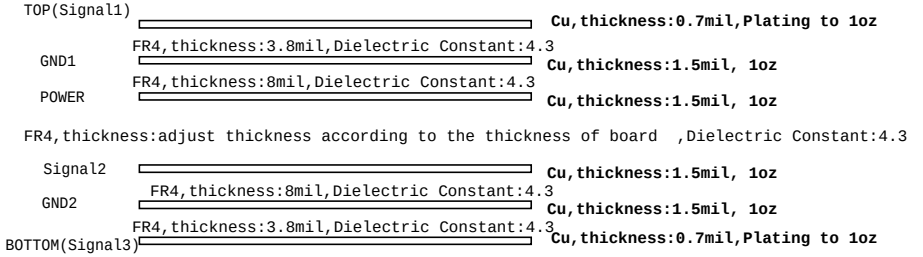
Content Indexing

6 LAYERS PCB STACK



Rockchip 瑞芯微电子 福州瑞芯微电子有限公司

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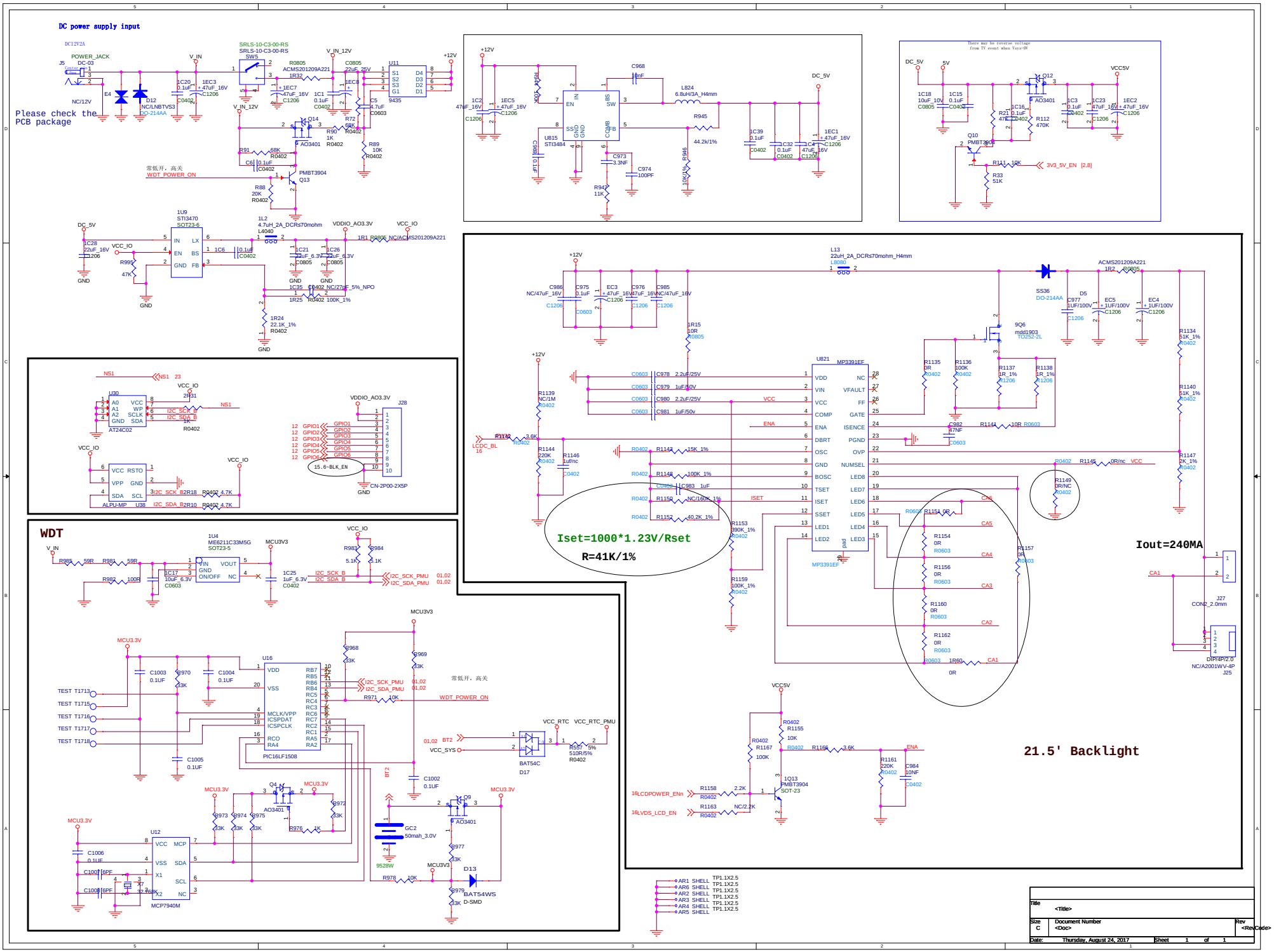
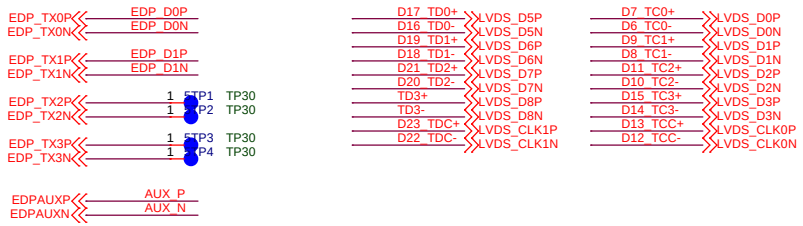
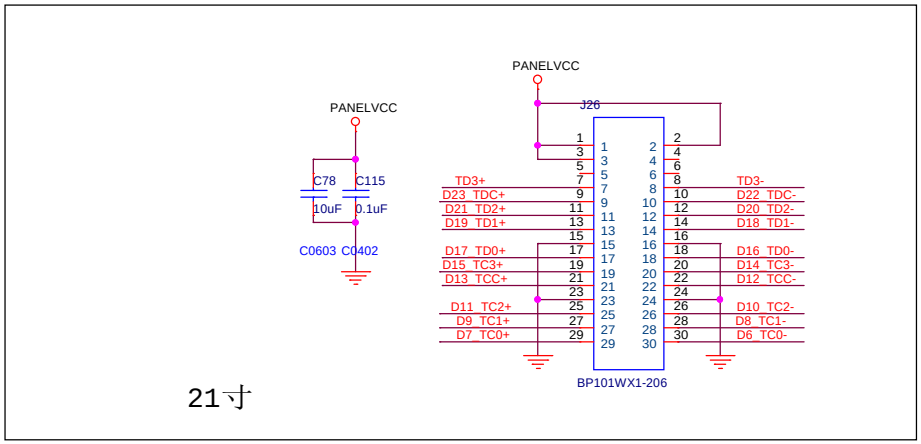
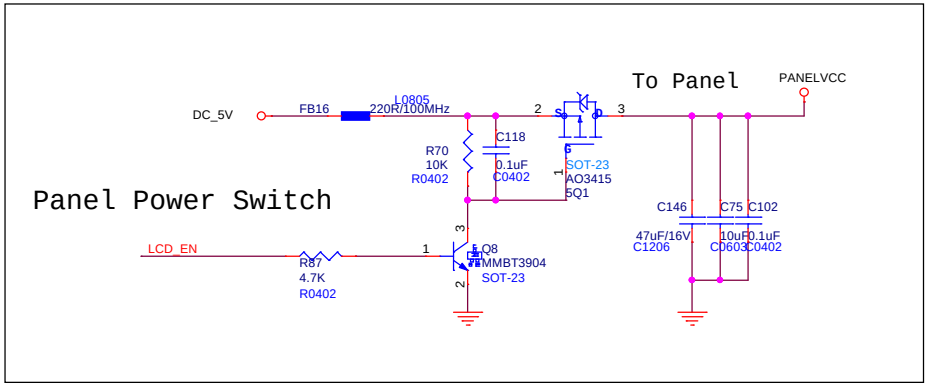
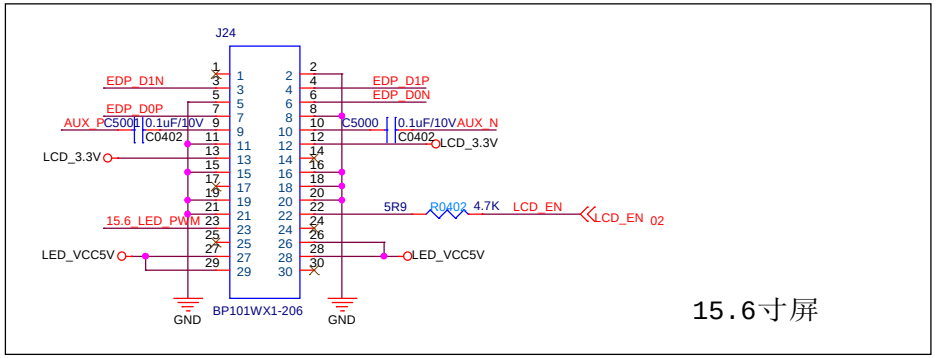
Create Date: Sunday, January 26, 2014	Page Num: 1	
Modify Date: Monday, July 03, 2017	Page Total: 24	

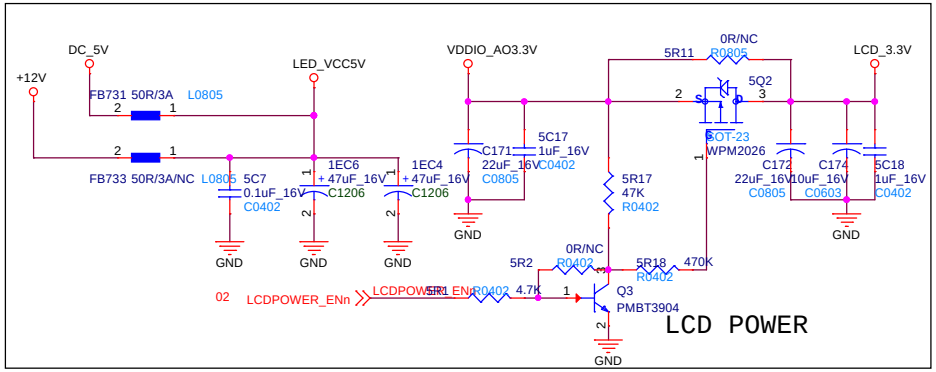

DC power supply input
Please check the PCB package
WDT
Iset=1000*1.23V/Rset
R=41K/1%
Iout=240MA
21.5' Backlight
Title
<Title>
Size C
Document Number <Doc>
Rev <RevCode>
Date: Thursday, August 24, 2017
Sheet 1 of 1

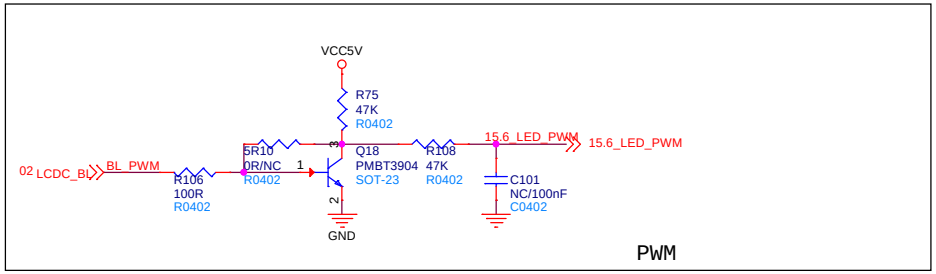












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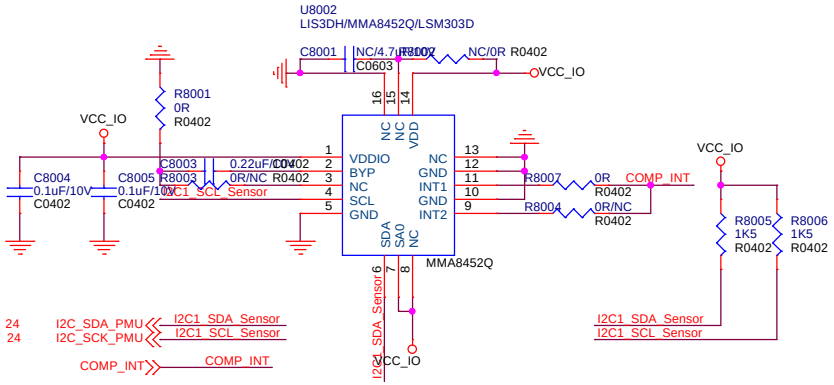
Size B	Document Number <Doc>	Rev <RevCode>
Date: Friday, August 25, 2017	Sheet 1 of 1	

G-sensor

LSM303D with 3D Gsensor and E-compass

	LIS3DH	MMA8452Q	LSM303D
C8001	NC	NC	4.7uF
R8002	0ohm	NC	NC
R8001	NC	0ohm	NC
C8003	NC	0.1uF	0.22uF
R8003	NC	NC	0R
R8004	NC	NC	0R



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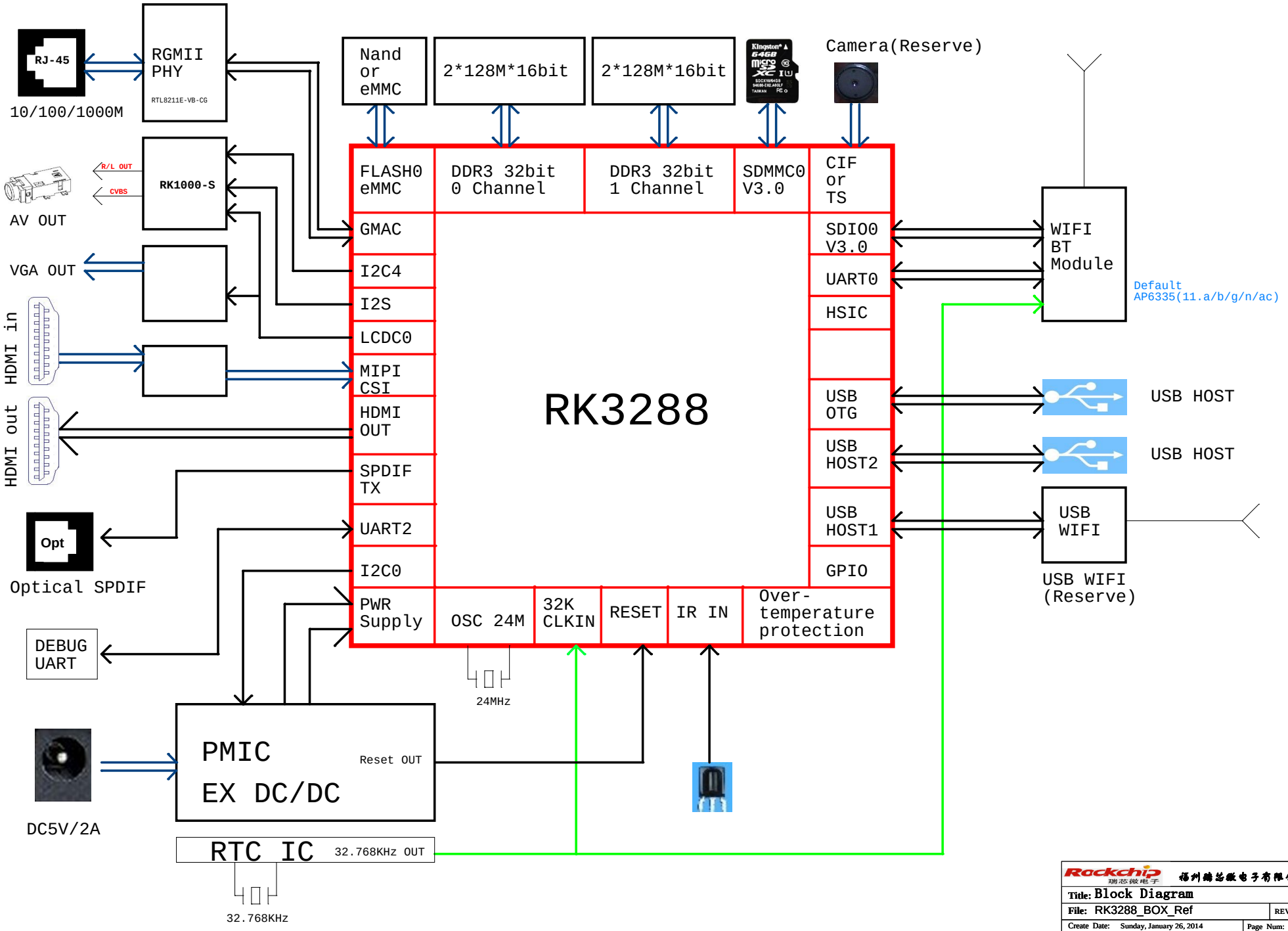
Size B	Document Number <Doc>		Rev <RevCode>
Date: Thursday, August 03, 2017	Sheet 1 of 1		

Version	Date	Author	Change Note	Approved
Beat V0.1	20140217	ZDZ	First edictor	
Beat V0.2	20140227	ZDZ	1:PMIC_SLEEP更改接RK3288-J28管脚 2:ROUT/LOUT耦合电容前后网络名一致，耦合电容前网络更改为RK1000-ROUT/LOUT 3:各电源的电容优化 4:S/PDIF电源预留可使用VCCA_33，待机时可以关掉。 5：AV OUT座子的CVBS输出管脚和LOUT对掉 6:SPK_CTL更改接RK3288-G24管脚	
V1.0	20140422	ZDZ	1：见修改文档.	
V1.1	20140516	ZDZ	1：RK3288 PIN AB23,Y12更改接VCCA_33 2：ACT8846和复位IC之间预留一个0R电阻(R203)。如果使用MCU，需用外部的复位IC。R203不贴. 3：以太网的TX信号增加上拉电阻，增强驱动能力。 4：ACT8846 DC4要用上，否则上电不了。 5：ACT8846 INL3输入电源默认用VCC_20供电。 6：解决HDMI CEC漏电问题 7：R85更改成510R 8：增加VDD_CPU,VDD_GPU电容,降低纹波 9：R146更改22R，原来是NC不贴。 10：增加Audio Line Driver 11：修改eMMC电源，默认支持1.8V的高速eMMC。 12：ACT8846型号修正，配RK3288的型号为ACT8846QM490-T 13：RTC IC电源增加预留VCC_SYS供电 14：HDMI ESD器件型号修改 15：更新原理图框图，POWER TREE，原来有误。 16：L26,L27更改成SWPA5020SR24NT/5A	
V1.2	20140805	ZDZ	1：修改记录请见RK3288_BOX_REF_V1.2_20140806原理图修改点	
V1.3	20140926	ZDZ	1：修改记录请见RK3288_BOX_REF_V1.3_20140928原理图修改点	
V1.4			1：在V1.3上增加HDMI IN功能，没有对应的PCB。	
V1.5	20150628	ZDZ	1：在V1.3上基础上，HDMI座子由贴片修改成插件。	
V2.0	20150915	ZDZ	1：增加HDMI IN和VGA OUT功能 2：删掉MIC，摄像头接口 3：删掉单片机预留	
V3.0	20151224	LCH	1：将PMIC由ACT8846-490修改为RK808-B	



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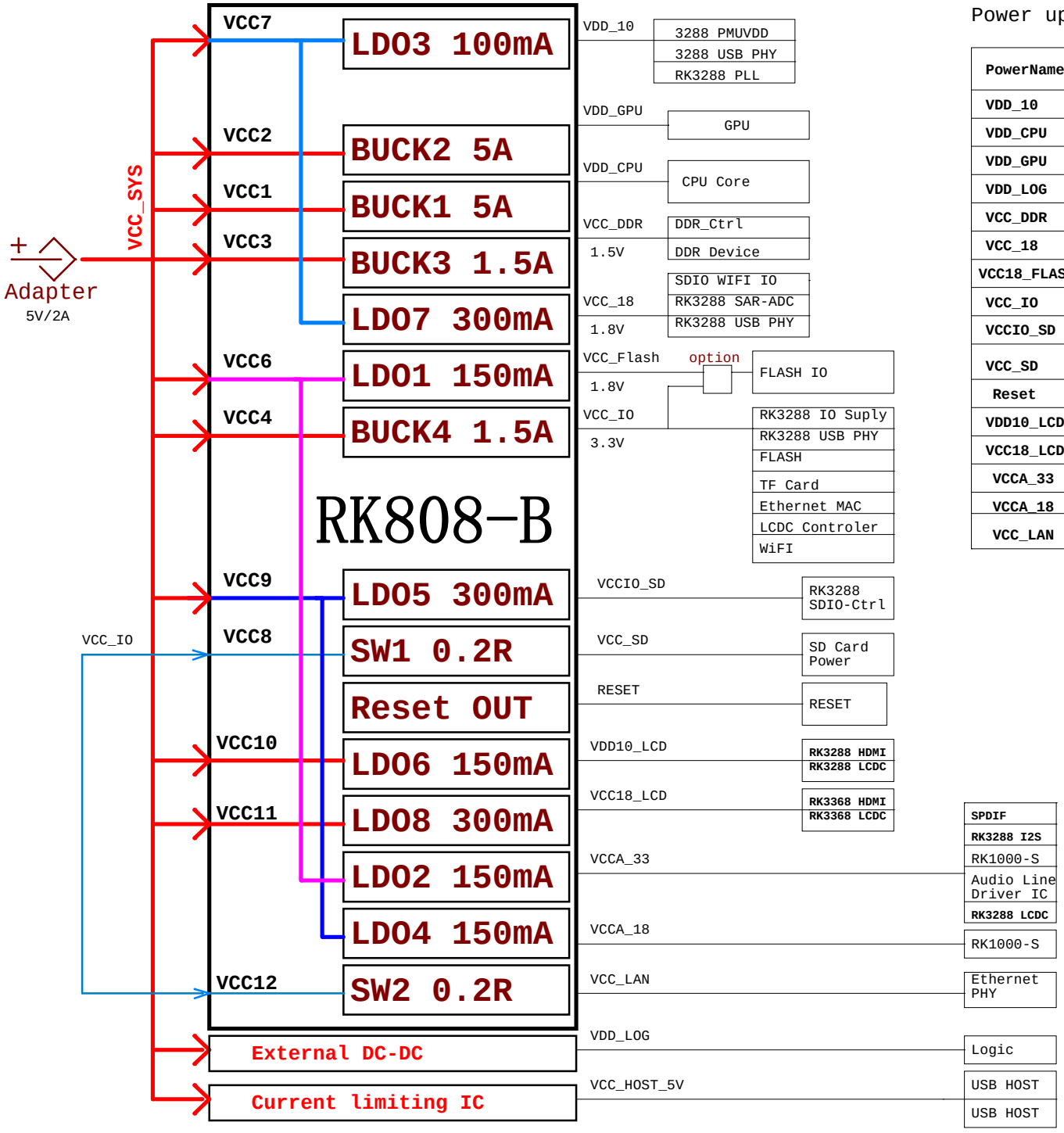
Create Date:	Sunday, January 26, 2014
Page Num:	3
Modify Date:	Monday, July 03, 2017
Page Total:	24



Power up Timing

PowerName	RK808-B Channel	timer 2mS	Default voltage	Normal voltage
VDD_10	LDO3	Slot:1	1.0V	1.0V
VDD_CPU	BUCK1	Slot:2	1.1V	DVFS
VDD_GPU	BUCK2	Slot:3	1.1V	DVFS
VDD_LOG	External DC-DC	Slot:4A	1.0V	DVFS
VCC_DDR	BUCK3	Slot:3	1.5V	1.5V
VCC_18	LDO7	Slot:3	1.8V	1.8V
VCC18_FLASH	LDO1	Slot:4	1.8V	1.8V
VCC_IO	BUCK4	Slot:4	3.3V	3.3V
VCCIO_SD	LDO5	Slot:5	3.3V	1.8V or 3.3V
VCC_SD	SW1	Slot:5	3.3V	3.3V
Reset		16*2mS+50mS		
VDD10_LCD	LDO6	OFF	0V	1.0V
VCC18_LCD	LDO8	OFF	0V	1.8V
VCCA_33	LDO2	OFF	0V	3.3V
VCCA_18	LDO4	OFF	0V	1.8V
VCC_LAN	SW2	OFF	0V	3.3V

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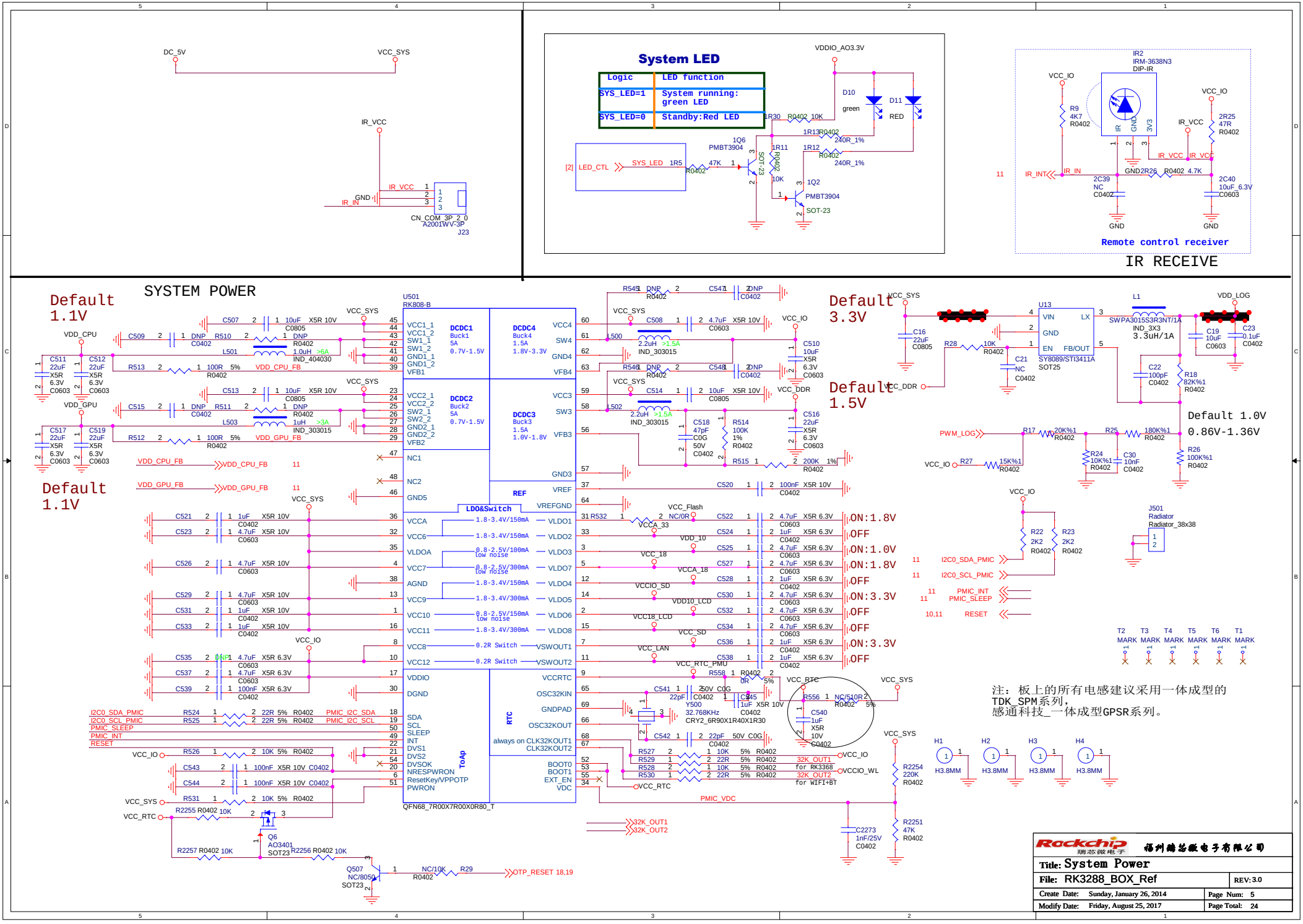
Title: Power Tree
File: RK3288_BOX_Ref REV:3.0
Create Date: Sunday, January 26, 2014 Page Num: 4
Modify Date: Monday, July 03, 2017 Page Total: 24


DC_5V
VCC_SYS
IR_VCC
GND
IR_IN
CN_COM_3P_2_0
A2001WV-3P
J23
System LED
Logic
LED function
SYS_LED=1
System running: green LED
SYS_LED=0
Standby:Red LED
VDDIO_AO3.3V
D10
green
D11
RED
R30 R0402 10K
R13 R0402 240R_1%
R12 R0402 240R_1%
1Q6
PMBT3904
SOT-23
1R11 200K
10K
1Q2
PMBT3904
SOT-23
[2] LED_CTL
SYS_LED 1R5
R0402 47K
IR2
IRM-3638N3
DIP-IR
VCC_IO
R9 4K7 R0402
IR
GND
3V3
IR_VCC
2R25 47R R0402
IR_VCC IR_VCC
11
IR_INT
IR_IN
GND 2R26 R0402 4.7K
2C39 NC C0402
2C40 10uF_6.3V C0603
GND
Remote control receiver
IR RECEIVE
SYSTEM POWER
Default 1.1V
U501
RK808-B
VCC_SYS
VDD_CPU
VDD_GPU
C507 10uF X5R 10V C0805
C509 DNP R510 R0402
L501 1.0uH >6A IND_404030
R513 100R 5% R0402
VDD_CPU_FB
C511 22uF X5R 6.3V C0603
C512 22uF X5R 6.3V C0603
C513 10uF X5R 10V C0805
C515 DNP R511 R0402
L503 1uH >3A IND_303015
R512 100R 5% R0402
VDD_GPU_FB
C517 22uF X5R 6.3V C0603
C519 22uF X5R 6.3V C0603
VDD_CPU_FB 11
VDD_GPU_FB 11
Default 1.1V
VCC_SYS
VCC_IO
C521 1uF X5R 10V C0402
C523 4.7uF X5R 10V C0603
C526 4.7uF X5R 10V C0603
C529 4.7uF X5R 10V C0603
C531 1uF X5R 10V C0402
C533 1uF X5R 10V C0402
C535 DNP 4.7uF X5R 6.3V C0603
C537 4.7uF X5R 6.3V C0603
C539 100nF X5R 6.3V C0402
I2C0_SDA_PMIC R524 22R 5% R0402 PMIC_I2C_SDA
I2C0_SCL_PMIC R525 22R 5% R0402 PMIC_I2C_SCL
PMIC_SLEEP
PMIC_INT
RESET
VCC_IO R526 10K 5% R0402
C543 100nF X5R 10V C0402
C544 100nF X5R 10V C0402
VCC_SYS R531 10K 5% R0402
VCC_RTC R2255 R0402 10K
Q6 AO3401 SOT23
R2257 R0402 10K
R2256 R0402 10K
Q507 NC/805Q SOT23
NC/10K R0402 R29
OTP_RESET 18,19
DCDC1 Buck1 5A 0.7V-1.5V
DCDC2 Buck2 5A 0.7V-1.5V
DCDC3 Buck3 1.5A 1.0V-1.8V
DCDC4 Buck4 1.5A 1.8V-3.3V
REF
LDO&Switch
RTC
ToAp
VCC1_1 VCC1_2 SW1_1 SW1_2 GND1_1 GND1_2 VFB1
VCC2_1 VCC2_2 SW2_1 SW2_2 GND2_1 GND2_2 VFB2
VCC3 SW3 VFB3
VCC4 SW4 GND4 VFB4
NC1 NC2 GND5 GND3
VREF VREFGND
VCCA VCC6 VLDOA AGND VCC9 VCC10 VCC11 VCC8 VCC12 VDDIO DGND
VLDO1 VLDO2 VLDO3 VLDO7 VLDO4 VLDO5 VLDO6 VLDO8 VSWOUT1 VSWOUT2
1.8-3.4V/150mA
0.8-2.5V/100mA low noise
0.8-2.5V/300mA low noise
0.2R Switch
VCCRTC OSC32KIN GNDPAD OSC32KOUT
always on CLK32KOUT1 CLK32KOUT2
BOOT0 BOOT1 EXT_EN VDC
SDA SCL SLEEP INT DVS1 DVS2 DVSOK NRESPWRON ResetKey/VPPOTP PWRON
QFN68_7R00X7R00X0R80_T
R545 DNR R0402 C547 DNP C0402
VCC_SYS
C508 4.7uF X5R 10V C0603
L500 2.2uH >1.5A IND_303015
VCC_IO
C510 10uF X5R 6.3V C0603
R546 DNR R0402 C548 DNP C0402
C514 10uF X5R 10V C0805
L502 2.2uH >1.5A IND_303015
VCC_DDR
C516 22uF X5R 6.3V C0603
C518 47pF C0G 50V C0402
R514 100K 1% R0402
R515 200K 1% R0402
C520 100nF X5R 10V C0402
VCC_Flash
R532 NC/0R
VCCA_33
VDD_10
VCC_18
VCCA_18
VCCIO_SD
VDD10_LCD
VCC18_LCD
VCC_SD
VCC_LAN
VCC_RTC_PMU
C522 4.7uF X5R 6.3V C0603
C524 1uF X5R 6.3V C0402
C525 4.7uF X5R 6.3V C0603
C527 4.7uF X5R 6.3V C0603
C528 1uF X5R 6.3V C0402
C530 4.7uF X5R 6.3V C0603
C532 4.7uF X5R 6.3V C0603
C534 4.7uF X5R 6.3V C0603
C536 1uF X5R 6.3V C0402
C538 1uF X5R 6.3V C0402
R558 R0402 0R 5%
ON:1.8V
OFF
ON:1.0V
ON:1.8V
OFF
ON:3.3V
OFF
OFF
ON:3.3V
OFF
VCC_RTC
VCC_SYS
C541 22pF C0402
C545 1uF X5R 10V C0402
Y500 32.768KHz CRY2_6R90X1R40X1R30
C542 22pF 50V C0G C0402
R556 NC/510R R0402 5%
C540 1uF X5R 10V C0402
R527 10K 5% R0402
R529 22R 5% R0402 32K_OUT1 for RK3368
R528 10K 5% R0402
R530 22R 5% R0402 32K_OUT2 for WIFI+BT
VCC_IO
VCCIO_WL
VCC_RTC
PMIC_VDC
32K_OUT1
32K_OUT2
C2273 1nF/25V C0402
R2254 220K R0402
R2251 47K R0402
Default 3.3V
VCC_SYS
C16 22uF C0805
R28 10K R0402
C21 NC C0402
U13
VIN LX GND EN FB/OUT
SY8089/STI3411A
SOT25
L1
SWPA3015S3R3NT/1A
IND_3X3 3.3uH/1A
VDD_LOG
C19 10uF C0603
C23 0.1uF C0402
C22 100pF C0402
R18 82K%1 R0402
Default 1.0V 0.86V-1.36V
R17 20K%1 R0402
R25 180K%1 R0402
R24 10K%1 R0402
C30 10nF C0402
R26 100K%1 R0402
PWM_LOG
VCC_IO R27 15K%1 R0402
Default 1.5V
VCC_DDR
VCC_IO
R22 2K2 R0402
R23 2K2 R0402
J501
Radiator
Radiator_38x38
11 I2C0_SDA_PMIC
11 I2C0_SCL_PMIC
11 PMIC_INT
11 PMIC_SLEEP
10,11 RESET
T2 MARK T3 MARK T4 MARK T5 MARK T6 MARK T1 MARK
H1 H3.8MM H2 H3.8MM H3 H3.8MM H4 H3.8MM
注：板上的所有电感建议采用一体成型的TDK_SPM系列，
感通科技_一体成型GPSR系列。
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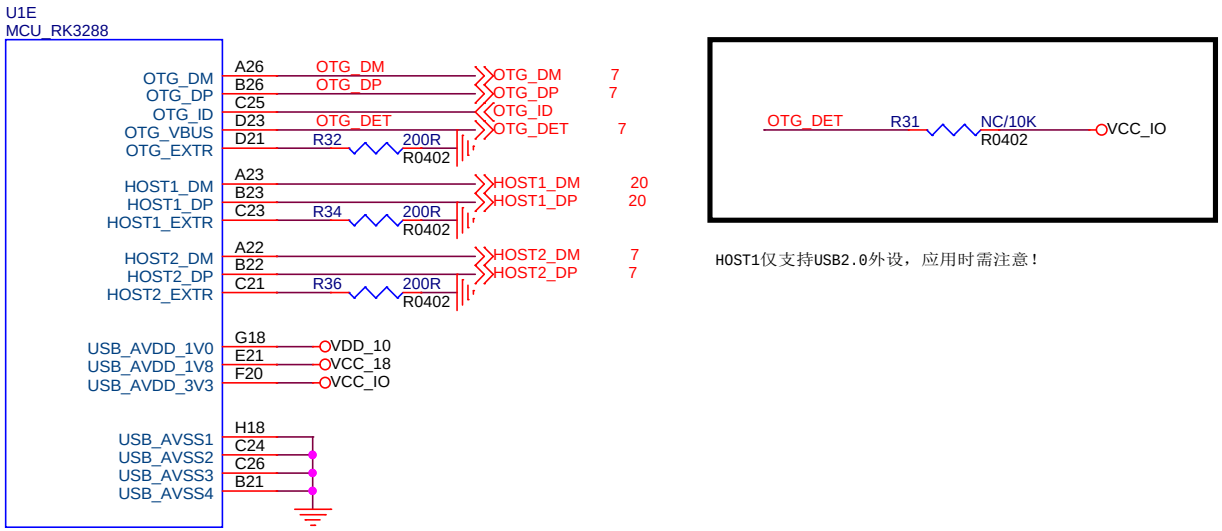
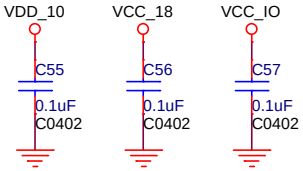
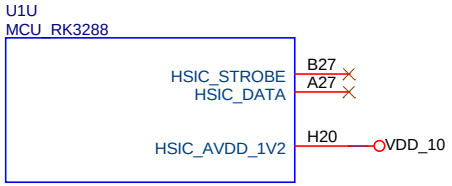
福州瑞芯微电子有限公司
Title: System Power
File: RK3288_BOX_Ref
REV: 3.0
Create Date: Sunday, January 26, 2014
Page Num: 5
Modify Date: Friday, August 25, 2017
Page Total: 24



HOST1仅支持USB2.0外设，应用时需注意！

RK3288_E





RK3288_U

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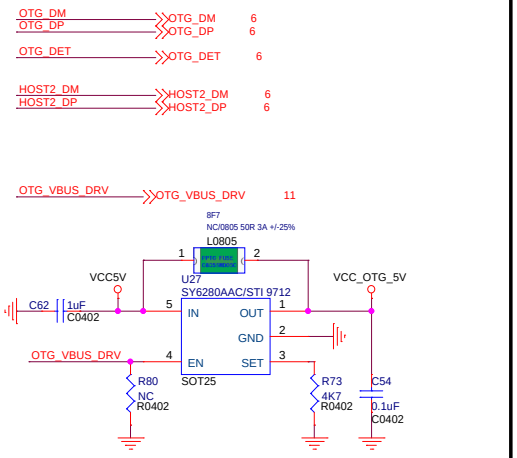
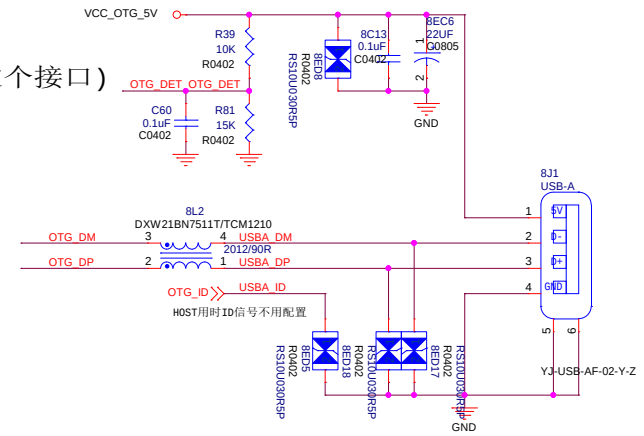
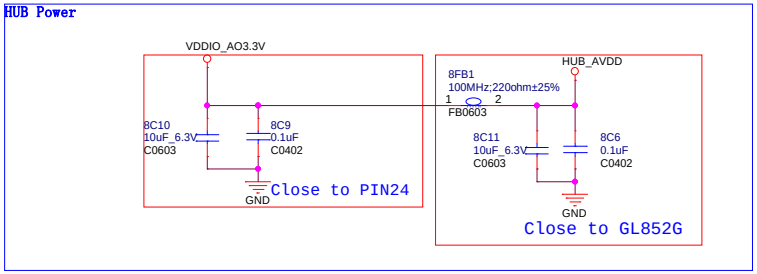
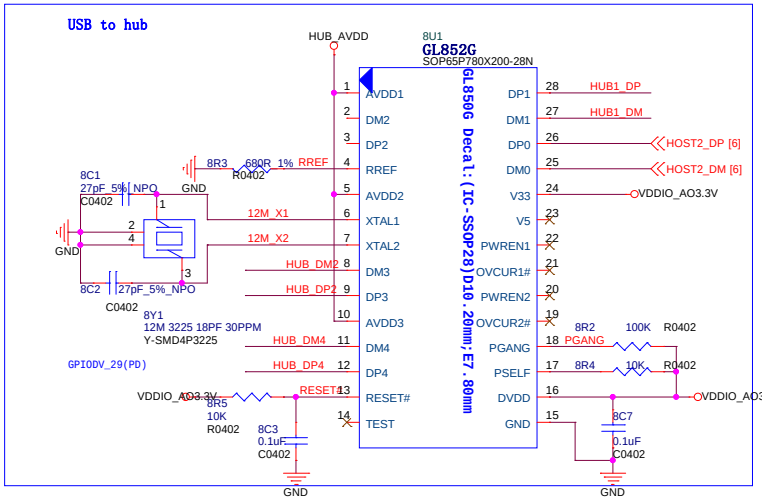
Title: RK3288 USB/HSIC Controler	
File: RK3288_BOX_Ref	REV:3.0
Create Date: Monday, February 17, 2014	Page Num: 6
Modify Date: Monday, July 03, 2017	Page Total: 24

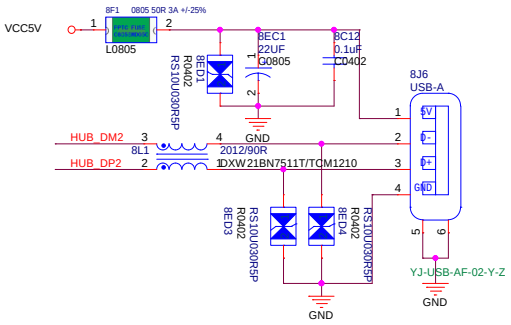


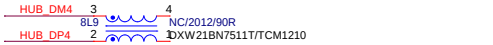
注：默认HOST接口（烧写固件用这个接口）
如果要当OTG电路需更改。

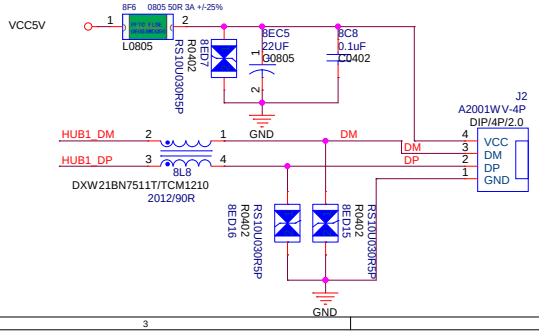




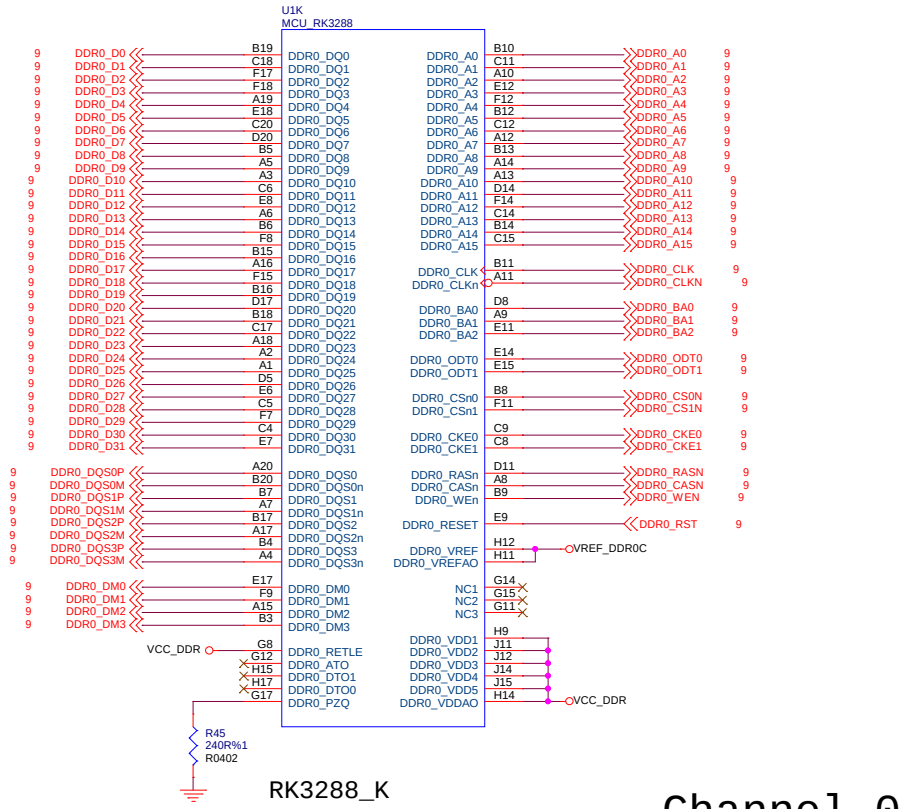






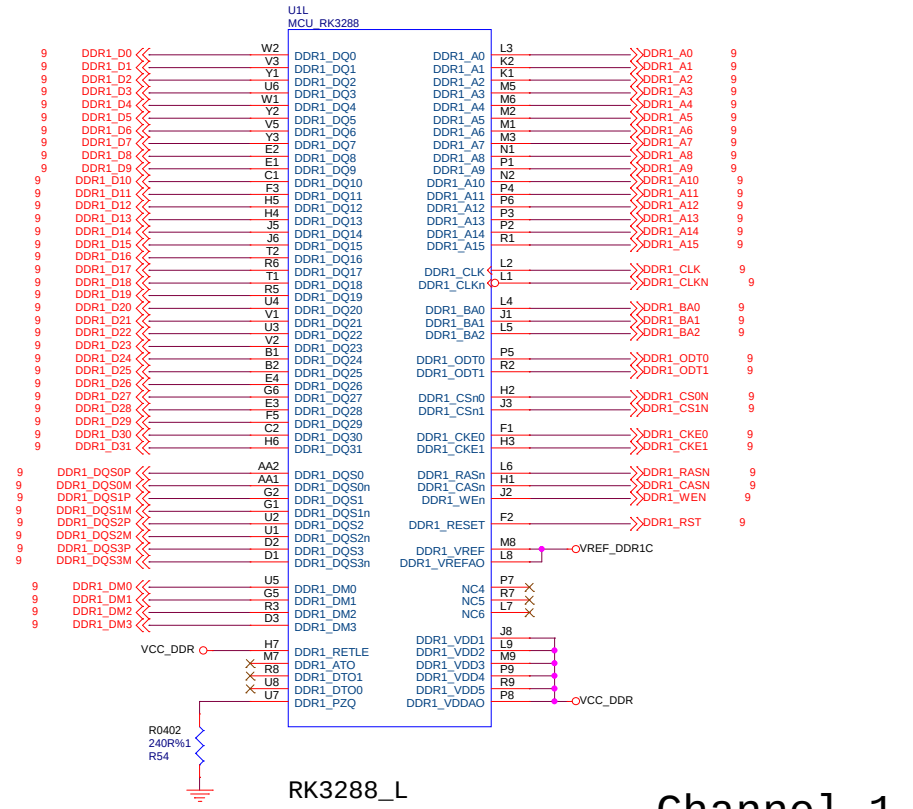


Rockchip 瑞芯微电子	福州瑞芯微电子有限公司	
Title: USB HOST		
File: RK3288_BOX_Ref		REV: 3.0
Create Date: Sunday, January 26, 2014		Page Num: 7
Modify Date: Friday, August 25, 2017		Page Total: 24



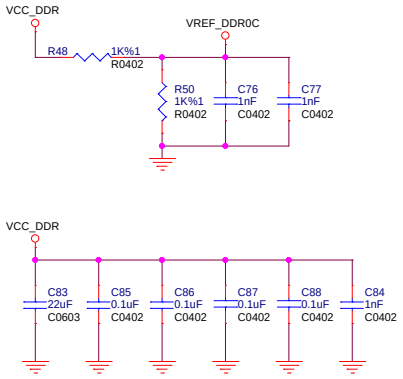
RK3288_K

Channel 0



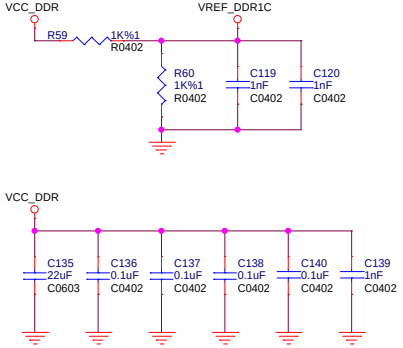
RK3288_L

Channel 1

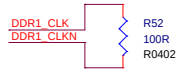


DDR0 FILTER

Note:
These termination resistors must be placed
in the middle of trace, and the termination resistor of CLK must be placed in thebifurcation point.

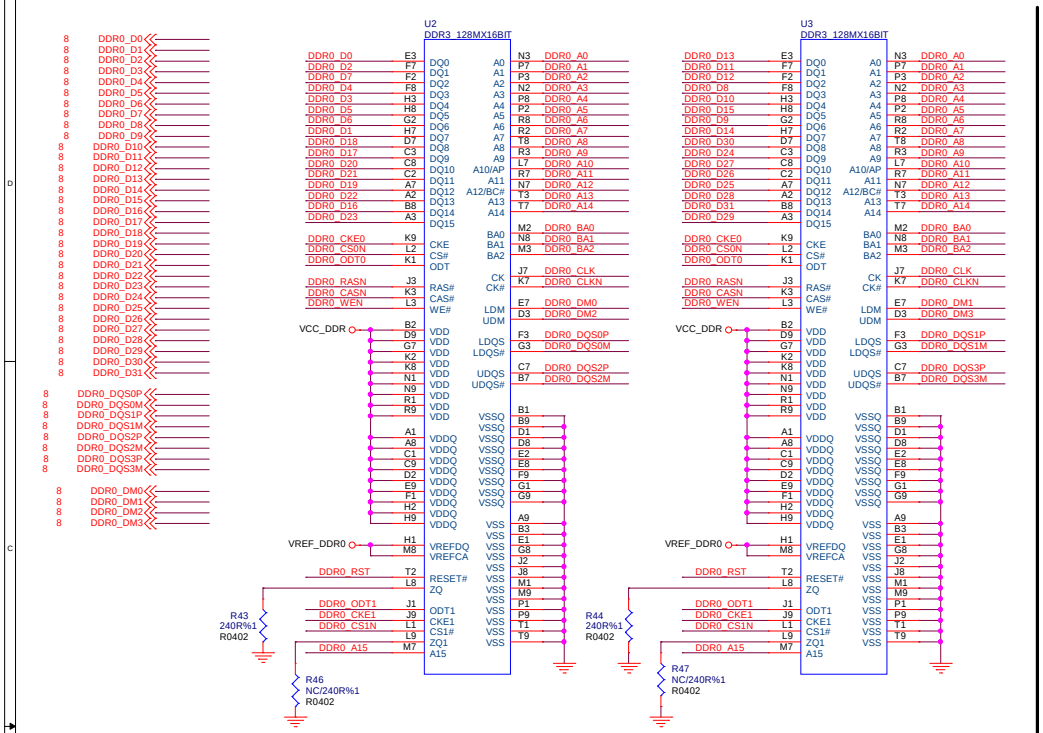


DDR1 FILTER

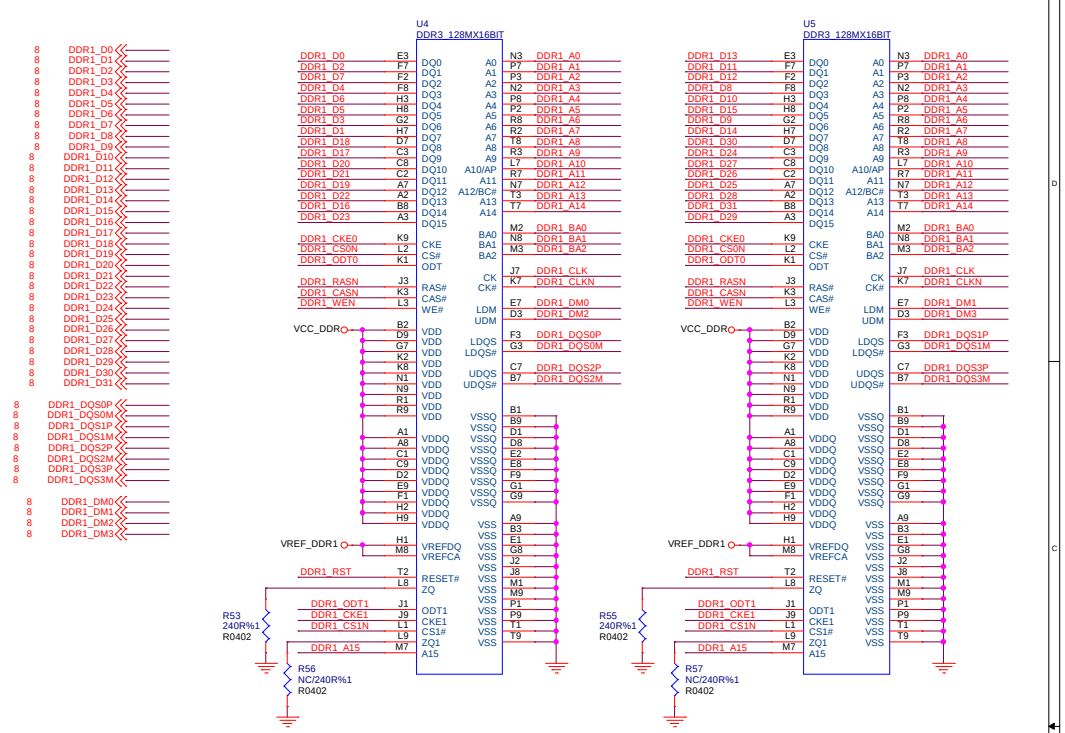


Note:
These termination resistors must be placed
in the middle of trace, and the termination resistor of CLK must be placed in thebifurcation point.

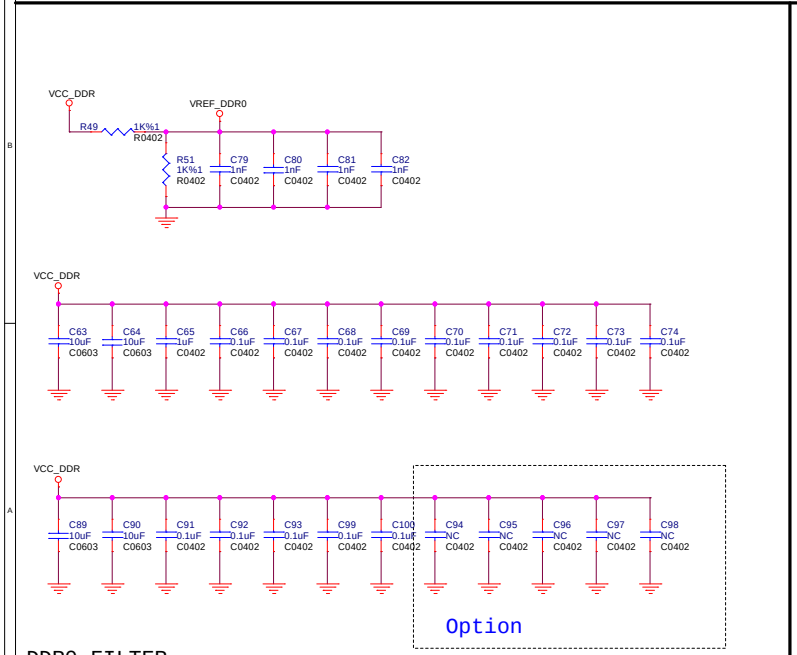
Rockchip 瑞芯微电子	福州瑞芯微电子有限公司	
Title: RK3288 RAM Controler		
File: RK3288_BOX_Ref		REV: 3.0
Create Date: Monday, February 17, 2014	Page Num: 8	
Modify Date: Monday, July 03, 2017	Page Total: 24	



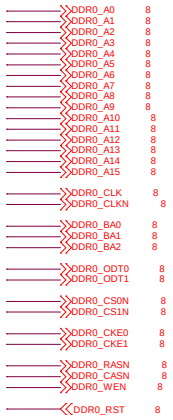
DDR3

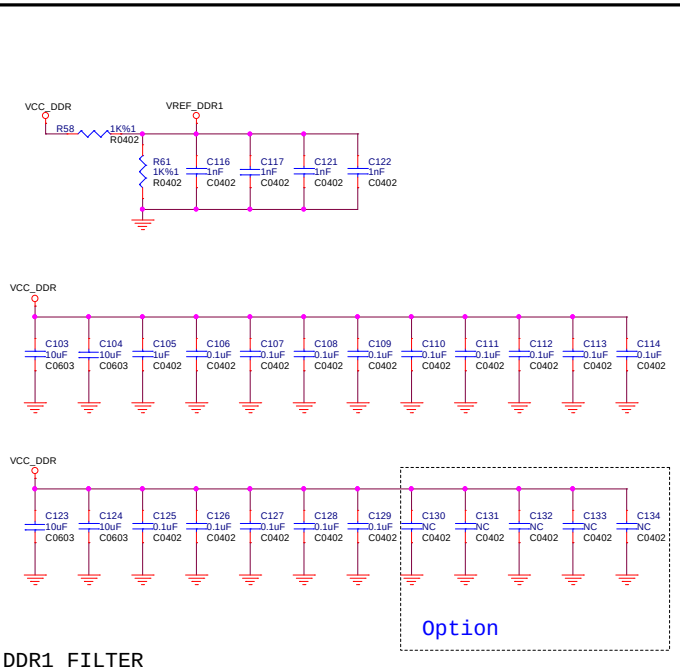


DDR3



DDR0 FILTER

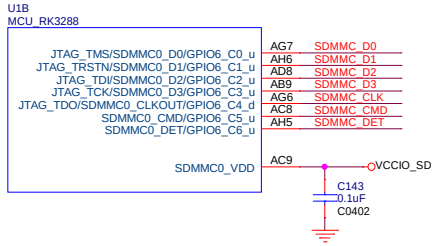




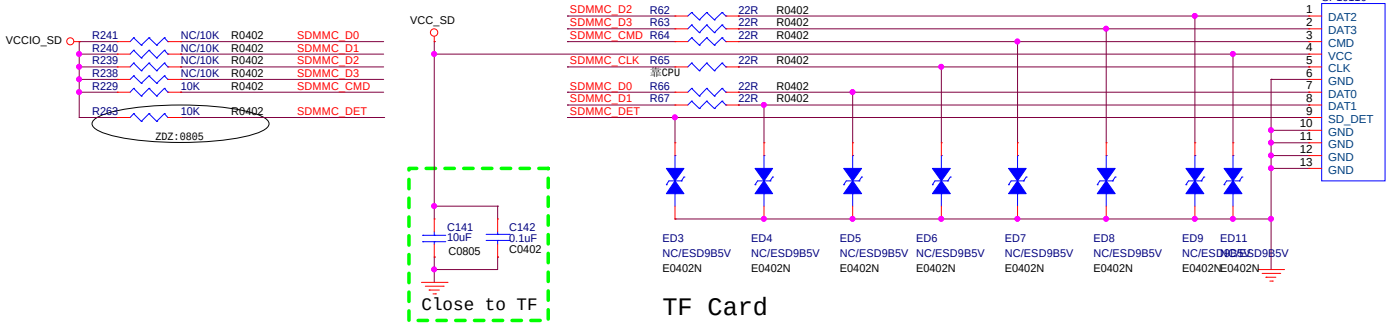
DDR1 FILTER

Rockchip 瑞芯微电子 福州瑞芯微电子有限公司

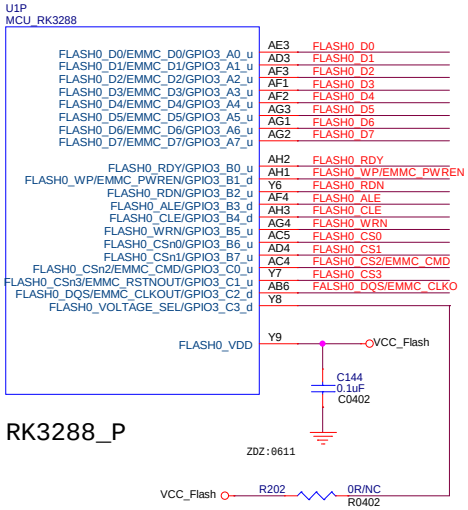
Title: RAM-DDR3-4X16bit		
File: RK3288_BOX_Ref		REV:3.0
Create Date: Tuesday, November 09, 2010	Page Num: 9	
Modify Date: Monday, July 03, 2017	Page Total: 24	



RK3288_B

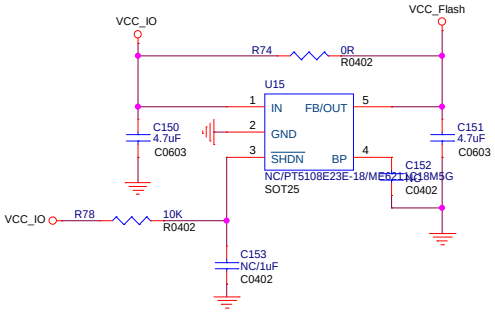


TF Card



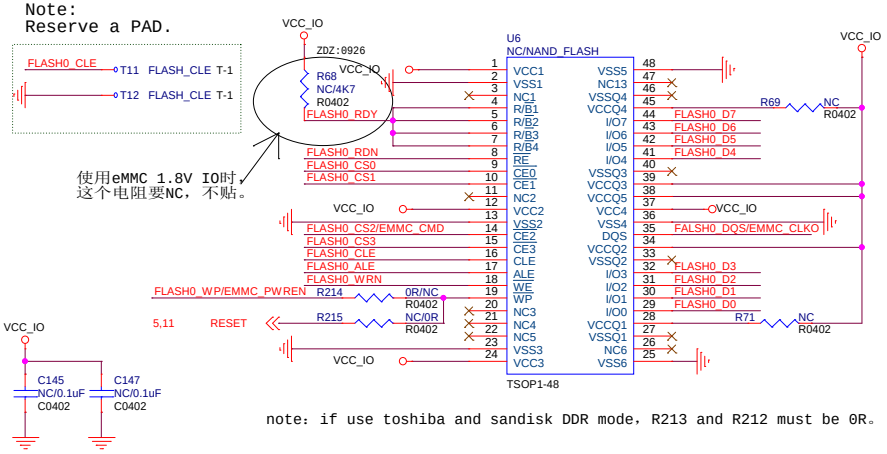
RK3288_P

Flash Power 接1.8V:1.8V IO
悬空：3.3V IO



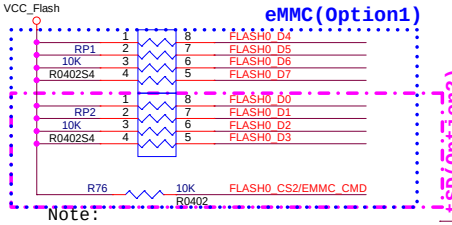
NAND FLASH(Option1)

Note:
Reserve a PAD.

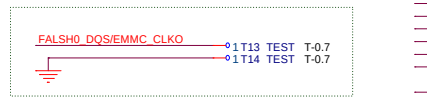


note：if use toshiba and sandisk DDR mode，R213 and R212 must be 0R。

eMMC(Option1)

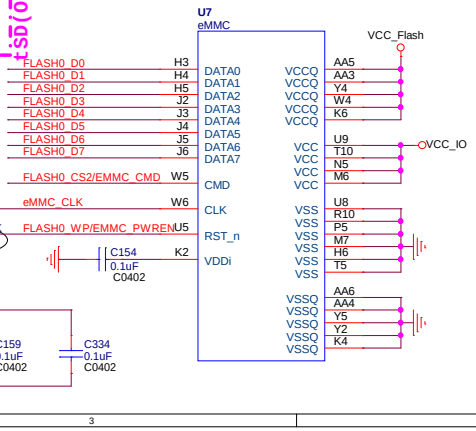


Note:
Reserve a PAD.



eMMC(default)

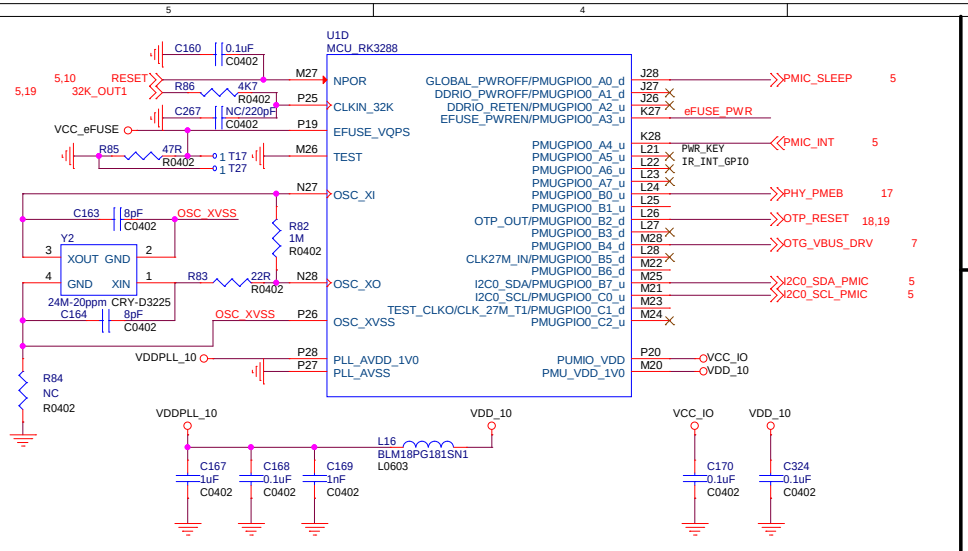
Pull-up select



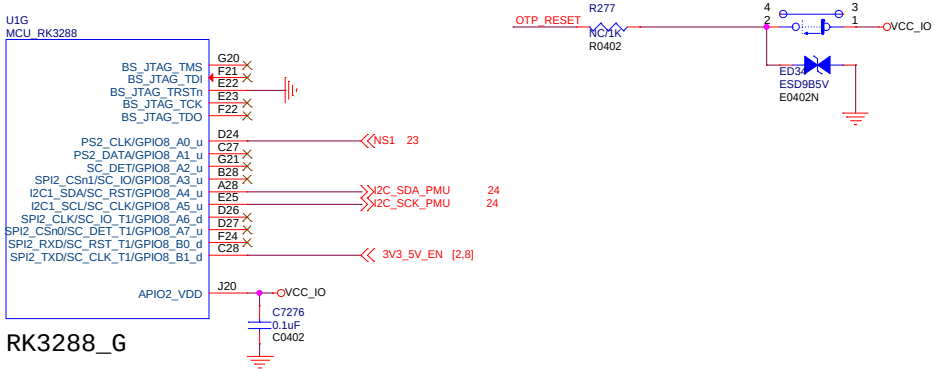
	Flash IO voltage		
eMMC (Default)	1.8V (VCCQ<150mA)	R74:DNP U15:DNP R532:0R	Default
	1.8V (VCCQ>150mA)	R74:DNP U15:PT5108E23E-18(500mA) R532:DNP	请确认所使用的eMMC颗粒的VCCQ峰值电流。
	3.3V	R74:0R U15:DNP R532:DNP	
Nand Flash	1.8V (VCCQ<150mA)	R74:DNP U15:DNP R532:0R	
	1.8V (VCCQ>150mA)	R74:DNP U15:PT5108E23E-18(500mA) R532:DNP	请确认所使用的Nand颗粒的VCCQ峰值电流。
	3.3V	R74:0R U15:DNP R532:DNP	

Rockchip 瑞芯微电子 福州瑞芯微电子有限公司

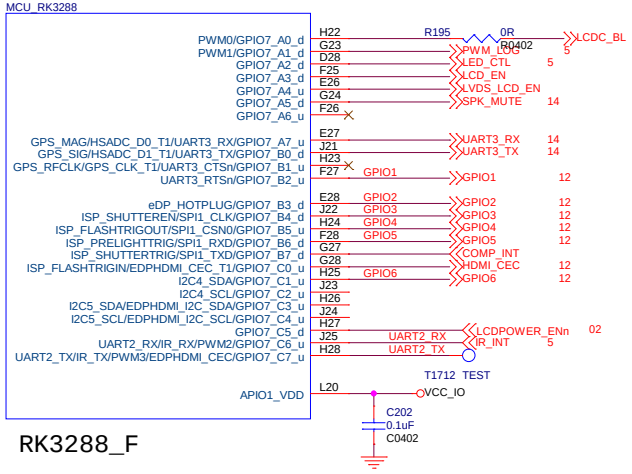
Title: Nand FLASH/eMMC/TF Card		
File: RK3288_BOX_Ref		REV: 3.0
Create Date: Sunday, January 26, 2014	Page Num:	10
Modify Date: Wednesday, July 26, 2017	Page Total:	24



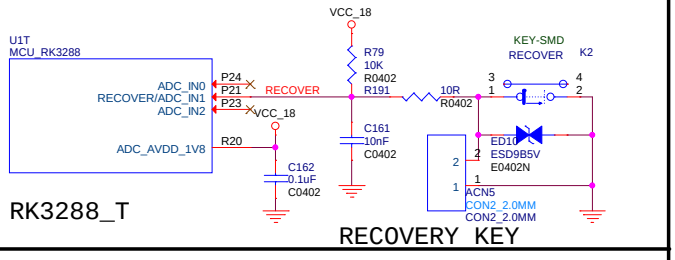
RK3288_D



RK3288_G

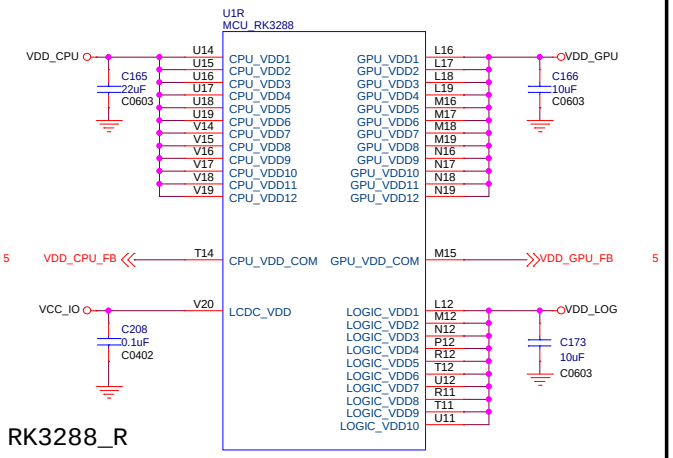


RK3288_F

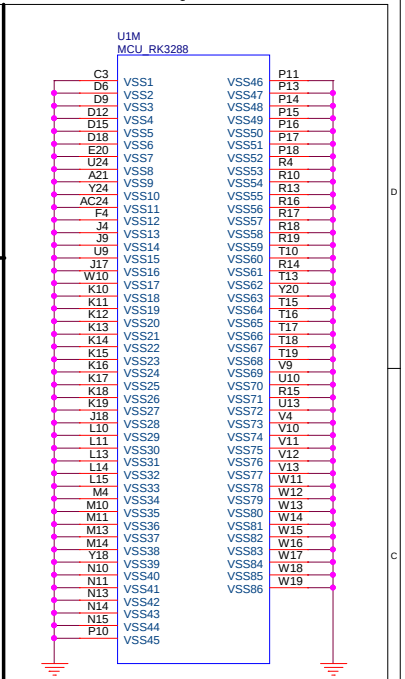


RK3288_T

RECOVERY KEY

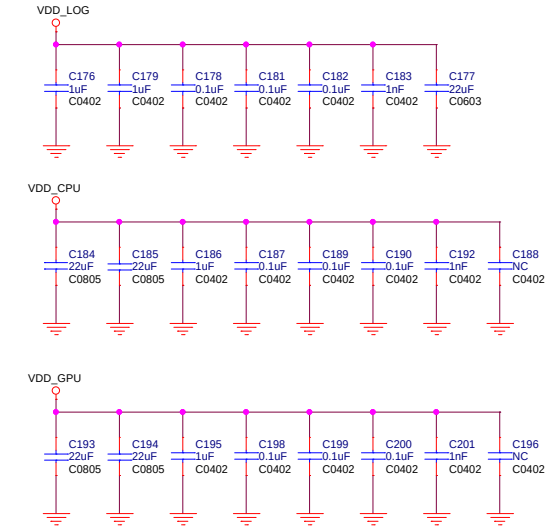


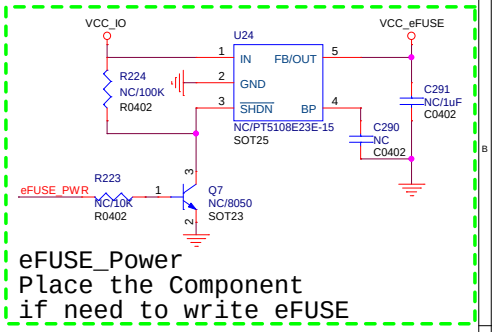
RK3288_R



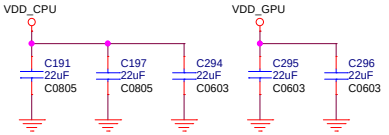
RK3288_M

RK3288 FILTER

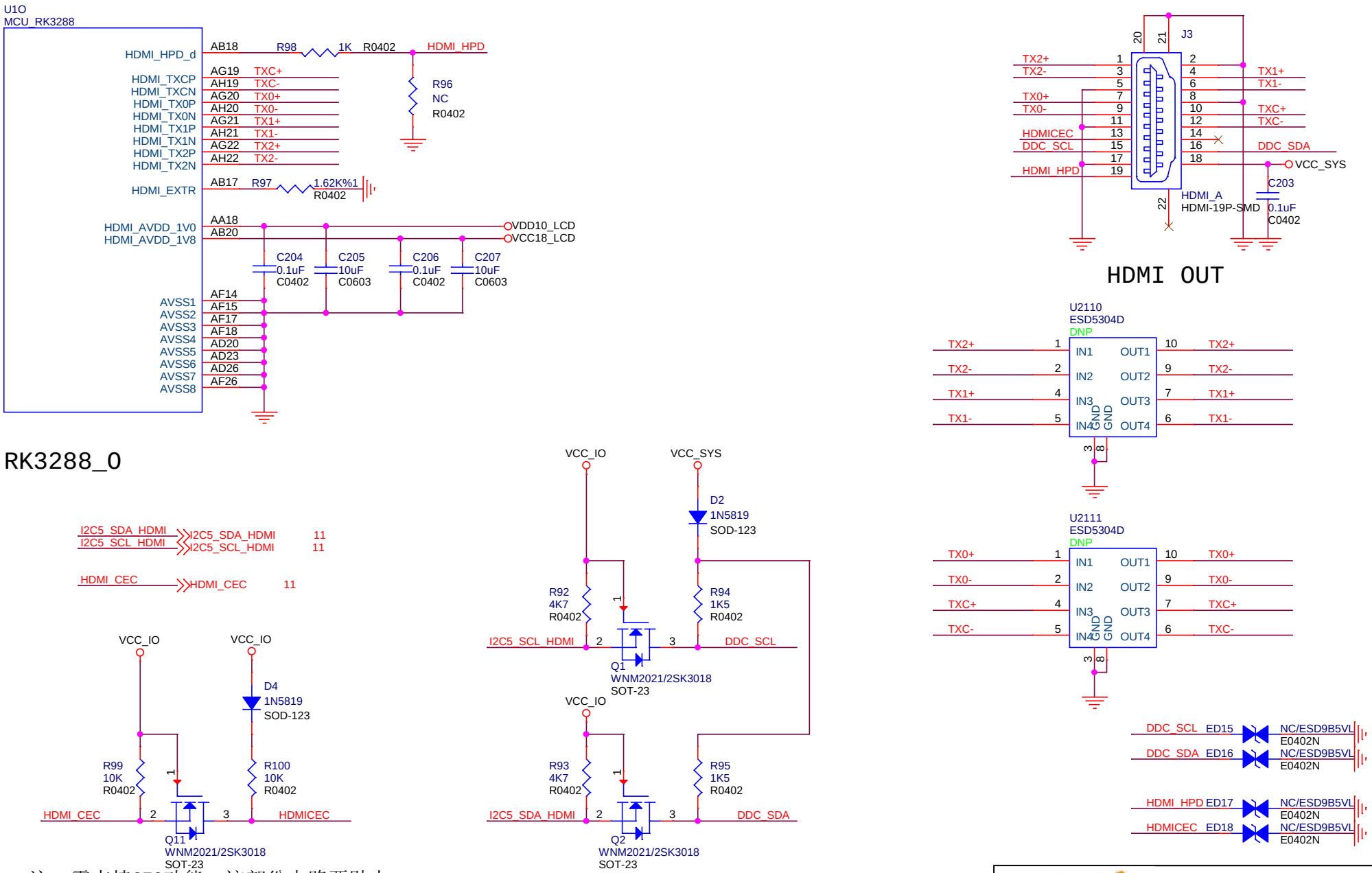




eFUSE_Power
Place the Component
if need to write eFUSE

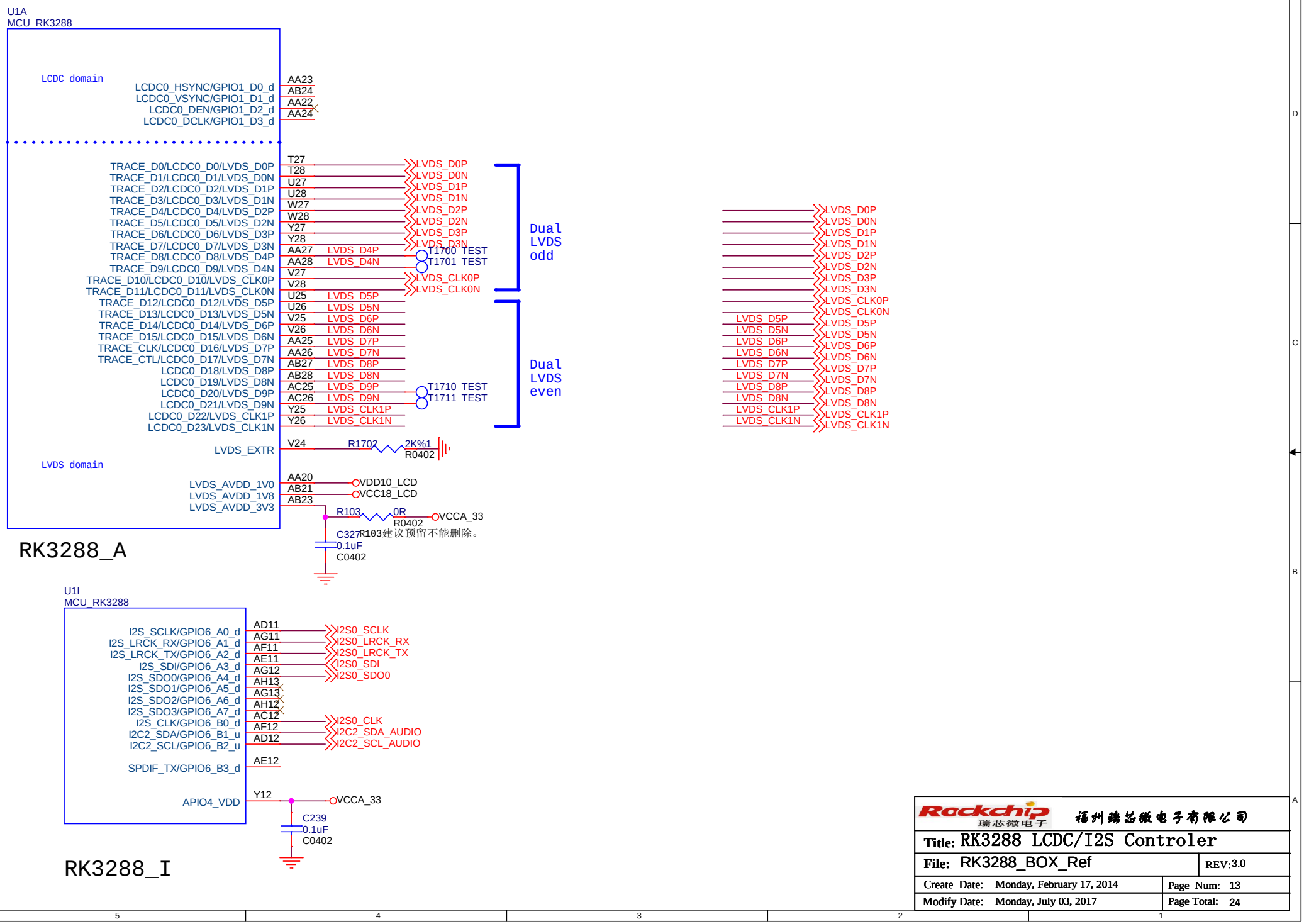


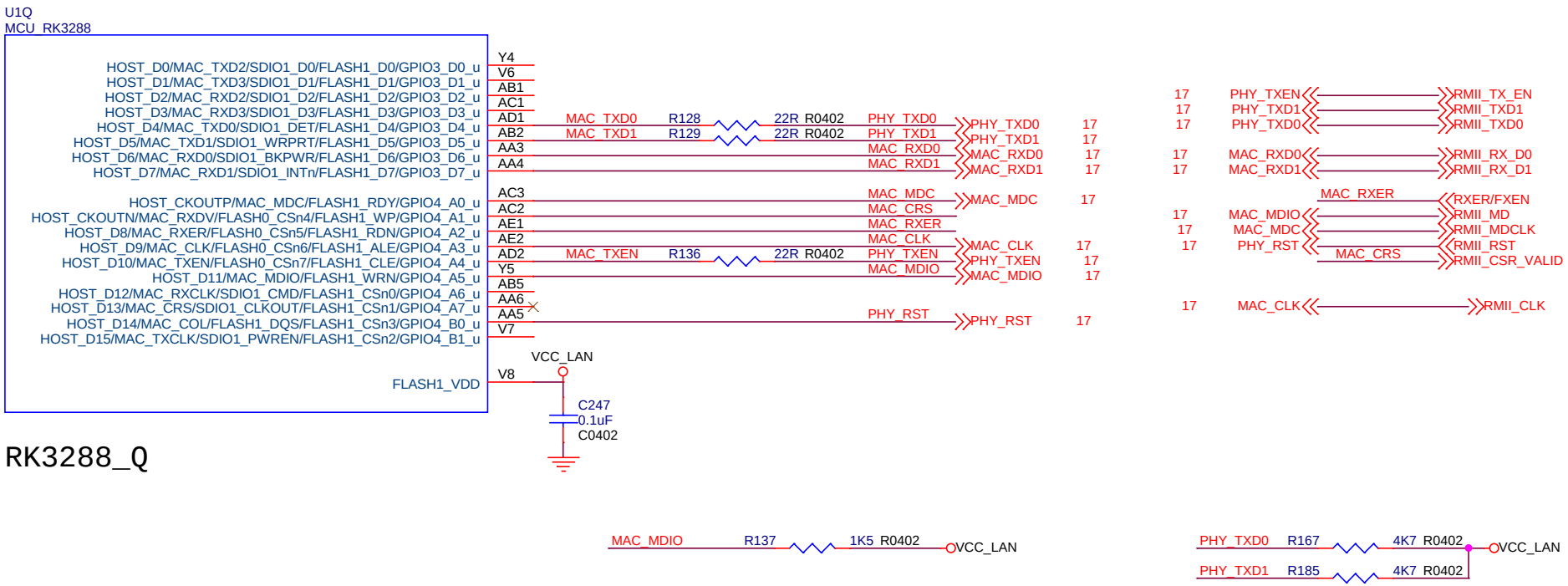
Rockchip 瑞芯微电子	福州瑞芯微电子有限公司	
Title: RK3288 GPIO/POWER		
File: RK3288_BOX_Ref		REV: 3.0
Create Date: Sunday, January 26, 2014		Page Num: 11
Modify Date: Thursday, August 03, 2017		Page Total: 24



注：需支持CEC功能，这部份电路要贴上。

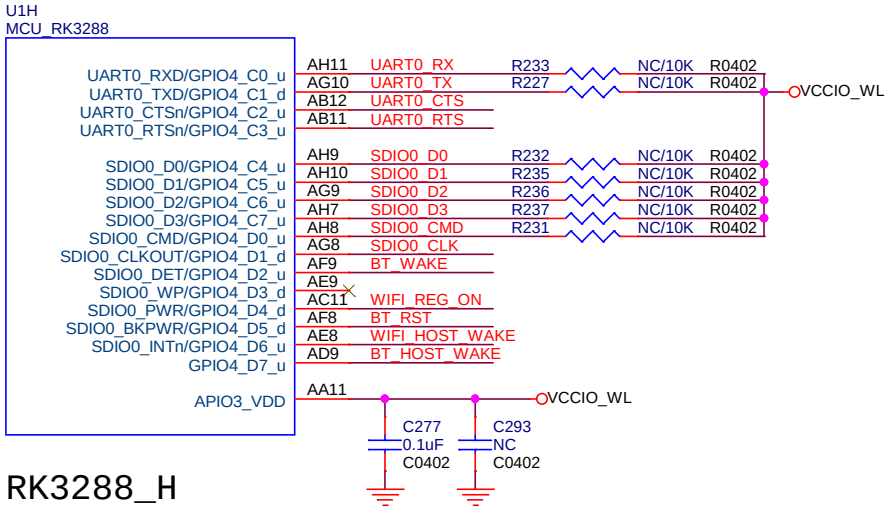
Rockchip 瑞芯微电子	福州瑞芯微电子有限公司
Title: HDMI OUT	
File: RK3288_BOX_Ref	REV:3.0
Create Date: Sunday, January 26, 2014	Page Num: 12
Modify Date: Thursday, August 03, 2017	Page Total: 24


U1A
MCU_RK3288
LCDC domain
LCDC0_HSYNC/GPIO1_D0_d
LCDC0_VSYNC/GPIO1_D1_d
LCDC0_DEN/GPIO1_D2_d
LCDC0_DCLK/GPIO1_D3_d
AA23
AB24
AA22
AA24
TRACE_D0/LCDC0_D0/LVDS_D0P
TRACE_D1/LCDC0_D1/LVDS_D0N
TRACE_D2/LCDC0_D2/LVDS_D1P
TRACE_D3/LCDC0_D3/LVDS_D1N
TRACE_D4/LCDC0_D4/LVDS_D2P
TRACE_D5/LCDC0_D5/LVDS_D2N
TRACE_D6/LCDC0_D6/LVDS_D3P
TRACE_D7/LCDC0_D7/LVDS_D3N
TRACE_D8/LCDC0_D8/LVDS_D4P
TRACE_D9/LCDC0_D9/LVDS_D4N
TRACE_D10/LCDC0_D10/LVDS_CLK0P
TRACE_D11/LCDC0_D11/LVDS_CLK0N
TRACE_D12/LCDC0_D12/LVDS_D5P
TRACE_D13/LCDC0_D13/LVDS_D5N
TRACE_D14/LCDC0_D14/LVDS_D6P
TRACE_D15/LCDC0_D15/LVDS_D6N
TRACE_CLK/LCDC0_D16/LVDS_D7P
TRACE_CTL/LCDC0_D17/LVDS_D7N
LCDC0_D18/LVDS_D8P
LCDC0_D19/LVDS_D8N
LCDC0_D20/LVDS_D9P
LCDC0_D21/LVDS_D9N
LCDC0_D22/LVDS_CLK1P
LCDC0_D23/LVDS_CLK1N
T27
T28
U27
U28
W27
W28
Y27
Y28
AA27
AA28
V27
V28
U25
U26
V25
V26
AA25
AA26
AB27
AB28
AC25
AC26
Y25
Y26
LVDS_D0P
LVDS_D0N
LVDS_D1P
LVDS_D1N
LVDS_D2P
LVDS_D2N
LVDS_D3P
LVDS_D3N
LVDS_D4P
LVDS_D4N
LVDS_CLK0P
LVDS_CLK0N
LVDS_D5P
LVDS_D5N
LVDS_D6P
LVDS_D6N
LVDS_D7P
LVDS_D7N
LVDS_D8P
LVDS_D8N
LVDS_D9P
LVDS_D9N
LVDS_CLK1P
LVDS_CLK1N
T1700 TEST
T1701 TEST
T1710 TEST
T1711 TEST
Dual LVDS odd
Dual LVDS even
LVDS_EXTR
V24
R1702
2K%1
R0402
LVDS domain
LVDS_AVDD_1V0
LVDS_AVDD_1V8
LVDS_AVDD_3V3
AA20
AB21
AB23
VDD10_LCD
VCC18_LCD
R103
0R
R0402
VCCA_33
C327
R103建议预留不能删除。
0.1uF
C0402
RK3288_A
U1I
MCU_RK3288
I2S_SCLK/GPIO6_A0_d
I2S_LRCK_RX/GPIO6_A1_d
I2S_LRCK_TX/GPIO6_A2_d
I2S_SDI/GPIO6_A3_d
I2S_SDO0/GPIO6_A4_d
I2S_SDO1/GPIO6_A5_d
I2S_SDO2/GPIO6_A6_d
I2S_SDO3/GPIO6_A7_d
I2S_CLK/GPIO6_B0_d
I2C2_SDA/GPIO6_B1_u
I2C2_SCL/GPIO6_B2_u
SPDIF_TX/GPIO6_B3_d
APIO4_VDD
AD11
AG11
AF11
AE11
AG12
AH13
AG13
AH12
AC12
AF12
AD12
AE12
Y12
I2S0_SCLK
I2S0_LRCK_RX
I2S0_LRCK_TX
I2S0_SDI
I2S0_SDO0
I2S0_CLK
I2C2_SDA_AUDIO
I2C2_SCL_AUDIO
VCCA_33
C239
0.1uF
C0402
RK3288_I
Rockchip 瑞芯微电子
福州瑞芯微电子有限公司
Title: RK3288 LCDC/I2S Controler
File: RK3288_BOX_Ref
REV:3.0
Create Date: Monday, February 17, 2014
Page Num: 13
Modify Date: Monday, July 03, 2017
Page Total: 24

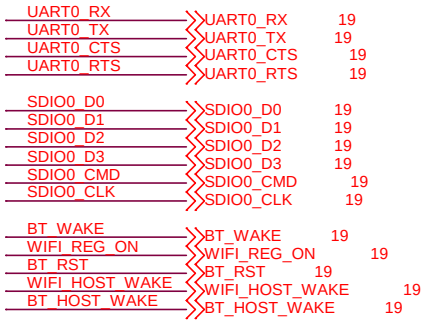


RK3288_Q

Rockchip 瑞芯微电子	福州瑞芯微电子有限公司		
Title: RK3288 EthernetMAC Controler			
File: RK3288_BOX_Ref		REV:3.0	
Create Date: Monday, February 17, 2014		Page Num: 16	
Modify Date: Friday, August 04, 2017		Page Total: 24	

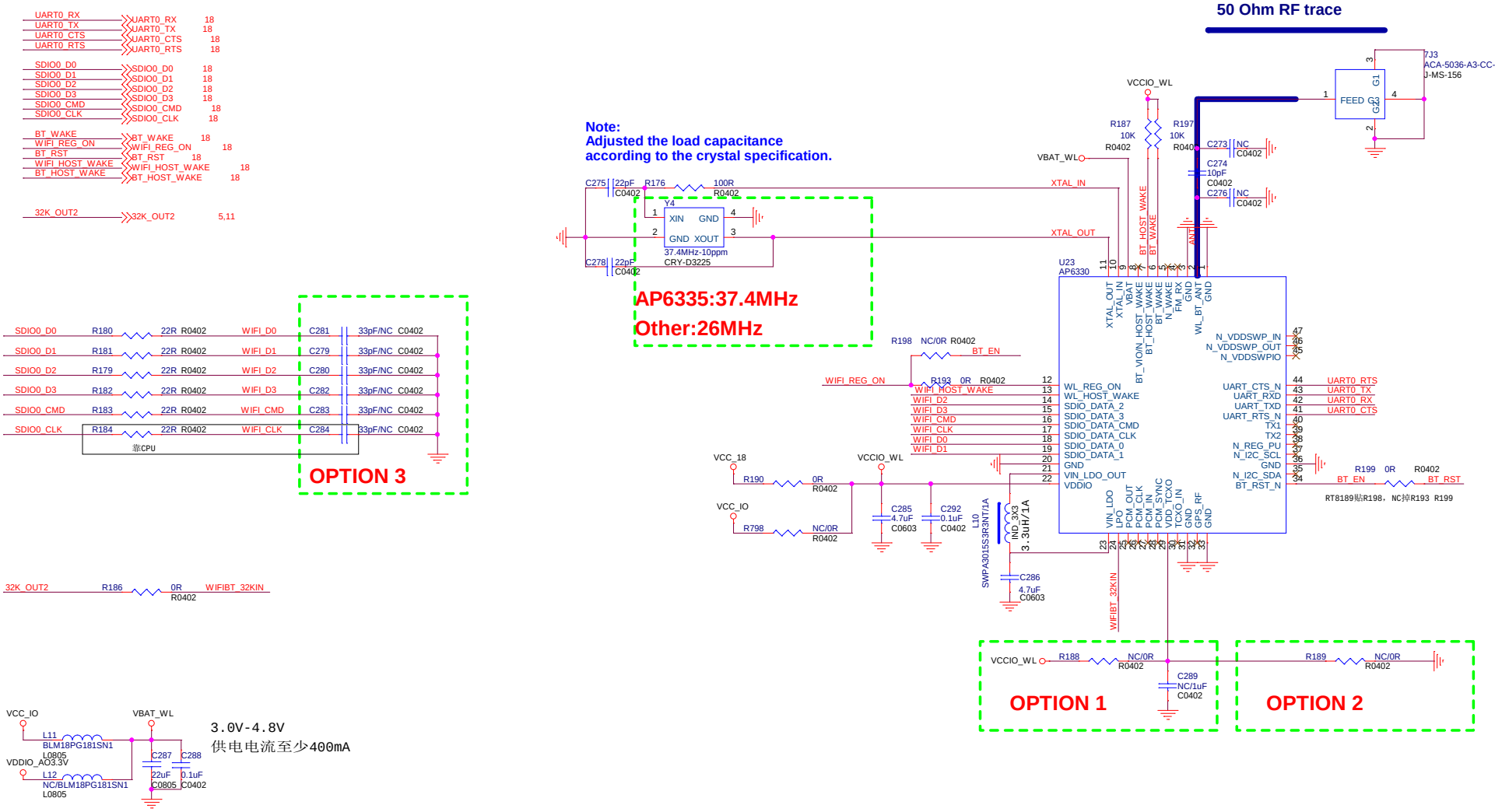


RK3288_H



Rockchip 瑞芯微电子 福州瑞芯微电子有限公司

Title: RK3288 SDIO0 Controler	
File: RK3288_BOX_Ref	REV:3.0
Create Date: Monday, February 17, 2014	Page Num: 18
Modify Date: Monday, July 03, 2017	Page Total: 24

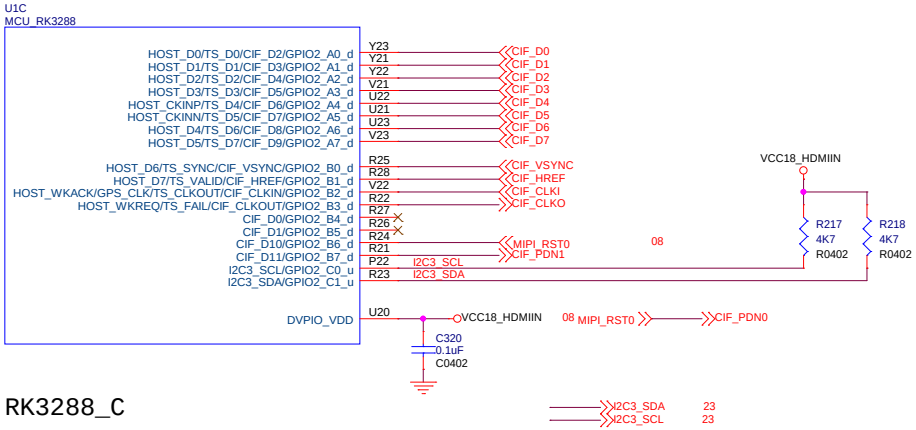


OPTION	WIFI				BT4.0	Crystals	VDDIO
	a	b/g/n	ac	5GHz			
AP6181		Yes				26MHz	1.71-3.6V
AP6212		Yes			Yes	26MHz	1.71-3.6V
XZ3538		Yes			Yes	26MHz	1.71-3.6V
XZ3660	Yes	Yes		Yes	Yes	26MHz	1.2-2.9V
AP6330	Yes	Yes		Yes	Yes	26MHz	1.2-2.9V
AP6335 (Default)	Yes	Yes	Yes	Yes	Yes	37.4MHz	1.71-3.63V

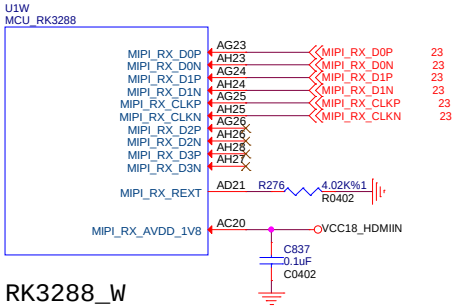
OPTION	1	2	3
AP6181	No	No	No
AP6212	No	No	No
XZ3538	No	No	No
XZ3660	No	No	No
AP6330	No	No	No
AP6335 (Default)	No	Yes	Yes

Note:
Yes:框内要贴
No:框内不贴

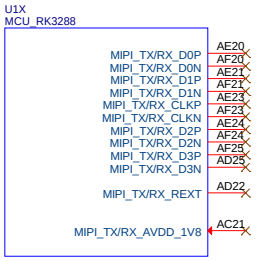
Rockchip 瑞芯微电子	福州瑞芯微电子有限公司
Title: AP6XXX-WIFI/BT	
File: RK3288_BOX_Ref	REV: 3.0
Create Date: Sunday, January 26, 2014	Page Num: 19
Modify Date: Monday, July 03, 2017	Page Total: 24



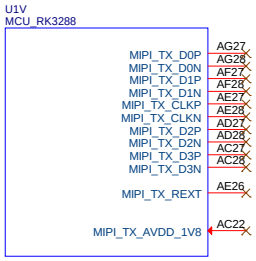
RK3288_C



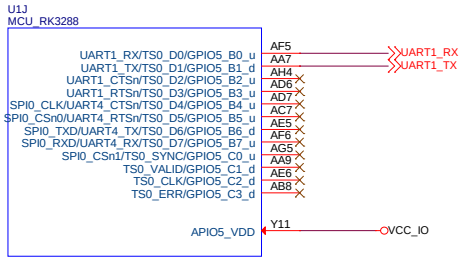
RK3288_W



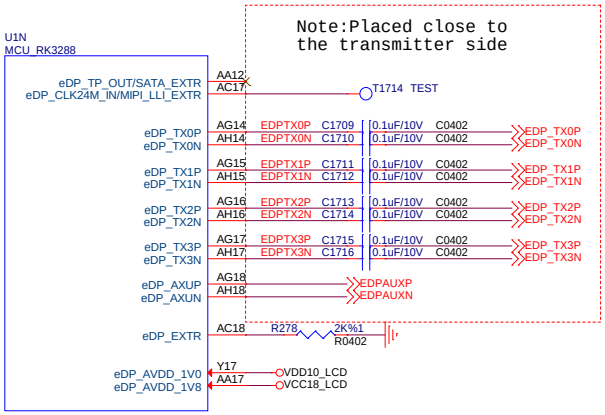
RK3288_X



RK3288_V

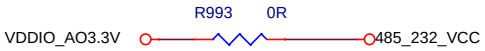


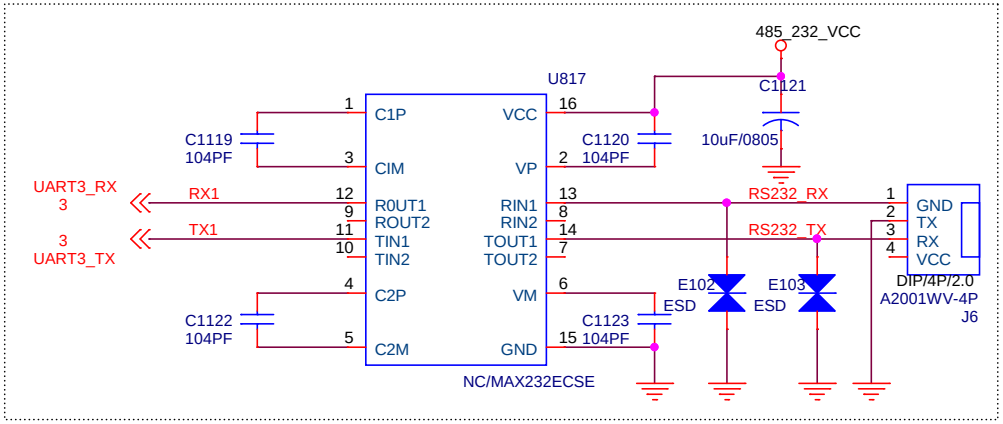
RK3288_J



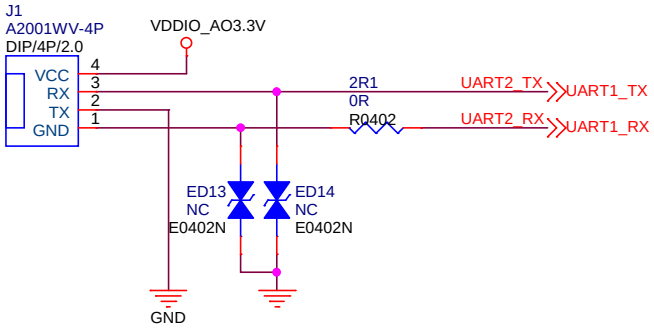
RK3288_N

Rockchip 瑞芯微电子	福州瑞芯微电子有限公司	
Title: MIPI Interface		
File: RK3288_BOX_Ref		REV: 3.0
Create Date: Sunday, January 26, 2014		Page Num: 21
Modify Date: Wednesday, July 26, 2017		Page Total: 24





For Linux Debug

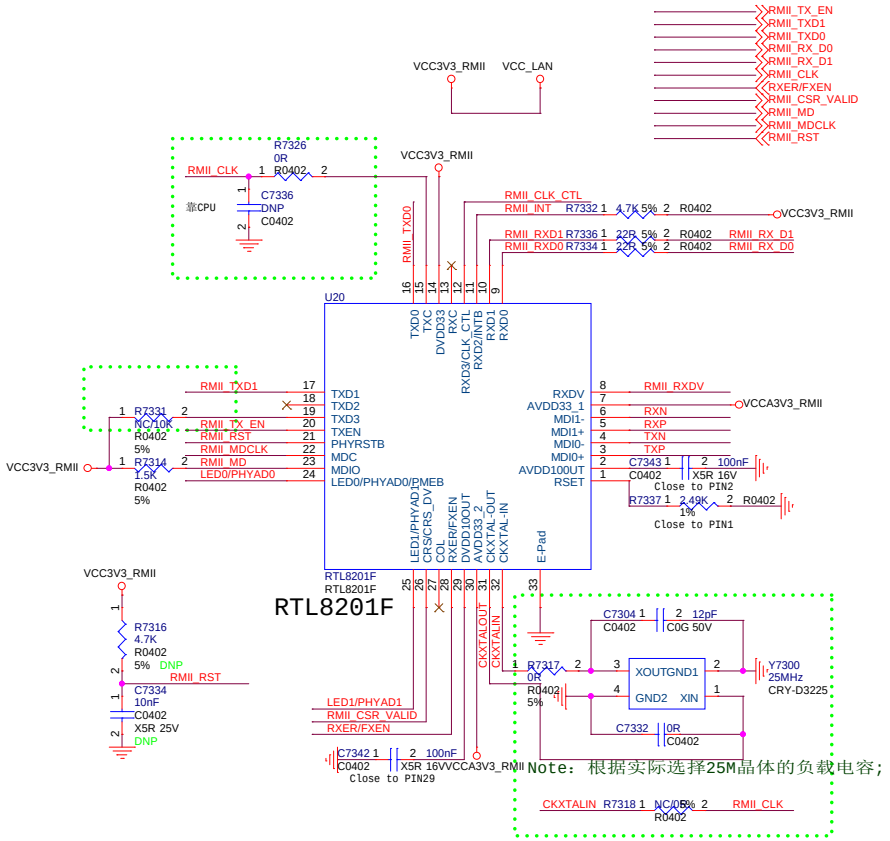


mark signal name on PCB

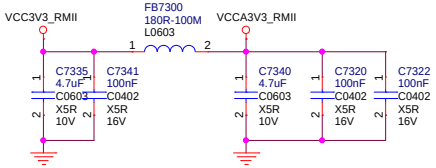
ARC JTAG Debug

Rockchip 瑞芯微电子 福州瑞芯微电子有限公司		
Title: UART Debug		
File: RK3288_BOX_Ref		REV:3.0
Create Date: Monday, February 17, 2014	Page Num: 22	
Modify Date: Friday, August 04, 2017	Page Total: 24	

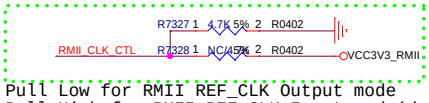
Ethernet RTL8201F



RTL8201F POWER



RMII REF_CLK direction



Pull Low for RMII REF_CLK Output mode
Pull High for RMII REF_CLK Input mode(default)

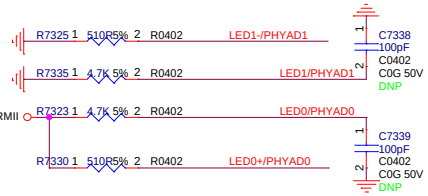
MII/RMII Selection

Pull High for RMII mode(default)

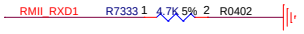
UTP / Fiber Selection

Pull Low for UTP Mode(default)
Pull High for Fiber Mode

PHY Address/LED

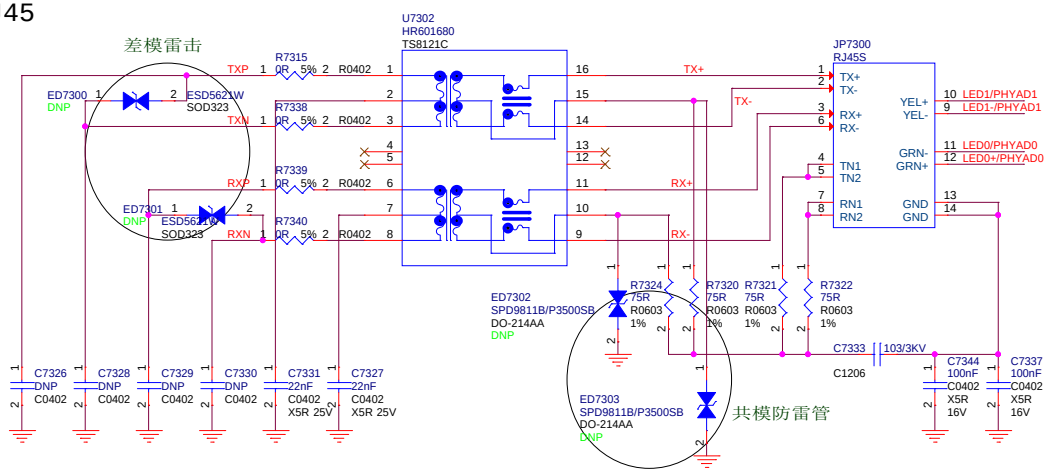


WOL/LED0 Selection



Pull Low for LED0 Mode(default)
Pull High for WOL Mode
WOL:Wake-on-LAN

RJ45



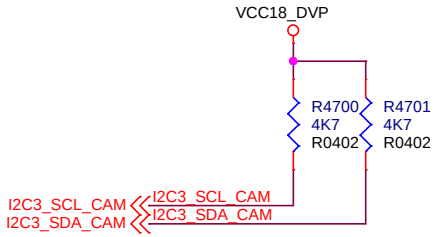
RK3188+ RTL8201F 不带晶体	R7305不贴NC R7318和C7306贴0R，R7317/C7304以及Y7300不贴 R7301贴4.7K，R7300不贴。 R7312贴10K
RK3188+ RTL8201F 带晶体	R7305贴0R R7318不贴NC，R7317贴0R，Y7300贴25M晶体， C7306和C7304贴12pF R7301贴4.7K，R7300不贴。 R7312不贴
RK3188T+ RTL8201F 必须带晶体	R7305贴0R R7318不贴NC，R7317贴0R，Y7300贴25M晶体， C7306和C7304贴12pF R7301不贴，R7300贴4.7K。 R7312不贴

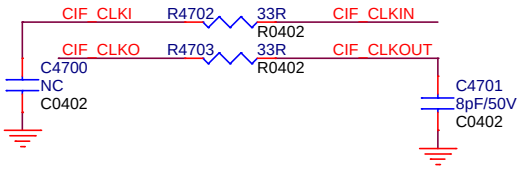
Note:
对防雷要求比较高的话，
请贴上差模以及共模防雷管;

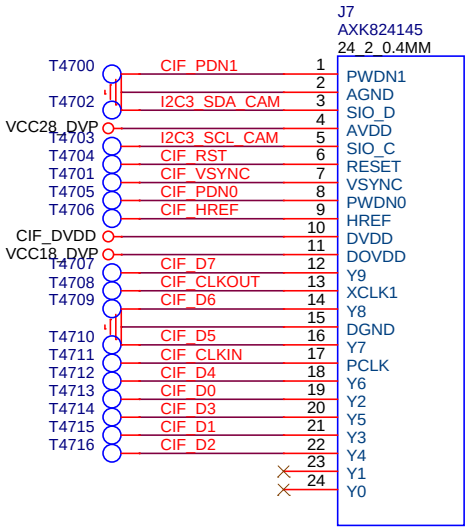
注:
默认配置RK3188
使用RK3188T需修改配置。

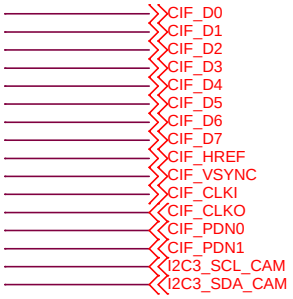
Rockchip 瑞芯微电子	Fuzhou Rockchip Electronics		
Project:	RK3288_BOX_Ref		
File:	<Page name>		
Date:	Friday, August 04, 2017	Rev:	V2.0
Designed by:	Linus	Sheet:	31 of 35

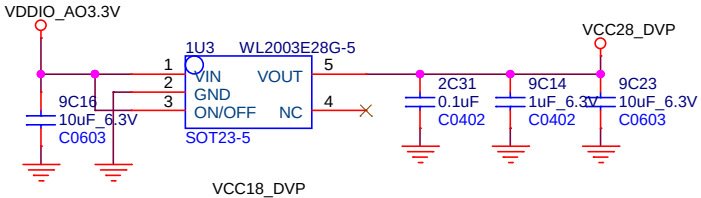
CIF Camera

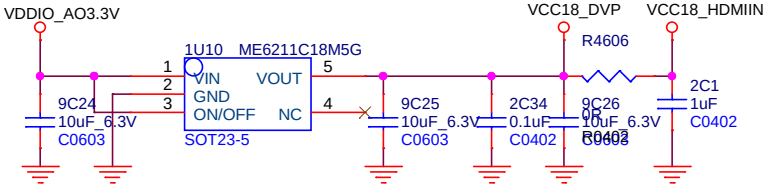


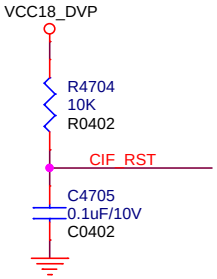


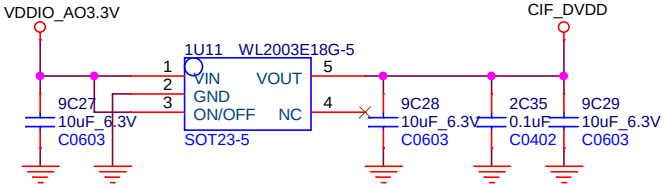






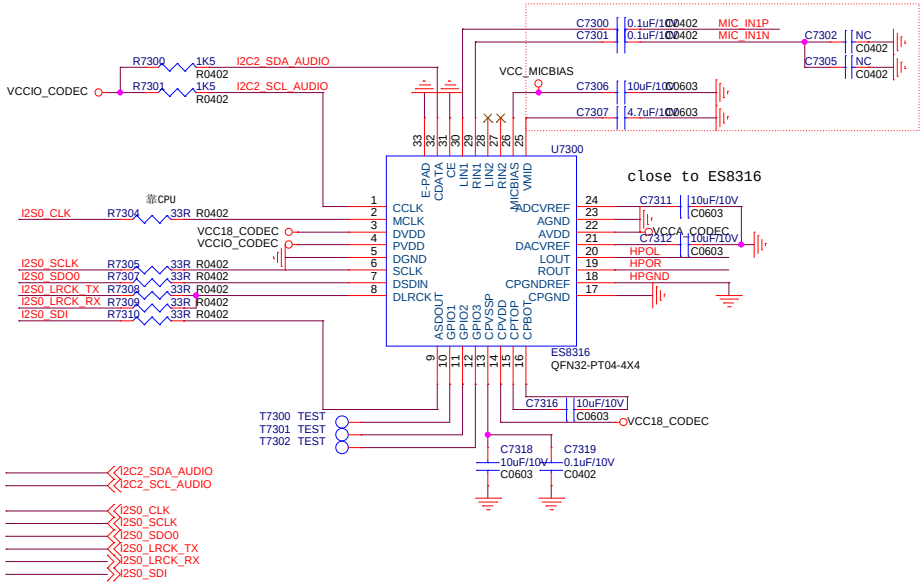


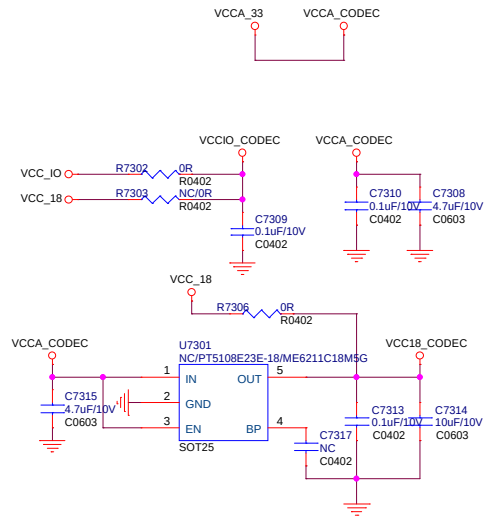




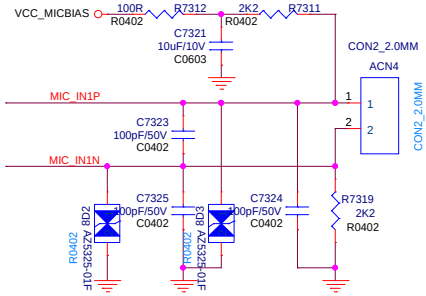
Rockchip 瑞芯微电子	福州瑞芯微电子有限公司	
Title: Camera-CIF (option)		
File: RK3288_BOX_Ref		REV:V1.5
Create Date: Wednesday, July 26, 2017		Page Num:32
Modify Date: Wednesday, August 02, 2017		Page Total:53

CODEC

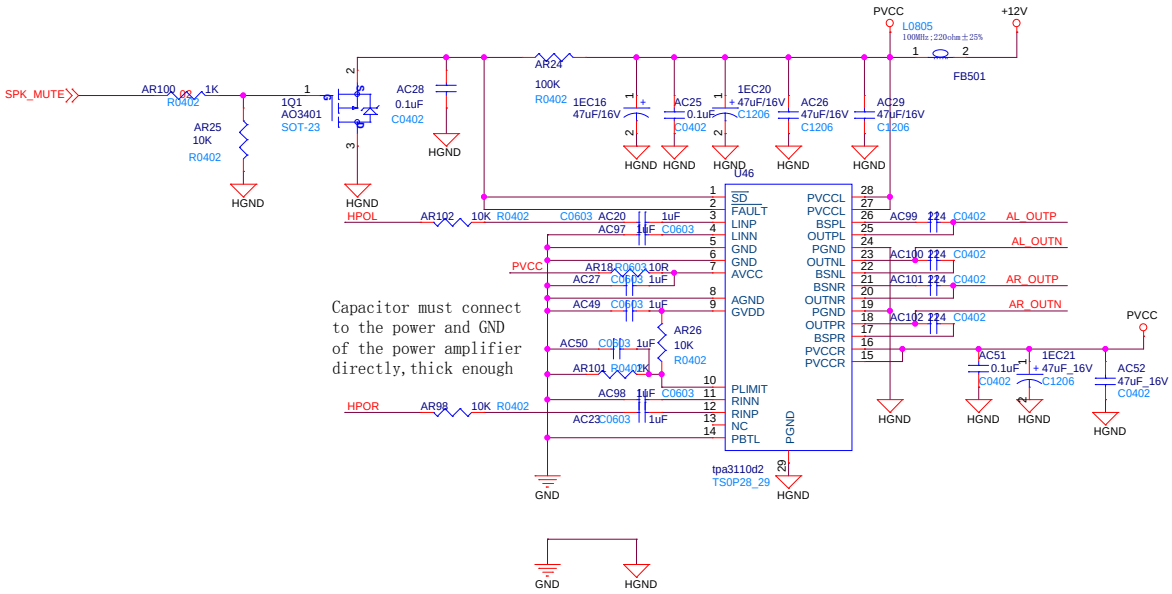


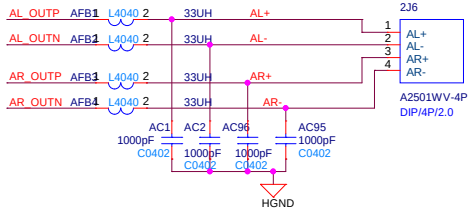


MIC



SPEAKER





Rockchip 瑞芯微电子	福州瑞芯微电子有限公司		
Title: Audio Codec-ALC5631 (option)			
File: RK3288_BOX_Ref		REV: V1.5	
Create Date: Thursday, April 06, 2017		Page Num: 43	
Modify Date: Thursday, August 24, 2017		Page Total: 53	