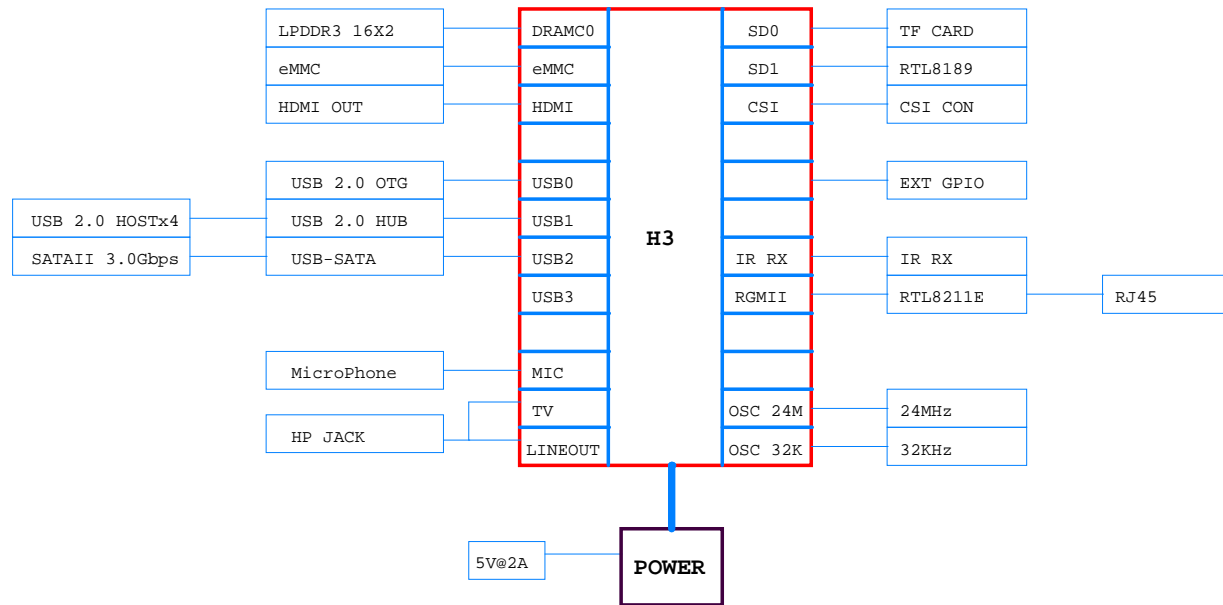


REVISION HISTORY

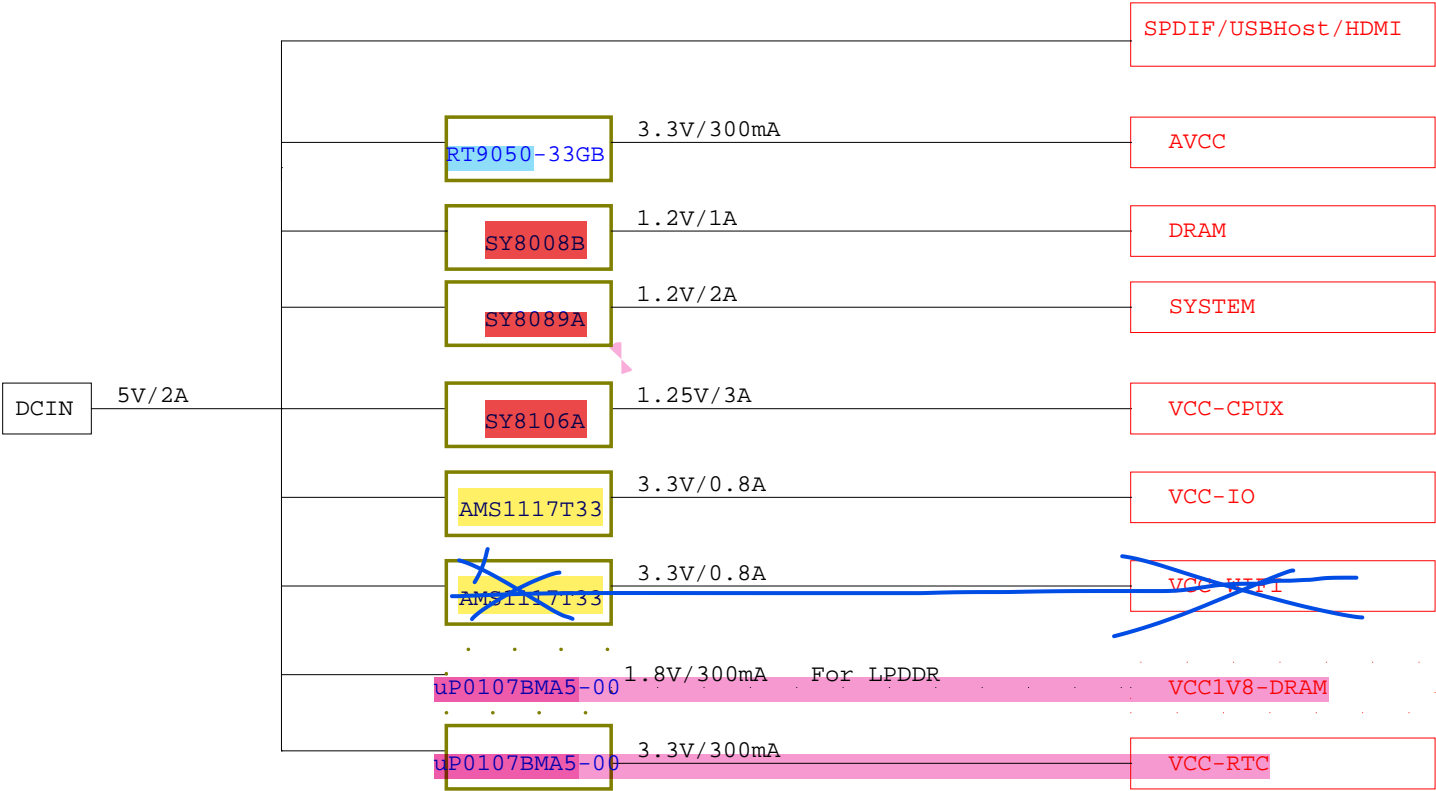
Schematics Index:

Revision	Description	Date	Drawn	Checked
ORANGE_PI-PC-V1_2	Initial	2015-07-11		
		2016-01-15		
ORANGE_PI-PC-PLUS_V1_0	Initial			
		1、千兆网口改为百兆网口		
		2、增加eMMC		

BLOCK



POWER TREE



GPIO ASSIGNMENT

PIN	Define	CFG	Function
PA0	RMS/DRVVBUS0	3/1	JTAG /USB
PA1	TCK/DRVVBUS1	3/1	
PA2	TDO/WPS	3/1	
PA3	TDI	3	UART
PA4	JART-TX	3	
PA5	JART-RX	3	
PA6	NC	7	
PA7	NC	7	
PA8	NC	7	
PA9	NC	7	
PA10	NC	7	
PA11	NC	7	
PA12	NC	7	
PA13	NC	7	
PA14	NC	7	
PA15	STATUS-LED	1	LED
PA16	MUTE	1	AV
PA17	SPDIF-OUT	2	SPDIF
PA18	NC	7	
PA19	NC	7	
PA20	NC	7	
PA21	NC	7	

PIN	Define	CFG	Function
PC0	NWE	2/3	NAND /eMMC /NOR
PC1	NALE	2/3	
PC2	NCLE	2/3	
PC3	NCE1	2/3	
PC4	NCE0	2	
PC5	NRE	2/3	
PC6	NRB0	2/3	
PC7	NRB1	2	
PC8	NDQ0	2/3	
PC9	NDQ1	2/3	
PC10	NDQ2	2/3	
PC11	NDQ3	2/3	
PC12	NDQ4	2/3	
PC13	NDQ5	2/3	
PC14	NDQ6	2/3	
PC15	NDQ7	2/3	
PC16	NDQS	2/3	

PIN	Define	CFG	Function
PD0	NC	7	
PD1	NC	7	
PD2	NC	7	
PD3	NC	7	
PD4	NC	7	
PD5	NC	7	
PD6	NC	7	
PD7	NC	7	
PD8	NC	7	
PD9	NC	7	
PD10	NC	7	
PD11	NC	7	
PD12	NC	7	
PD13	NC	7	
PD14	NC	7	
PD15	NC	7	
PD16	NC	7	
PD17	NC	7	

PIN	Define	CFG	Function
PE0	NC	7	
PE1	NC	7	
PE2	NC	7	
PE3	NC	7	
PE4	NC	7	
PE5	NC	7	
PE6	NC	7	
PE7	NC	7	
PE8	NC	7	
PE9	NC	7	
PE10	NC	7	
PE11	NC	7	
PE12	NC	7	
PE13	NC	7	
PE14	NC	7	
PE15	NC	7	

PIN	Define	CFG	Function
PF0	D1	2	CARD0
PF1	D0	2	
PF2	CLK	2	
PF3	CMD	2	
PF4	D3	2	
PF5	D2	2	
PF6	DET	0	

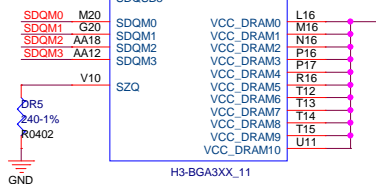
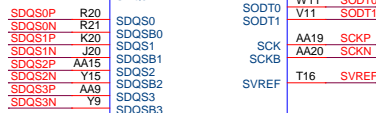
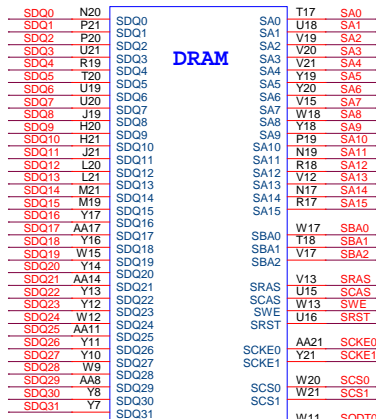
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PG0	NC	7	
PG1	NC	7	
PG2	NC	7	
PG3	NC	7	
PG4	NC	7	
PG5	NC	7	
PG6	NC	7	
PG7	NC	7	
PG8	NC	7	
PG9	NC	7	
PG10	NC	7	
PG11	NC	7	
PG12	NC	7	
PG13	NC	7	

PIN	Define	CFG	Function
PL0	TWI	2	TWI
PL1	TWI	2	
PL2	USB0-DRVVBUS	1	USB
PL3	USB1-DRVVBUS	1	
PL4	RECOVERY	0	KEY
PL5	VCC-IO-EN	1	IO-EN
PL6	NC	7	WIFI-EN
PL7	WIFI-EN	7	
PL8	PWR-STB	1	
PL9	PWR-DRAM	1	
PL10	PWR-LED	1	
PL11	IR-RX	2	

DDR3 16x2

U1A

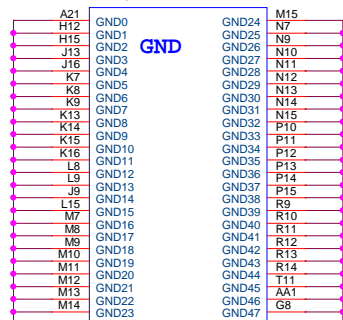
DRAM



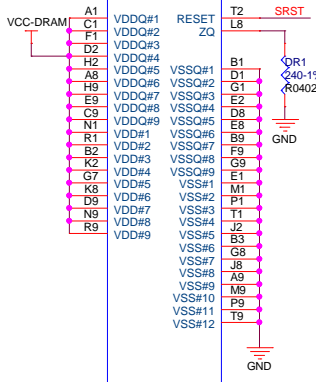
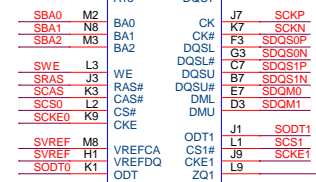
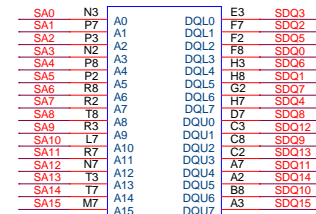
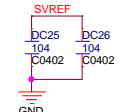
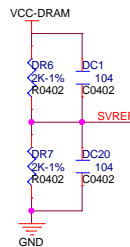
H3-BGA3XX_11

U11

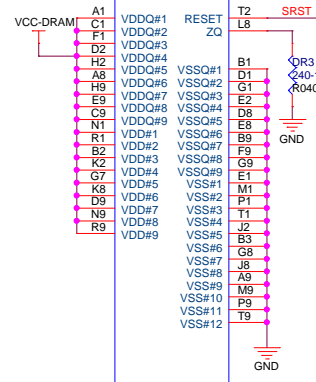
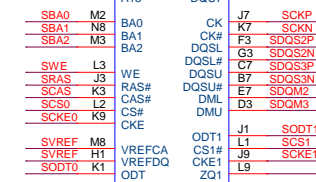
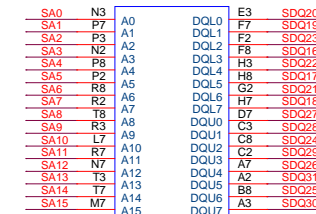
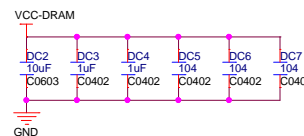
GND



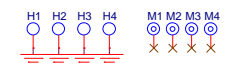
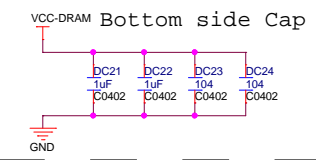
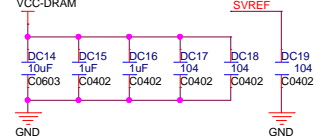
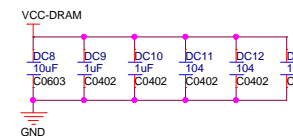
H3-BGA3XX_11



DU1
DDR3-FBGA96
FBGA96C80P9X13



DU2
DDR3-FBGA96
FBGA96C80P9X13



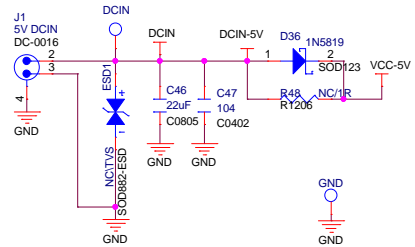
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Design Name			
ORANGE PI-PC-PLUS			
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A3	DDR3 16x2		
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1



	PWRON/WORK	STANDBY	PWRO
PWR - STB	1	0	0
PWR - DRAM	1	1	0

DCIN

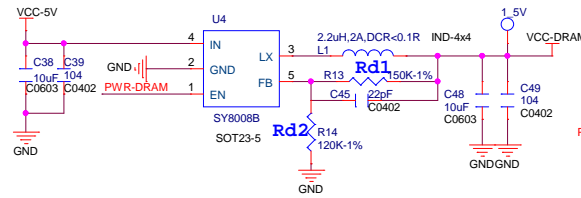


POWER

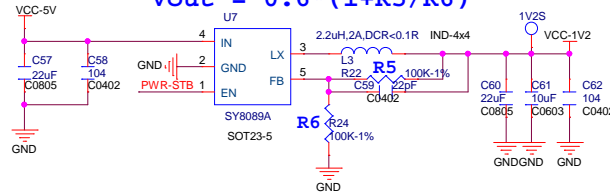
$$V_{out} = 0.6 * (1 + R_{d1}/R_{d2})$$

$$V_{DRAM} = 1.5V/1A, R_2 = 100K-1\%$$

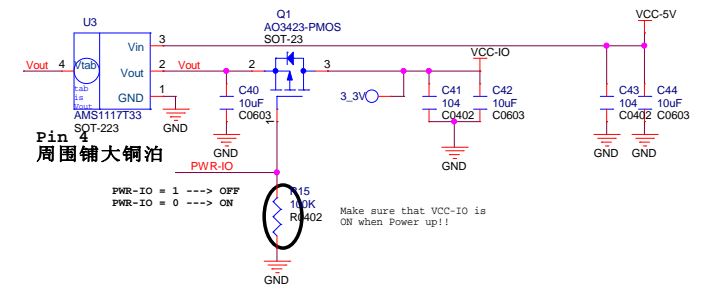
$$V_{DRAM} = 1.35V/1A, R_2 = 120K-1\%$$



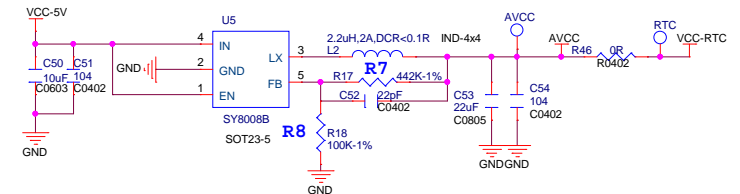
$$V_{out} = 0.6 * (1 + R_5/R_6)$$



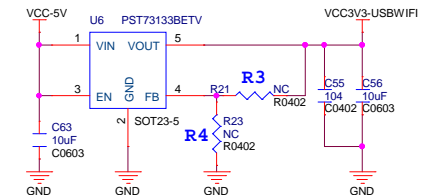
VCCIO 3.3V/1A



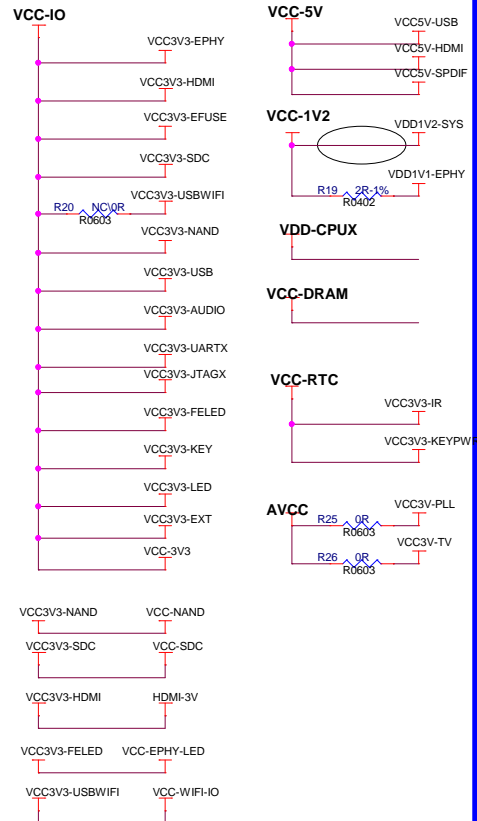
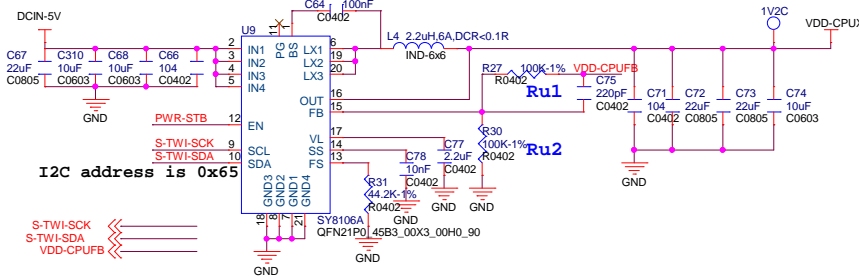
AVCC 3.3V/1A



WIFI Power 3.3V/300mA



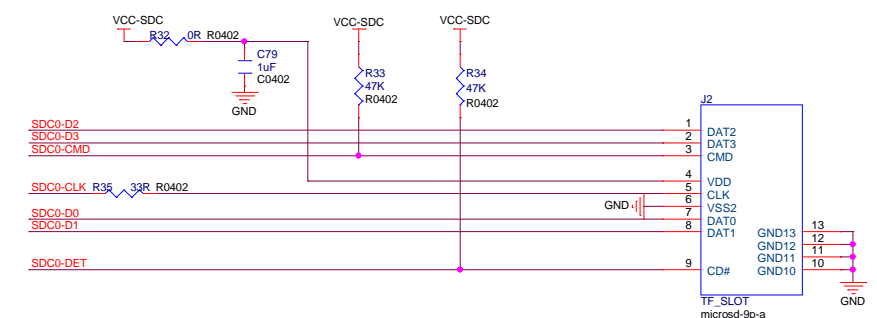
$$V_{out} = 0.6 * (1 + R_{u1}/R_{u2})$$



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ORANGE_PI-PC-PLUS			
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TF-eMMC

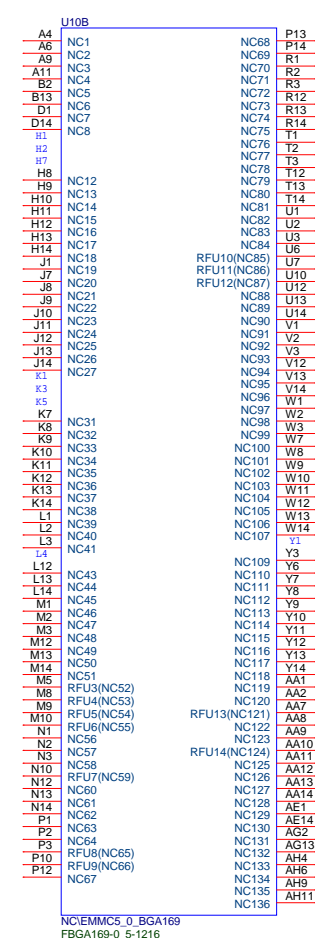
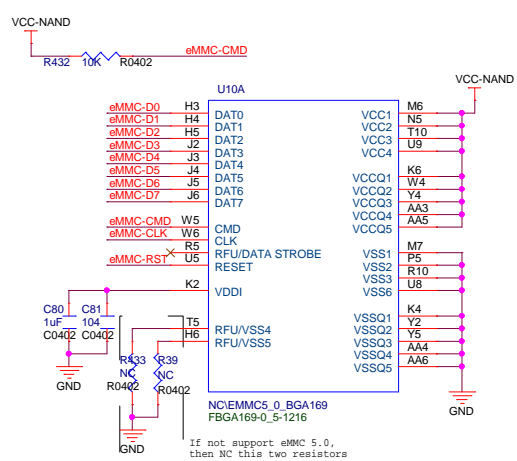
SDC0-D1
SDC0-D0
SDC0-CLK
SDC0-CMD
SDC0-D3
SDC0-D2
SDC0-DET



增加eMMC

eMMC

NRE
NRB0
NDO0
NDO1
NDO2
NDO3
NDO4
NDO5
NDO6
NDO7
NDQS



Xunlong Software

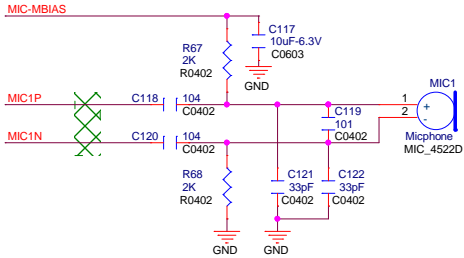
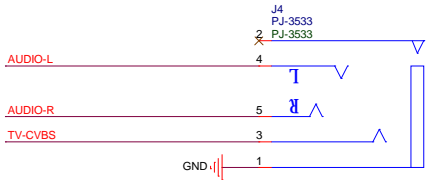
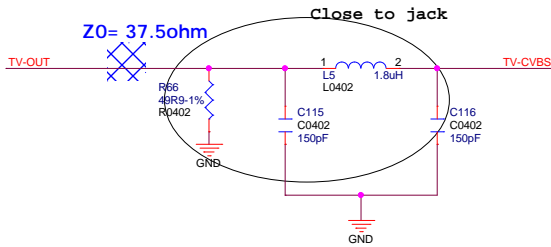
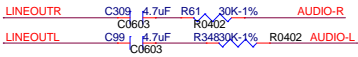
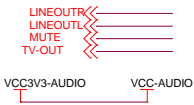
Design Name
ORANGE PI-PC-PLUS

Size A3 Page Name TF-eMMC Rev

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AV-MIC



Xunlong Software			
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Camera

CSI-RESET# << CAM0-RESET#
CSI-STBY-EN << CAM0-STBY-EN
CSI-PWR-EN << CSI-PWR-EN

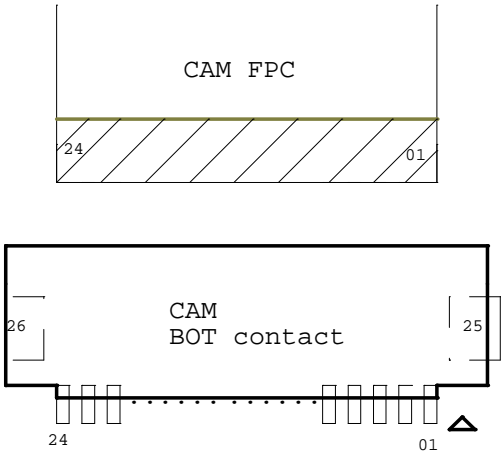
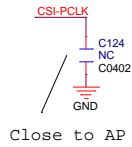
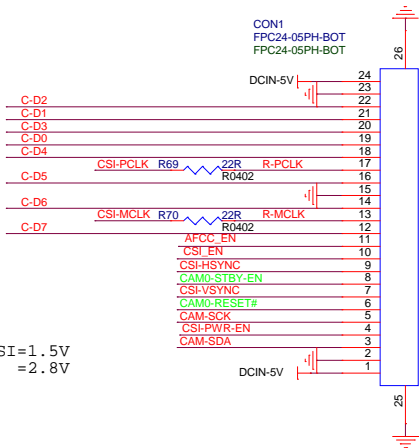
CSI-SCK << CAM-SCK
CSI-SDA << CAM-SDA
CSI-PCLK << CSI-PCLK
CSI-MCLK << CSI-MCLK
CSI-HSYNC << CSI-HSYNC
CSI-VSYNC << CSI-VSYNC

CSI-D0 << C-D0
CSI-D1 << C-D1
CSI-D2 << C-D2
CSI-D3 << C-D3
CSI-D4 << C-D4
CSI-D5 << C-D5
CSI-D6 << C-D6
CSI-D7 << C-D7

AFCC_EN << AFCC_EN

CSI_EN << CSI_EN

VDD1V5-CSI=1.5V
VCC-CSI =2.8V



Xunlong Software

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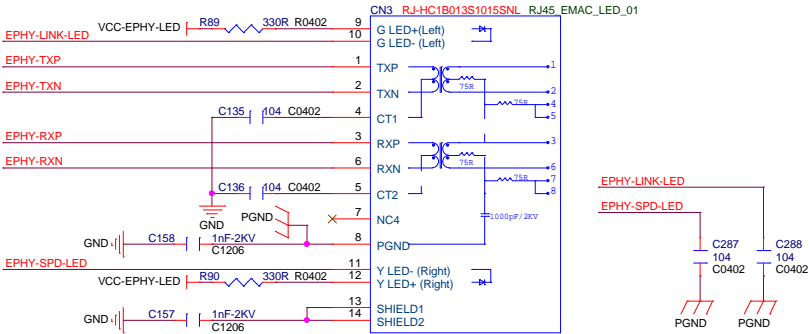
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Rev

EMAC

删除千兆网口，增加百兆网口

EPHY-RXP
EPHY-RXN
EPHY-TXP
EPHY-TXN
EPHY-LINK-LED
EPHY-SPD-LED
VCC-EPHY-LED



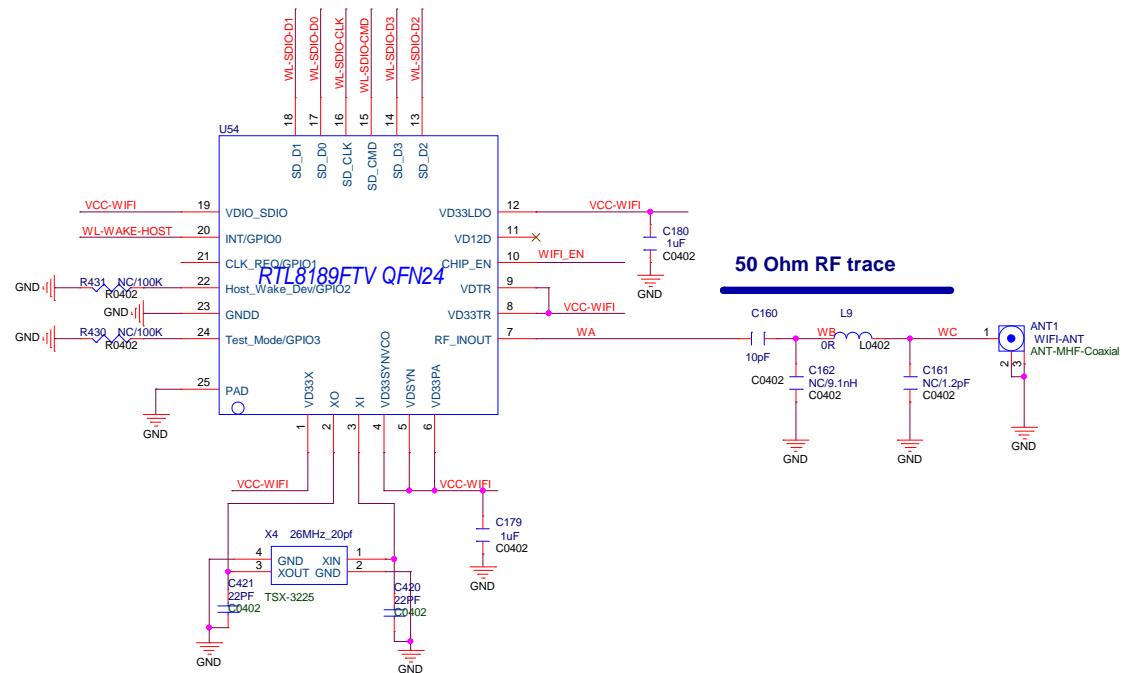
Xunlong Software

Design Name
ORANGE_PI-PC-PLUS

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A3
Page Name
FE-DBG

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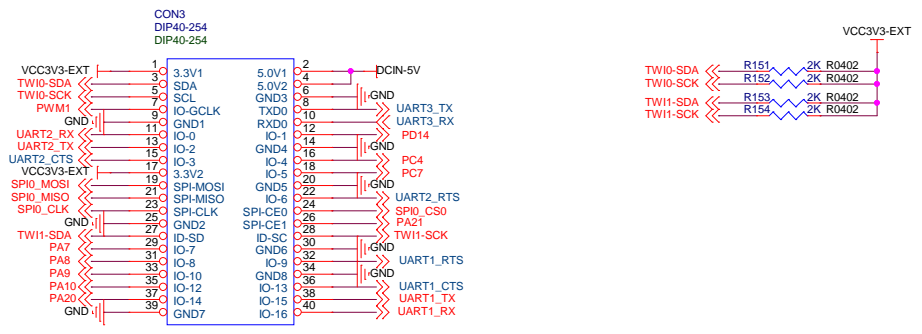
Date: Thursday, April 14, 2016 Sheet 12 of 16

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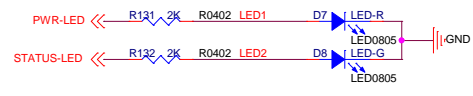
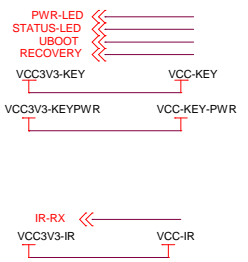
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Ext Port

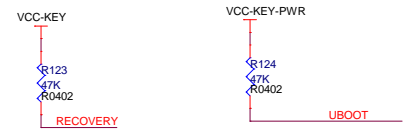
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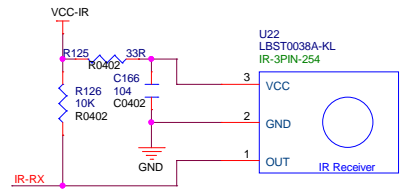
LED



KEY



IR



DEBUG

