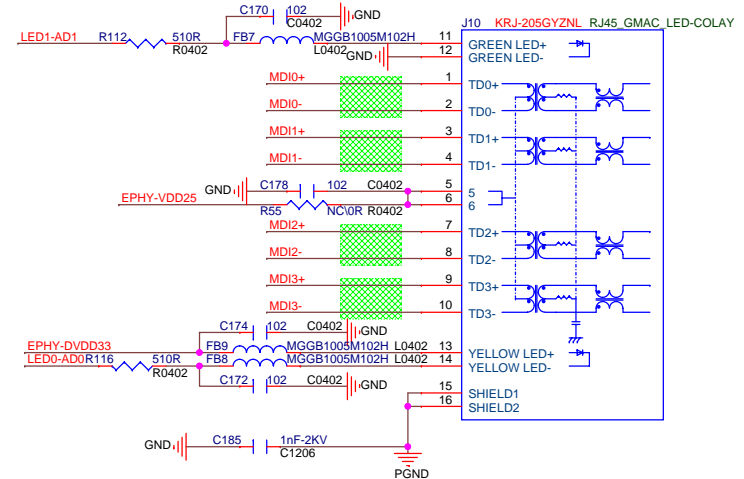
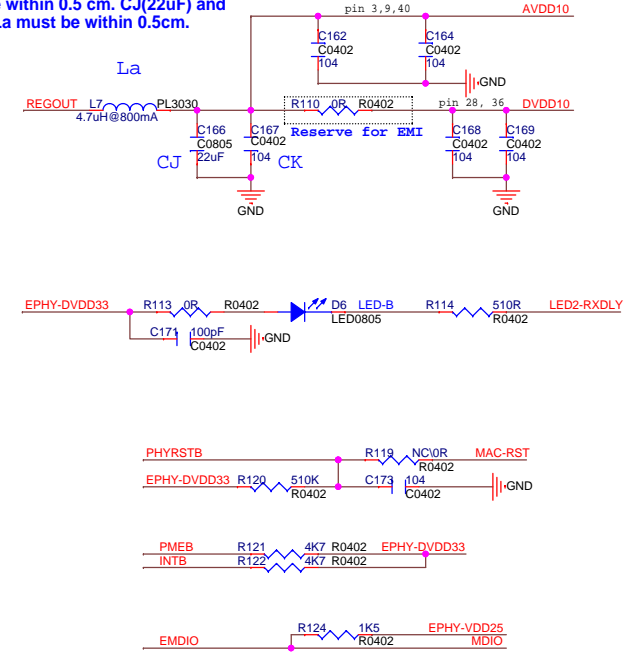
## 10/100/1000 RGMII Ethernet PHY



Note 2: The Trace length from CA(22uF),CB(0.1uF) to Pin 44,45(VDDREG) must bewithin 0.5 cm. The trace width from AVDD33 to Pin 44,45 should>40mils.



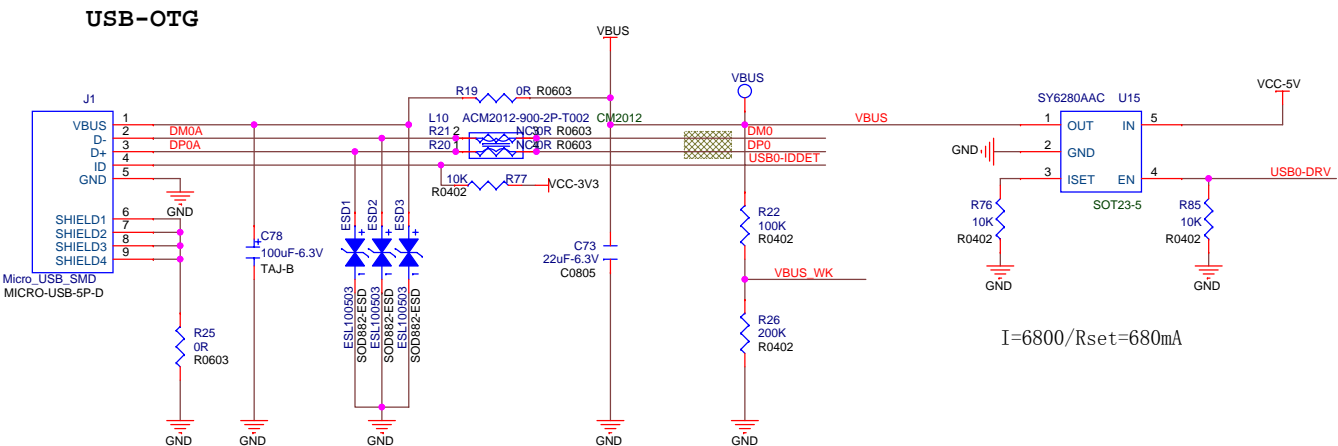
Note 1: The Trace length between La and PHY's Pin48 must be within 0.5 cm. CJ(22uF) and CK(0.1uF) to La must be within 0.5cm.



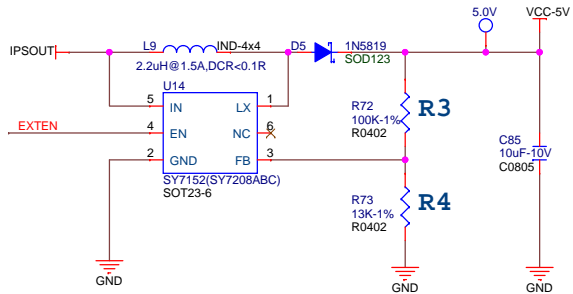
LED0:Blinking=Transmitting or Receiving.  
LED1:Link Up/Down

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USB\_OTG



VCC-5V



$$V_{out} = 0.6 * (1 + R3/R4)$$

V1.00

- 1. 第一版

V1.01

- 1. 调整J10 Transformer线路
- 2. U1的PIN: H10、J10供电由VCC-3V3改为VCC-PA

V1.2

- 1. GMAC-3V改为DC-DC供电 (U16)
- 2. 增加FB7～FB9（网口灯EMI滤波）
- 3. C178改为102（原来104）
- 4. 增加C185，1nf-2KV
- 5. IR-IN修正为连接IR0-RX
- 6. R49改为0603封装（原0402）
- 7. 增加FB10～FB12及电容（耳机EMI滤波）
- 8. 增加U11（SD卡3.3VLD0）
- 9. SATA座子改为弯插
- 10. 增加USB供电座子DC1
- 11. SATA供电改为ACIN，  
只有接DC电源时才能用SATA
- 12. J3增加OTG功能，增加相应DC-DC升压电路（U14、U15），  
删除Q1（VBUS连ACIN的MOS管）
- 13. HDMI供电改为VCC-5V
- 14. CON3，J12的VBUS改为VCC-5V
- 15. SD卡删除WP，增加DET
- 16. ACIN的滤波电容C96增加1R电阻

V1.3

- 1. CON1改为40PIN，增加ADC和AUDIO部分功能口
- 2. J3供电改为VCC-5V

V1.4

- 1. 去掉Camera的电源LD0
- 2. CON1的PIN22、36、37、38、40、3、5  
分别改为CSIO-PWR-EN、HPR、HPL、IPSOUT、IPSOUT、VCC-CSI、GND
- 3. CVBS增加串联电阻R103，R70改为49.9欧姆
- 4. CON2的PIN7、10分别改为LCDIO-03、PWM0
- 5. EMAC-PWR-EN增加下拉电阻R179，R123改为13K
- 6. J3供电合并为一，增加220uF钽电容
- 7. 增加电源指示灯D7，IO灯D8
- 8. R75改为100uF钽电容
- 9. C73、C74、C97、C88、C82、C92改为22uF-6.3V
- 10. 增加C78
- 11. USB和HDMI增加共模滤波器
- 12. SD卡数据线预留上拉电阻
- 13. HDMI差分线预留并联电阻位置

A20	PIN	使用	不使用
HDMI	T13	VCC-3V3	VCC-3V3
SATA 2.5V	N15, N16	2.5V	DRAM-VCC(1.5V)
CSIO	F19 (VCC-PE)	VCC-2.8	VCC-2.8
CSII	E18 (VCC-PG)	VCC-2.8	VCC-3V3
TVIN 2.5V	W17	2.5V	DRAM-VCC(1.5V)
TVIN 3.3V	W16	VCC-3V3	VCC-3V3
TVOUT 3.3V	W15	VCC-3V3	VCC-3V3
LVDS IO	W12, W13, W14	VCC-3V3	VCC-3V3
EMAC IO	J10, H10 (VCC-PA)	3.0V/2.5V	VCC-3V3
NAND IO	J19, H19 (VCC-PC)	VCC-3V3	VCC-3V3
SD IO	N19 (VCC-PF)	VCC-3V3	VCC-3V3
USB VDD	K16	INTVDD(1.2V)	VCC-3V3
USB VCC	L15, L16	VCC-3V3	VCC-3V3

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