

RK3288软硬件开发设计，请联系QQ7643066

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I2C address(7bit):

1.I2C0 POWER:

ACT8846 0x5a
CW2013 0x62
HYM8563 0x51
RT5C619 0x32
SYR827 0x40
SYR828 0x41

2.I2C1 Sensor:

CM3218 0x10,0x0c
LSM330TR G:0x6a A:0x1e
MMA8452Q 0X1d
MPU6050C 0x68
LIS3DH 0X19
LSM303D 0X1d

3.I2C2 Audio Codec:


ALC3224 0x19
ALC5623 0x1a
ALC5631 0x1a
ES8323 0x10

4.I2C3 Camera:

OV2659 0x30
OV8825 0x36

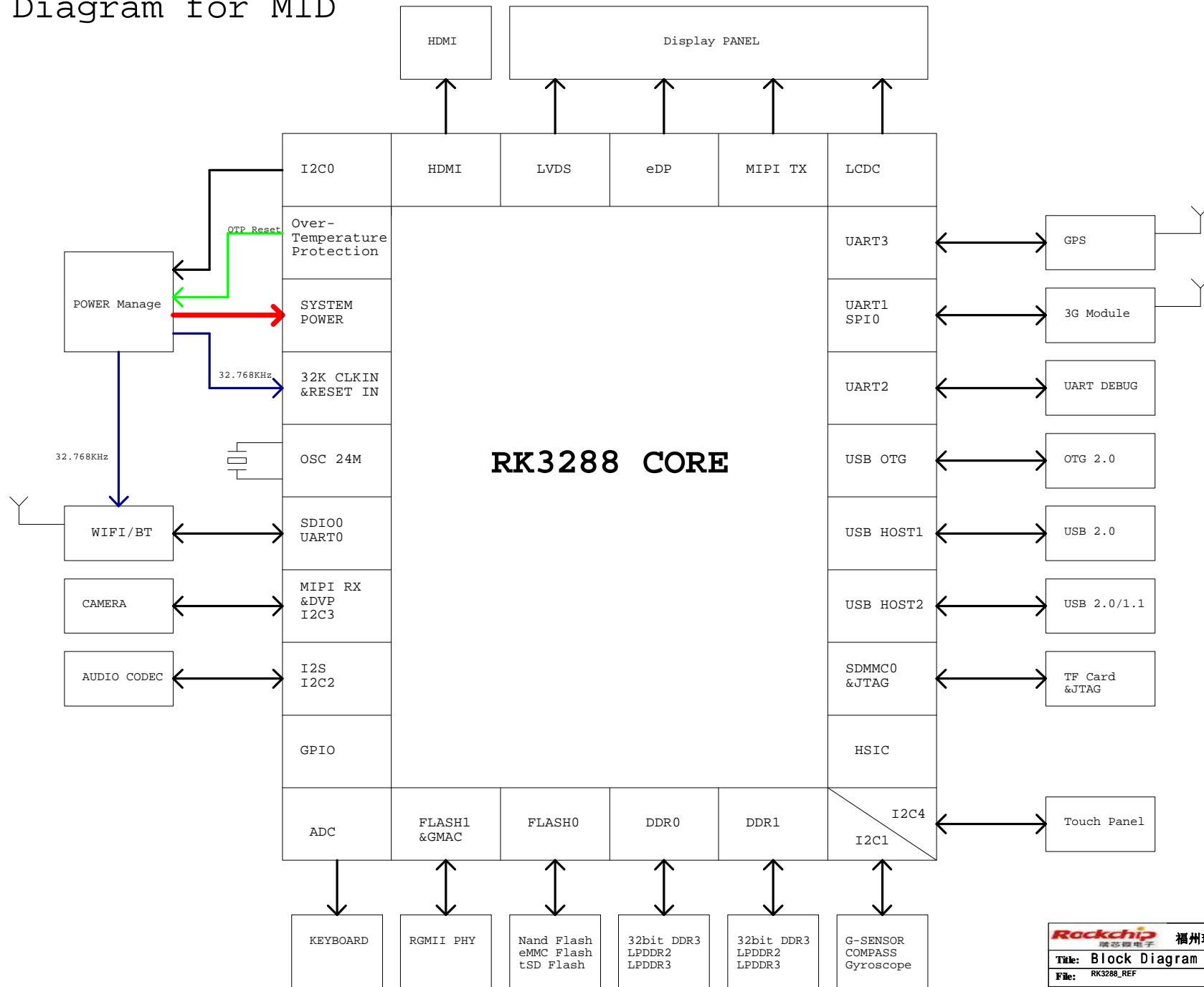
5.I2C4 Touch:

CT363 0x1b
FT5506
GSL3680 0x40

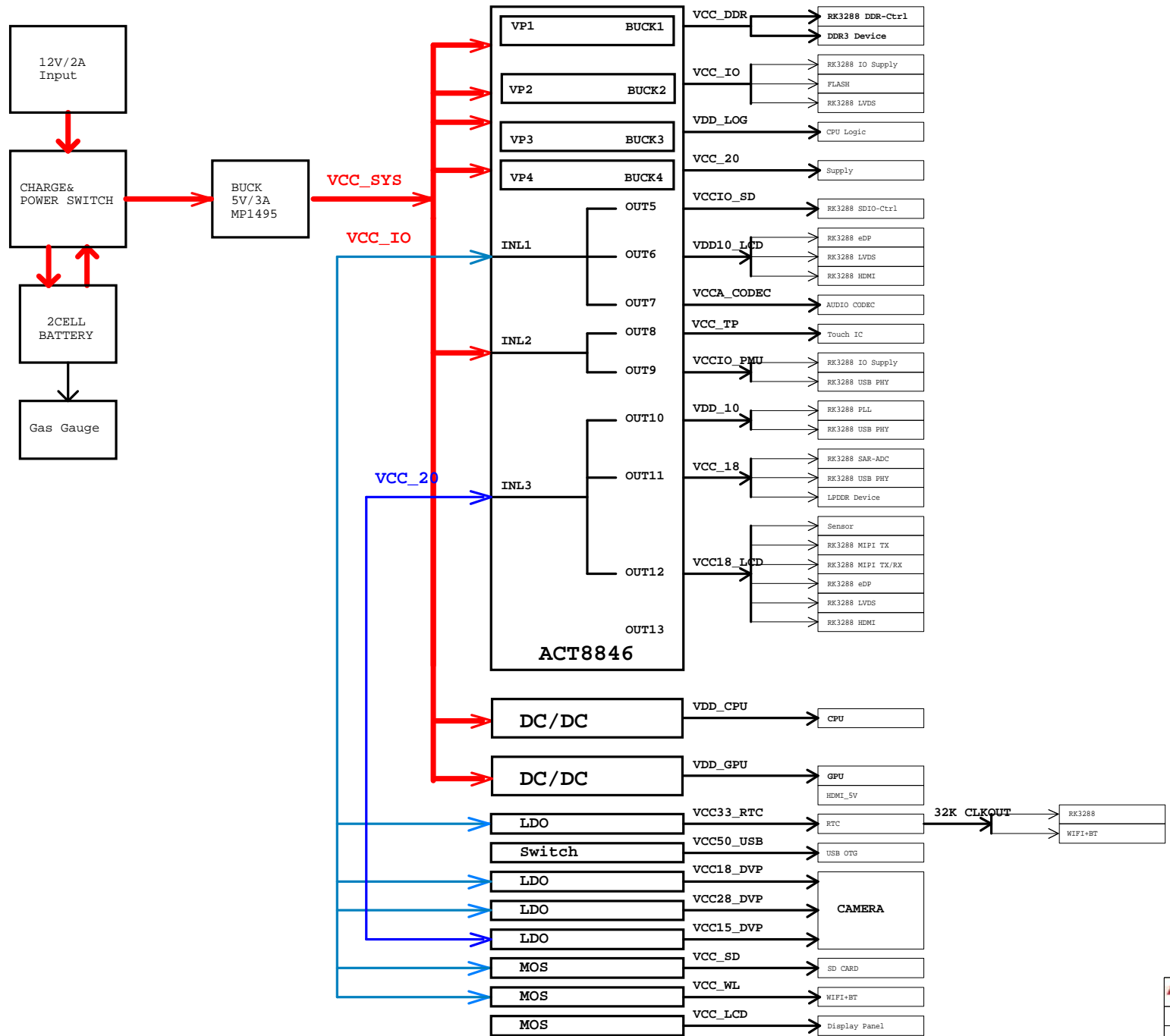
 福州瑞芯微电子有限公司

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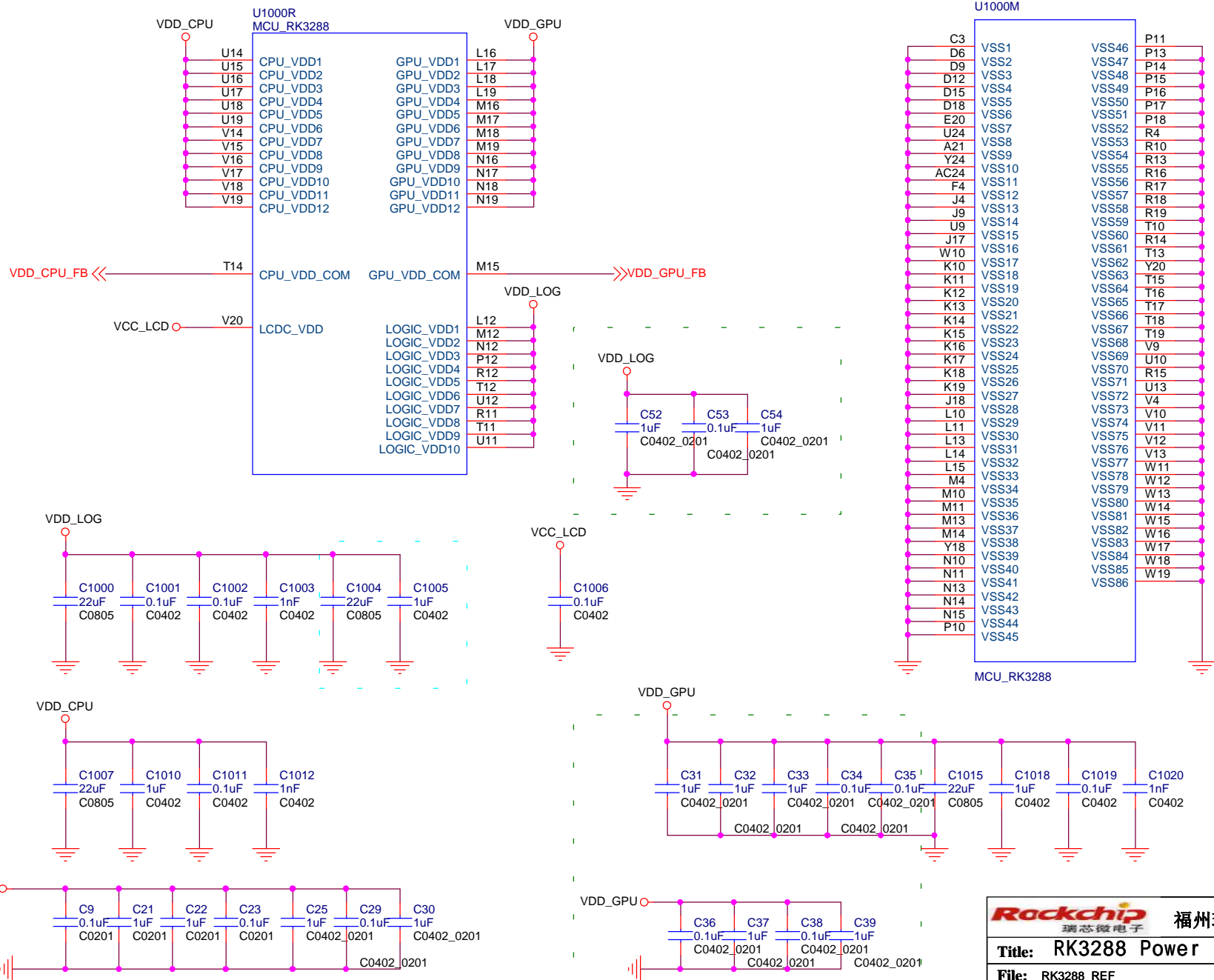
Block Diagram for MID



Rackchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: Block Diagram			
File: RK3288_REF		REV: V1.0	
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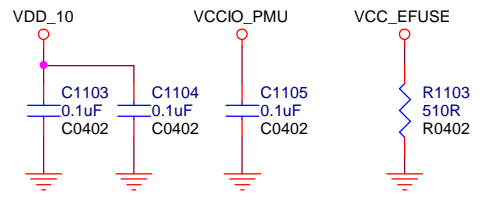
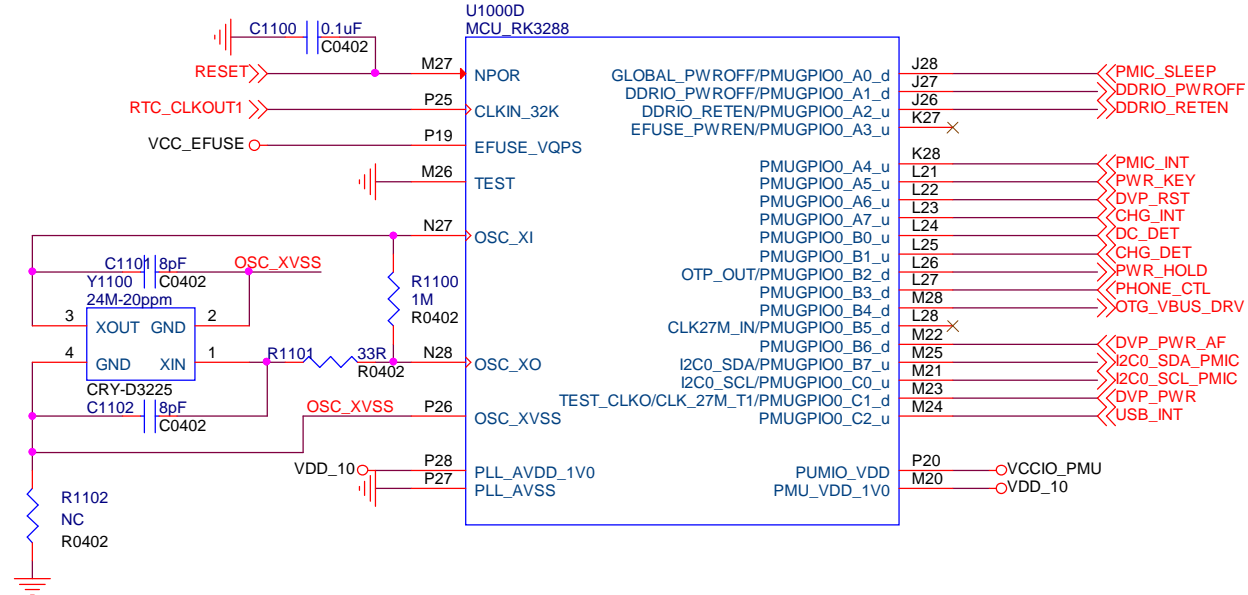


Rockchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: Power Tree			
File: RK3288_REF		REV: V1.0	
Create Date: Monday, February 10, 2014	Page Num: 5		
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RK3288 FILTER

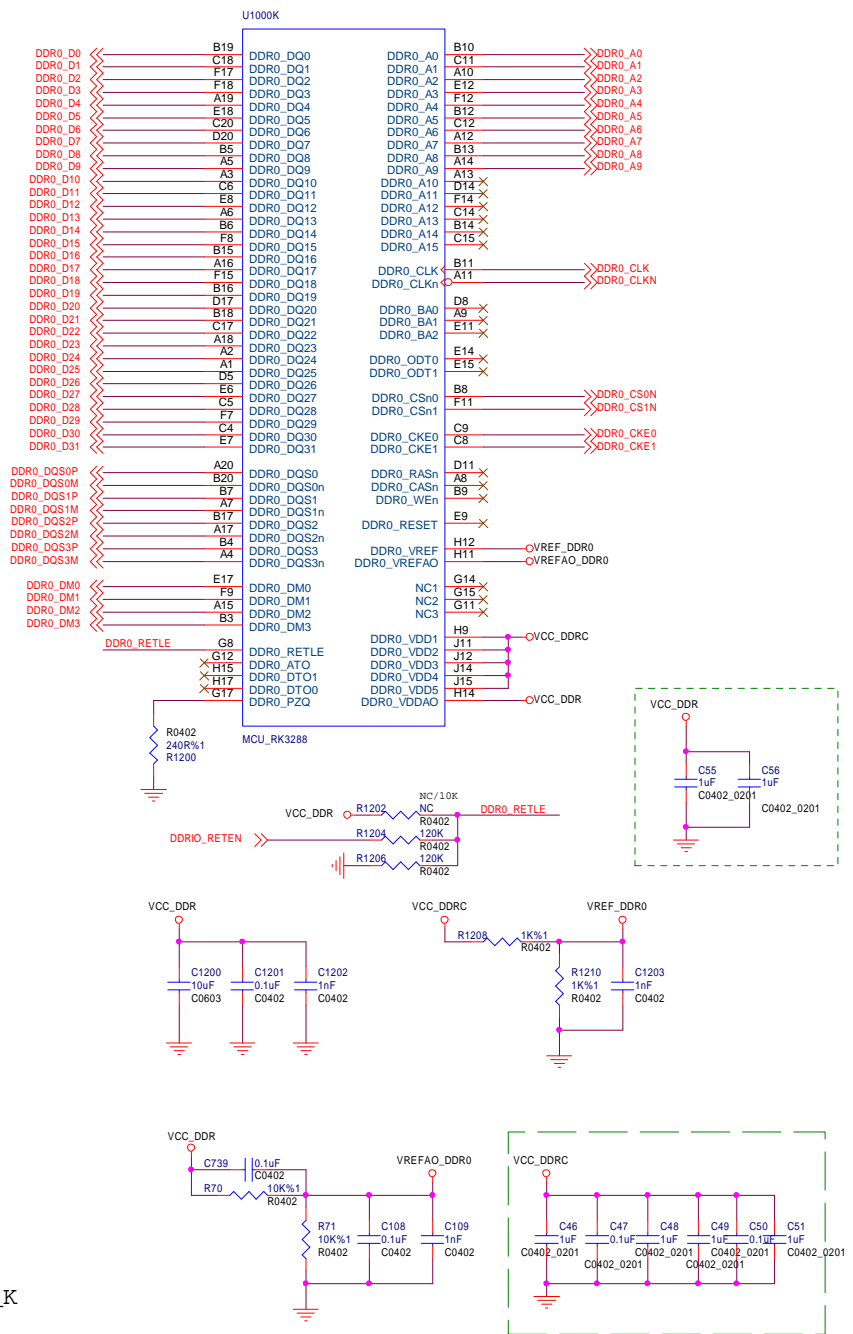
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Title: RK3288 Power	
File: RK3288_REF	REV:V1.0
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Rockchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: RK3288 PMU Controller			
File: RK3288_REF			REV: V1.0
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RK3288 DDR Channel-0

RK3288 DDR Channel-1



RK3288_K

RK3288_L

Rackchip 福州瑞芯微电子有限公司

Title: RK3288 DDR Controller

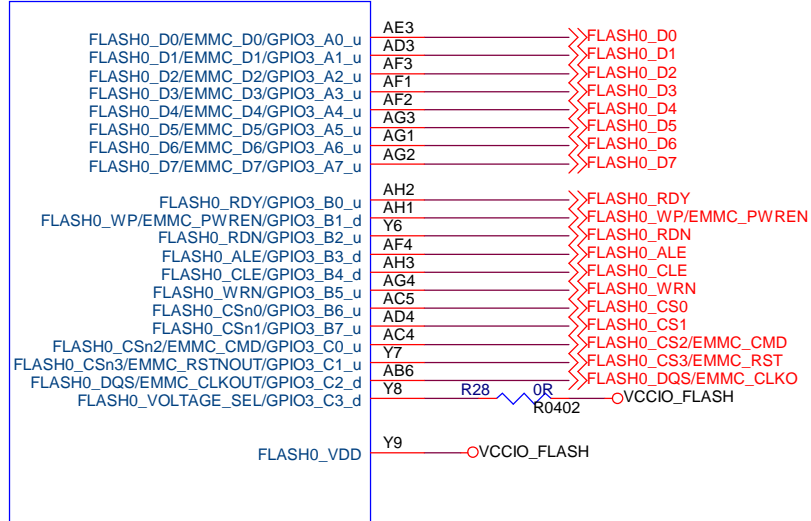
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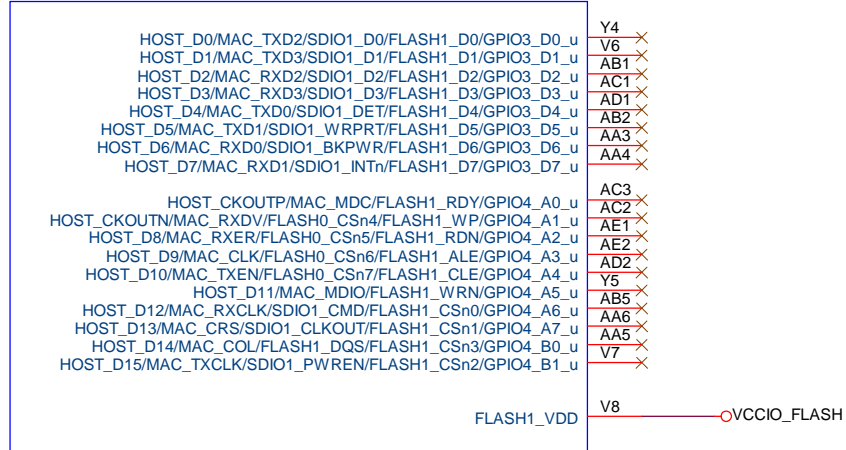
Modify Date: Friday, January 23, 2015 Page Total: 49

Note:VCC_FLASH (The supply may be 1.8V or3.0V,
and must be connected to RK3288 FLASH_VDD).

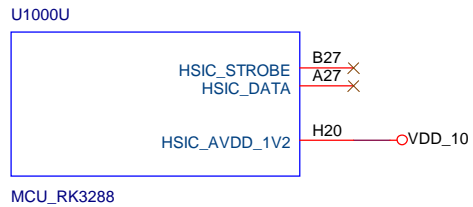
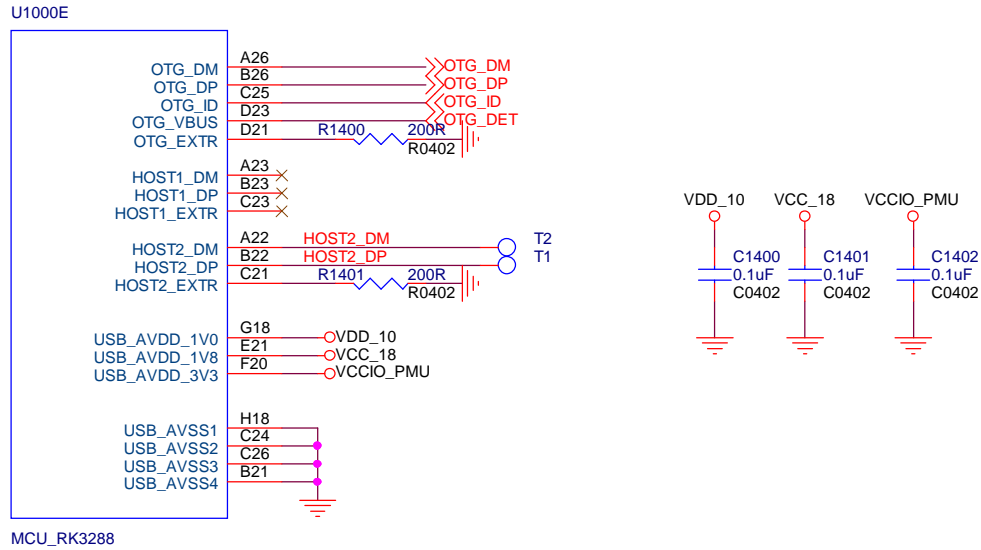
U1000P
MCU_RK3288



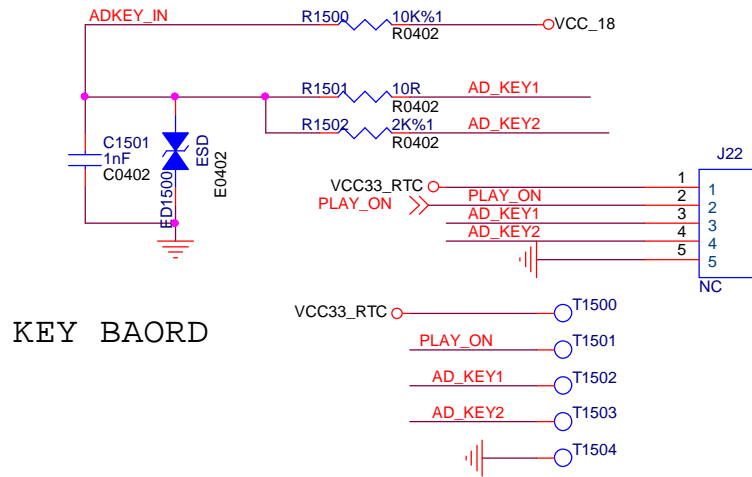
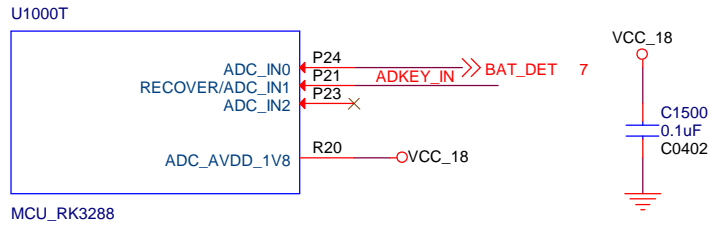
U1000Q
MCU_RK3288




 福州瑞芯微电子有限公司 瑞芯微电子	
Title: RK3288 Flash Control	
File: RK3288_REF	REV:V1.0
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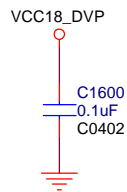
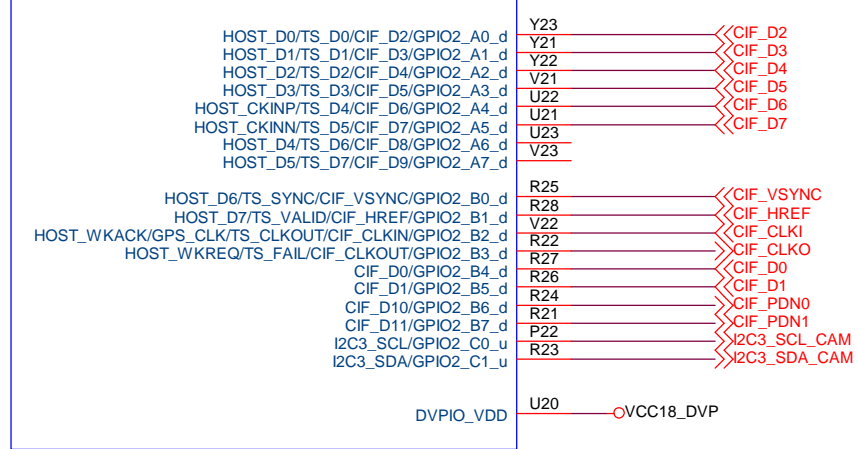
Rockchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: RK3288 USB/HSIC Controller			
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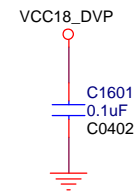
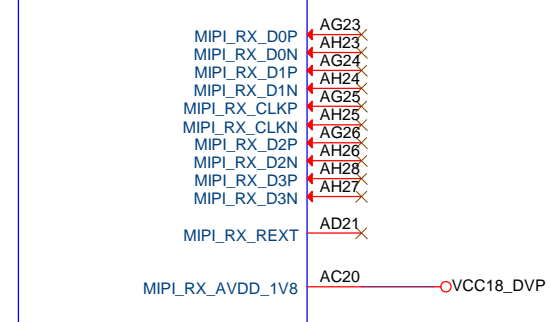
KEY BAORD


 福州瑞芯微电子有限公司 瑞芯微电子	
Title: RK3288 SARADC/Key Board	
File: RK3288_REF	REV:V1.0
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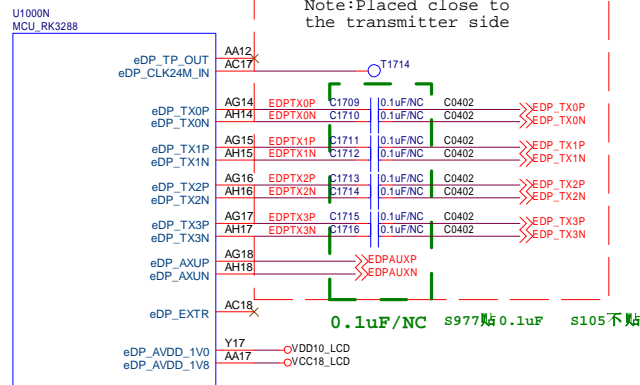
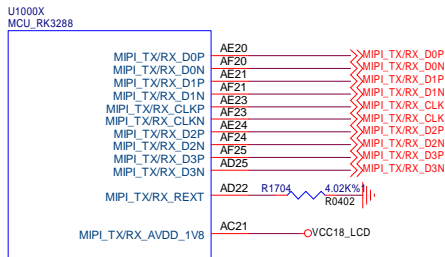
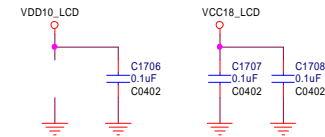
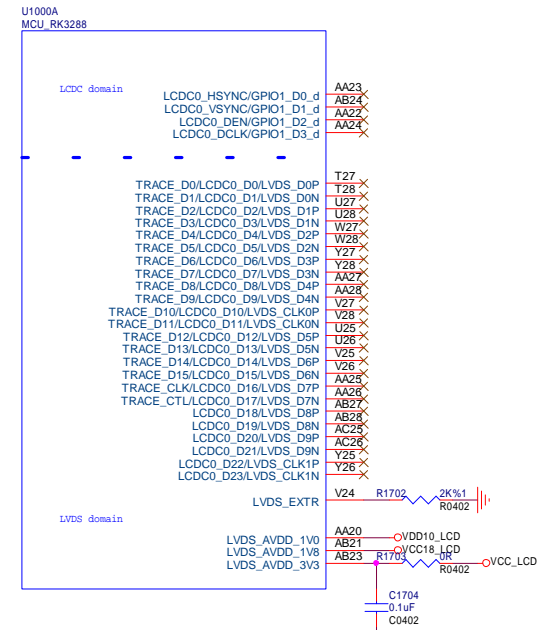
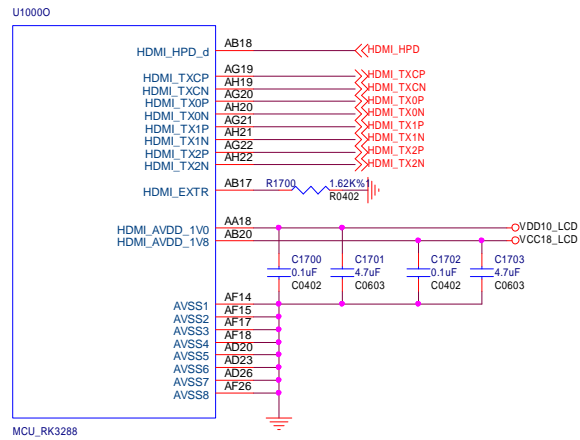
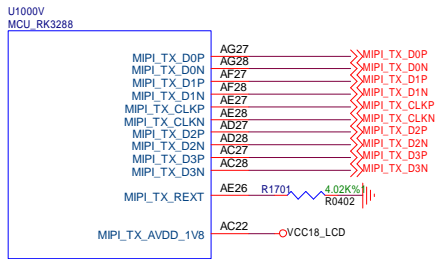
U1000C
MCU_RK3288



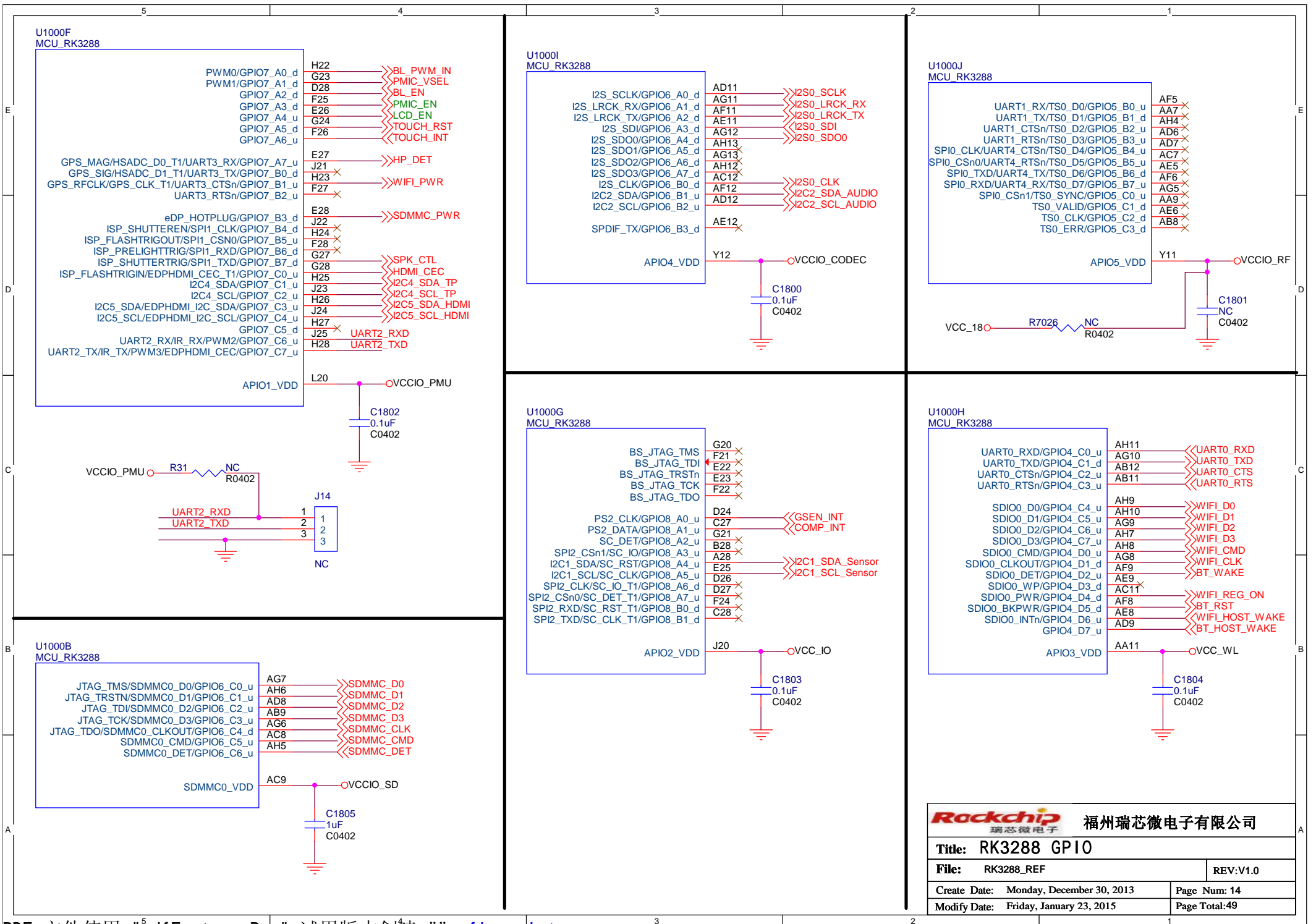
U1000W
MCU_RK3288



		福州瑞芯微电子有限公司 瑞芯微电子	
Title: RK3288 DVP Interface			
File: RK3288_REF			REV: V1.0
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Rackchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: RK3288 Display Interface			
File: RK3288_REF		REV: V1.0	
Create Date: Wednesday, February 12, 2014	Page Num: 13		
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Rockchip 瑞芯微电子 福州瑞芯微电子有限公司

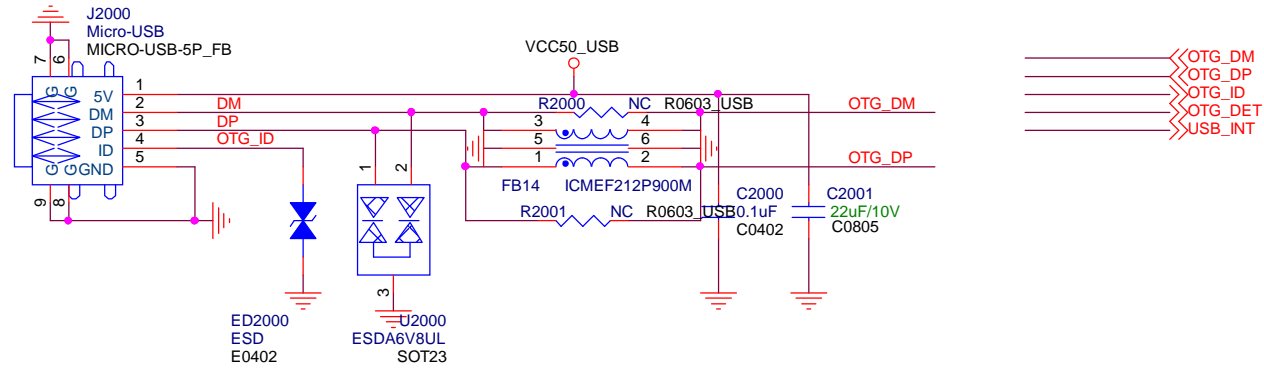
Title: RK3288 GPIO

File: RK3288_REF **REV:** V1.0

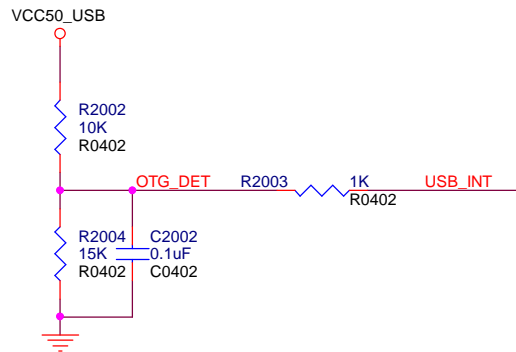
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USB OTG

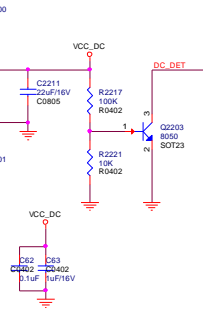


USB Detection

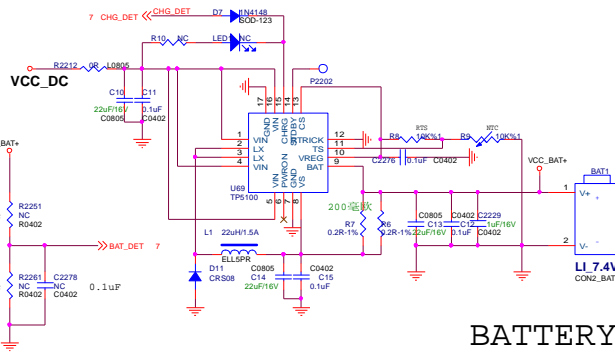


 福州瑞芯微电子有限公司 瑞芯微电子	
Title: USB Port	
File: RK3288_REF	REV: V1.0
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DC IN

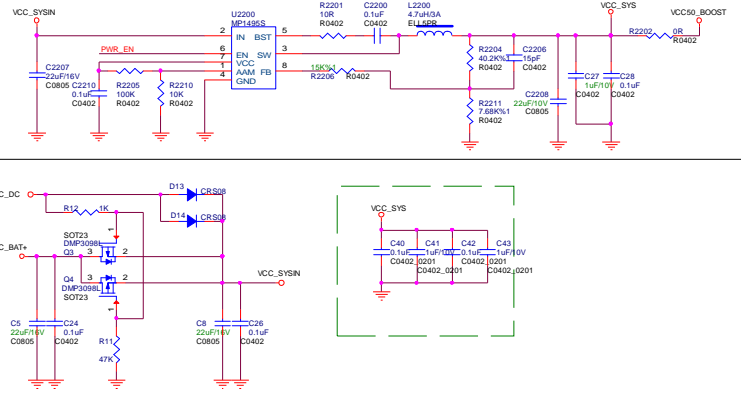


Notes:
Please use a 12V DC.



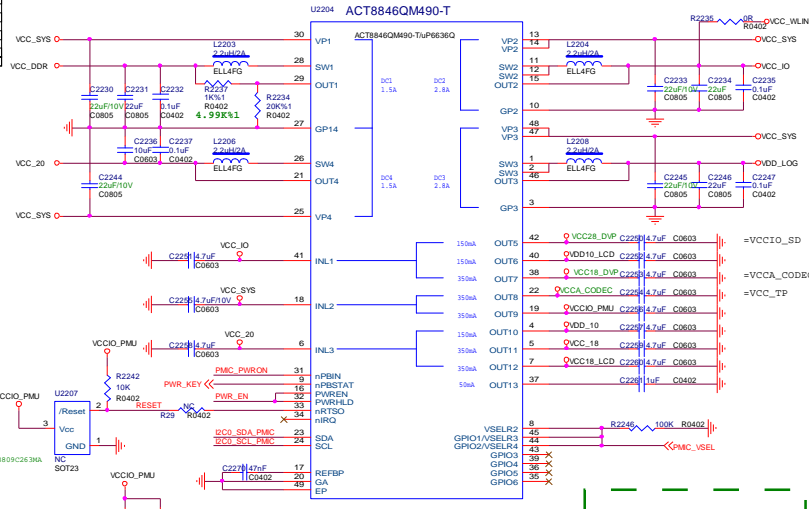
Note: TP5100用于8.4V充电时，其恒流检测电压Vens为100mv
即充电电流为I=Vens/Rsna=100mw/0.1R=1000mA

BATTERY



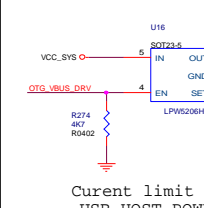
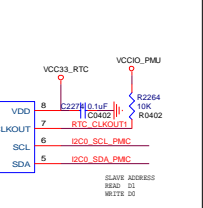
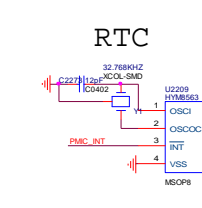
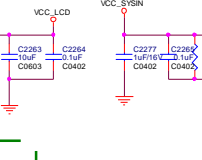
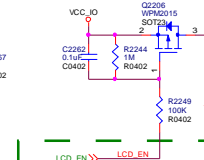
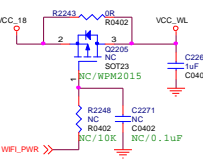
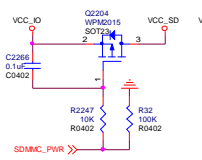
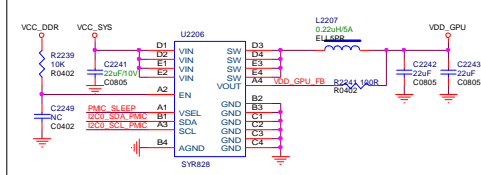
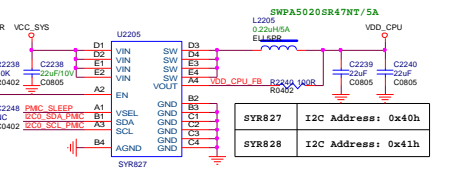
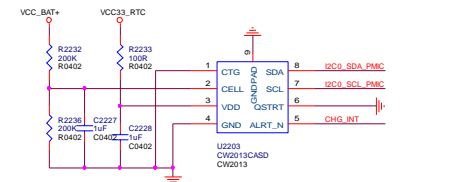
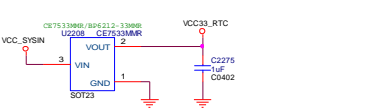
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VCC_10_2	0006	S0111	1.0V
VCC_10_3	0007	S0111	1.0V
VCC_10_4	0009	S0111	1.0V
VCC_10_5	0010	S0111	1.0V
VCC_10_6	0011	S0111	1.0V
VCC_10_7	0012	S0111	1.0V
VCC_10_8	0013	S0111	1.0V
VCC_10_9	0014	S0111	1.0V
VCC_10_10	0015	S0111	1.0V
VCC_10_11	0016	S0111	1.0V
VCC_10_12	0017	S0111	1.0V
VCC_10_13	0018	S0111	1.0V
VCC_10_14	0019	S0111	1.0V
VCC_10_15	0020	S0111	1.0V
VCC_10_16	0021	S0111	1.0V
VCC_10_17	0022	S0111	1.0V
VCC_10_18	0023	S0111	1.0V
VCC_10_19	0024	S0111	1.0V
VCC_10_20	0025	S0111	1.0V
VCC_10_21	0026	S0111	1.0V
VCC_10_22	0027	S0111	1.0V
VCC_10_23	0028	S0111	1.0V
VCC_10_24	0029	S0111	1.0V
VCC_10_25	0030	S0111	1.0V
VCC_10_26	0031	S0111	1.0V
VCC_10_27	0032	S0111	1.0V
VCC_10_28	0033	S0111	1.0V
VCC_10_29	0034	S0111	1.0V
VCC_10_30	0035	S0111	1.0V

Note: The ACT8846-2cell Solution only for 9.7" eDP Panel.



SYSTEM POWER

RTC POWER



Curent limit 640mA
USB HOST POWER

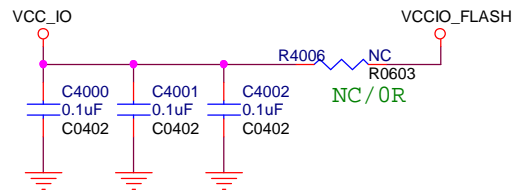
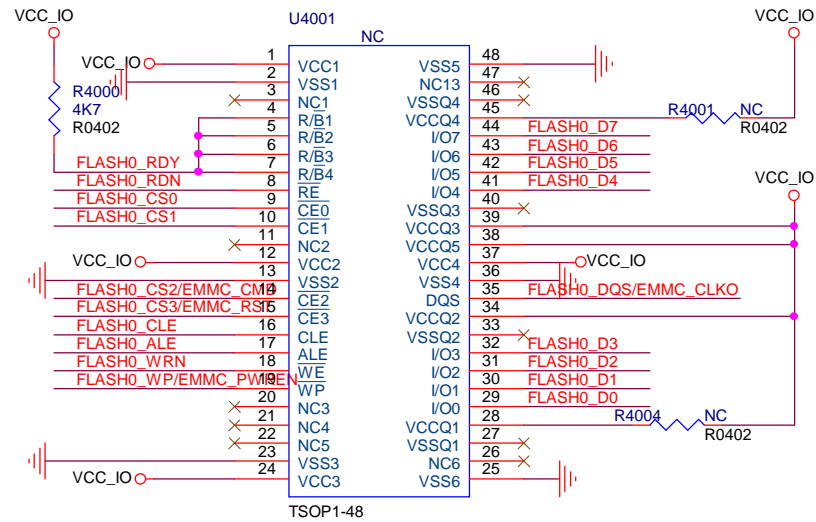
- ← VDD_GPU_FB
- ← VDD_CPU_FB
- ← VTC_CLKOUT1
- ← VTC_CLKOUT2
- ← RESET
- ← CHG_SLEEP
- ← CHG_DET
- ← CTG_WBUS_DRV
- ← NC_INT

Rockchip 福州瑞芯微电子股份有限公司
Title: Power-ACT8846_2CELL (option)
File: RK3288_REF
REV: V1.0
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NAND FLASH

note: if use toshiba and sandisk DDR mode,
VCCQ1 and VCCQ4 must be connected to VCC_IO.

- FLASH0_D0
- FLASH0_D1
- FLASH0_D2
- FLASH0_D3
- FLASH0_D4
- FLASH0_D5
- FLASH0_D6
- FLASH0_D7
- FLASH0_RDY
- FLASH0_WP/EMMC_PWREN
- FLASH0_RDN
- FLASH0_ALE
- FLASH0_CLE
- FLASH0_WRN
- FLASH0_CS0
- FLASH0_CS1
- FLASH0_CS2/EMMC_CMD
- FLASH0_CS3/EMMC_RST
- FLASH0_DQS/EMMC_CLKO

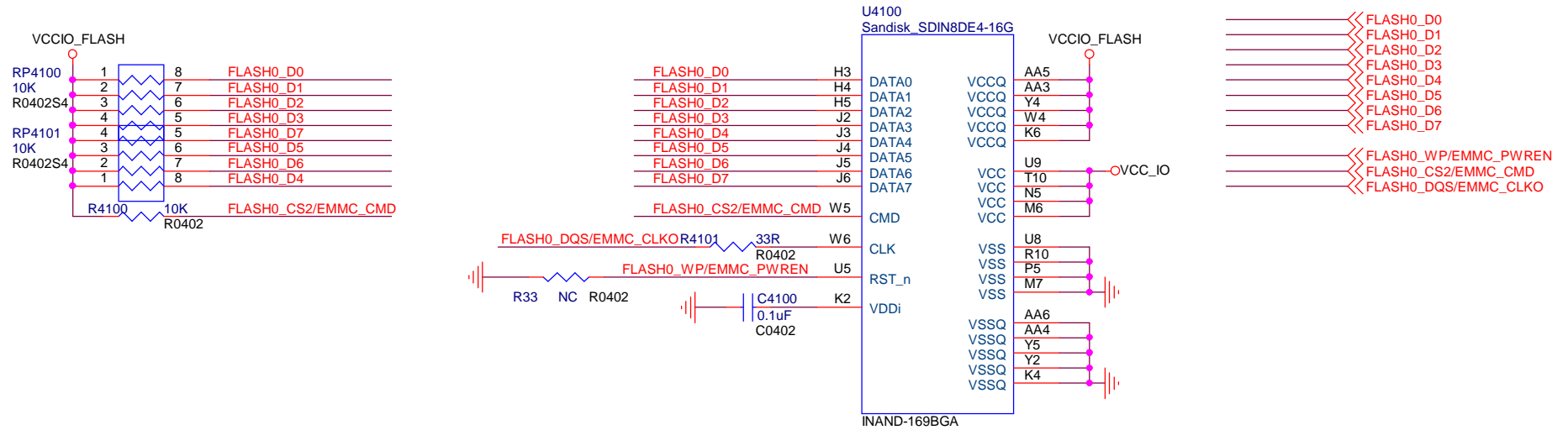


Note:
Reserve PAD for Update.

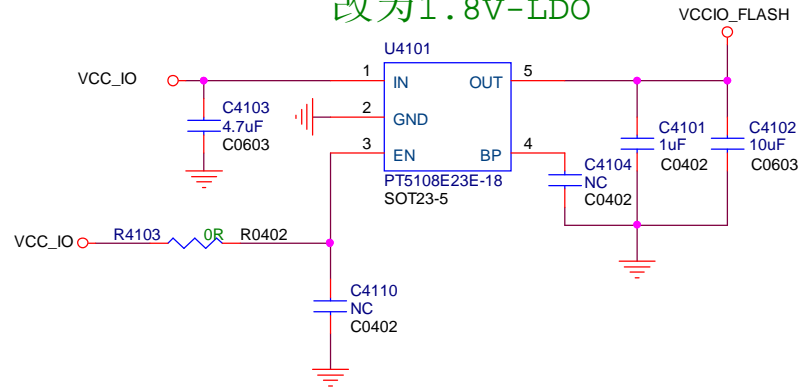


 福州瑞芯微电子有限公司 瑞芯微电子	
Title: Flash-Nand FLASH	
File: RK3288_REF	REV:V1.0
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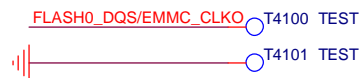
eMMC FLASH




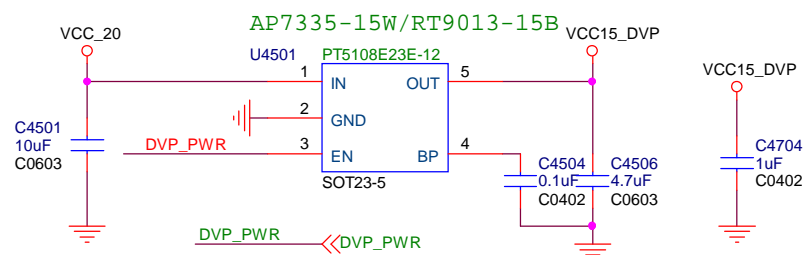
改为1.8V-LDO



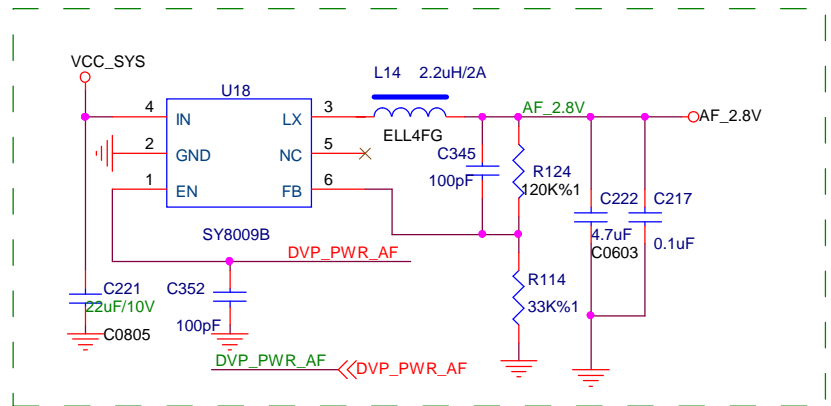
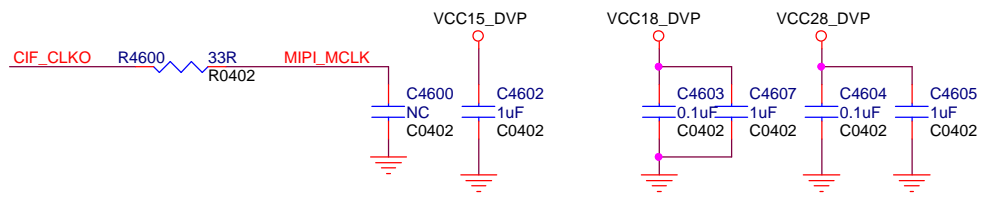
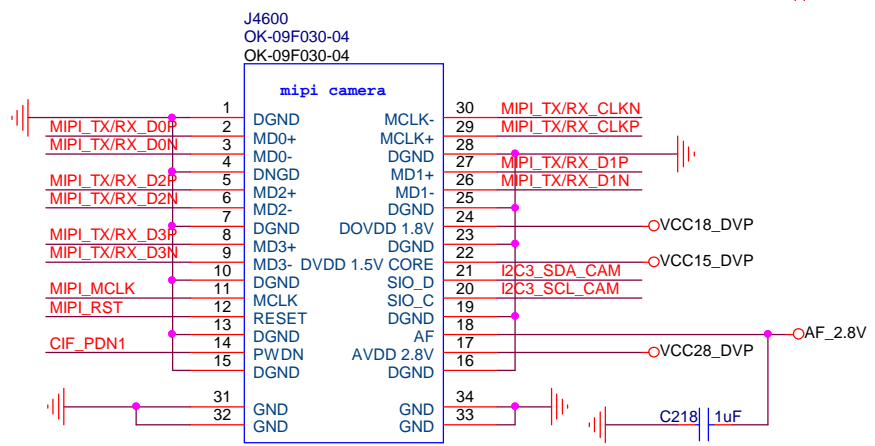
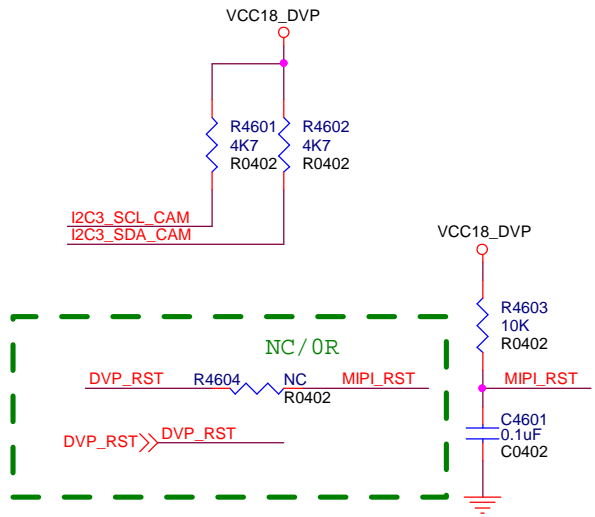
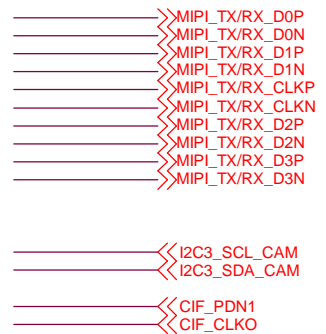
Note:
Reserve PAD for Update.



 福州瑞芯微电子有限公司 瑞芯微电子	
Title: Flash-eMMC (option)	
File: RK3288_REF	REV:V1.0
Create Date: Wednesday, February 12, 2014	Page Num: 25
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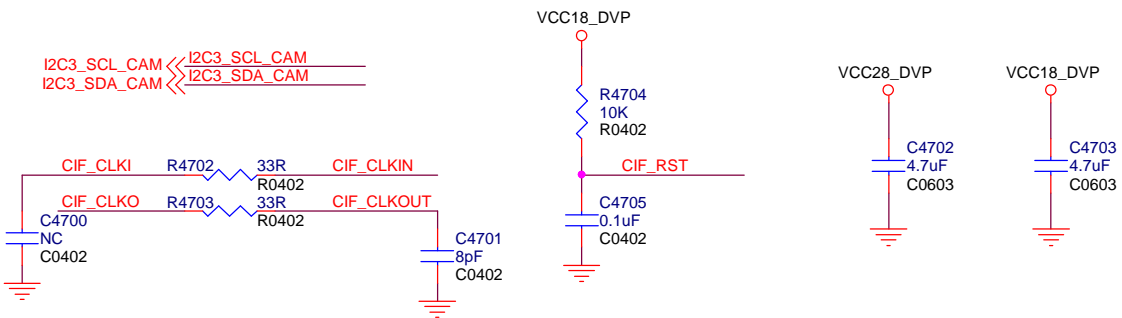
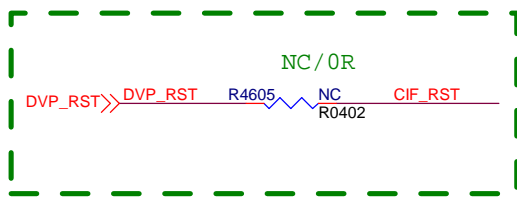
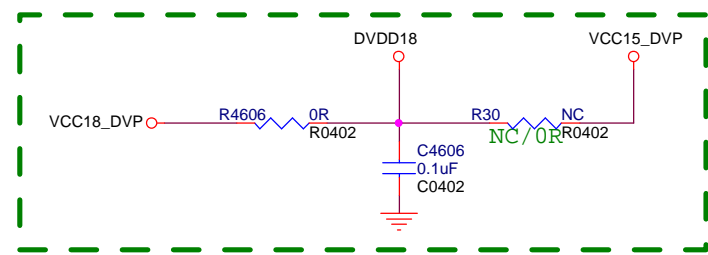
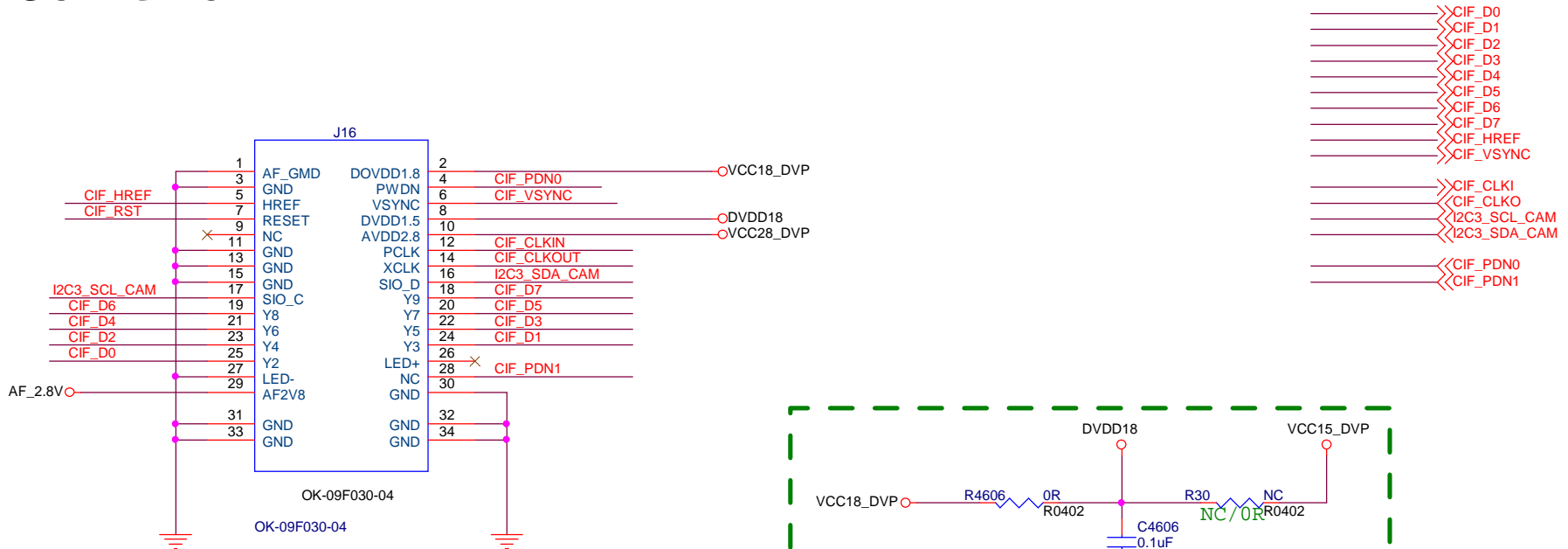
MIPI接口后摄像头 (OV8858) DVDD为1.2V, 此时前摄像头的DVDD改为NC (J16 第8 pin), 采用摄像头自供电方式



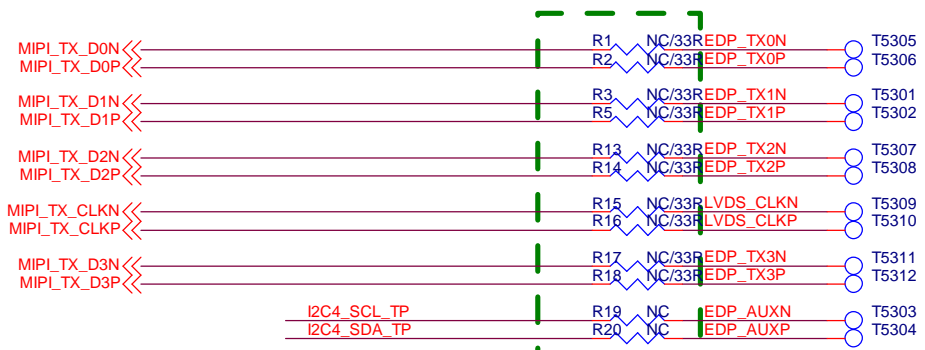
MIPI Camera

Rockchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: Camera-MIPI CSI			
File: RK3288_REF			REV:V1.0
Create Date: Monday, May 26, 2014		Page Num:28	
Modify Date: Friday, January 23, 2015		Page Total:49	

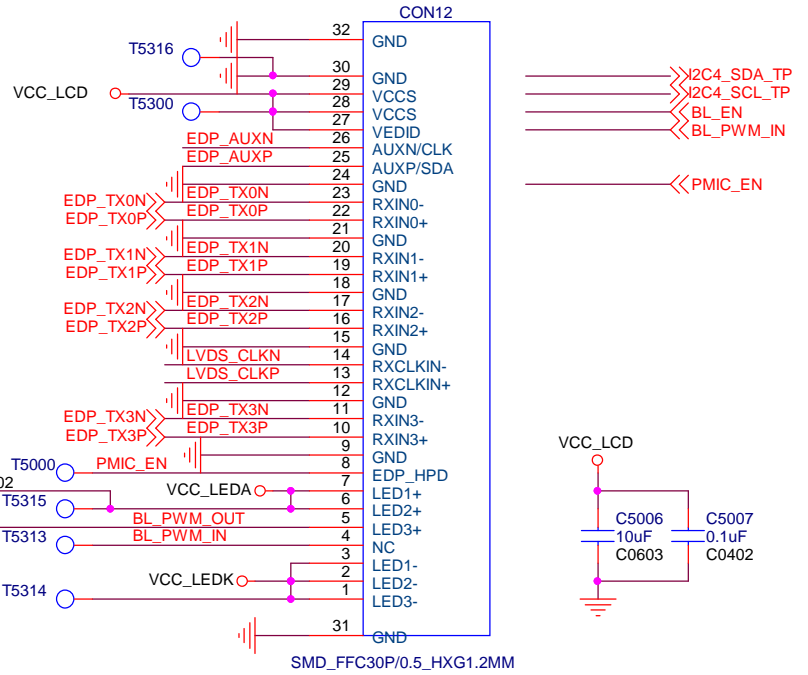
CIF Camera



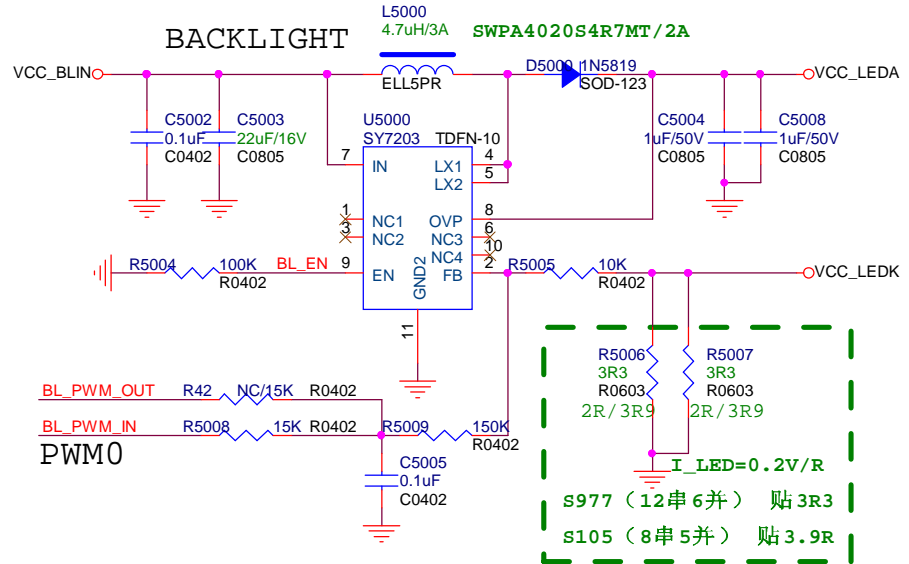
 福州瑞芯微电子有限公司 瑞芯微电子	
Title: Camera-CIF (option)	
File: RK3288_REF	REV:V1.0
Create Date: Friday, May 30, 2014	Page Num:29
Modify Date: Friday, January 23, 2015	Page Total:49



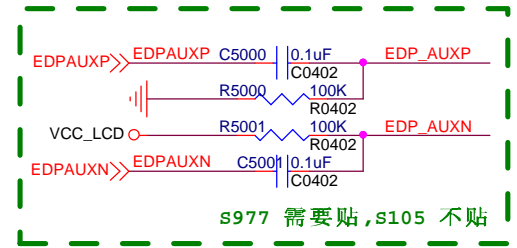
NC/33R
 S977 不贴, s105贴33R



I2C4_SCL_TP
 I2C4_SDA_TP
 BL_EN
 BL_PWM_IN
 PMIC_EN



I_LED=0.2V/R
 S977 (12串6并) 贴3R3
 S105 (8串5并) 贴3.9R



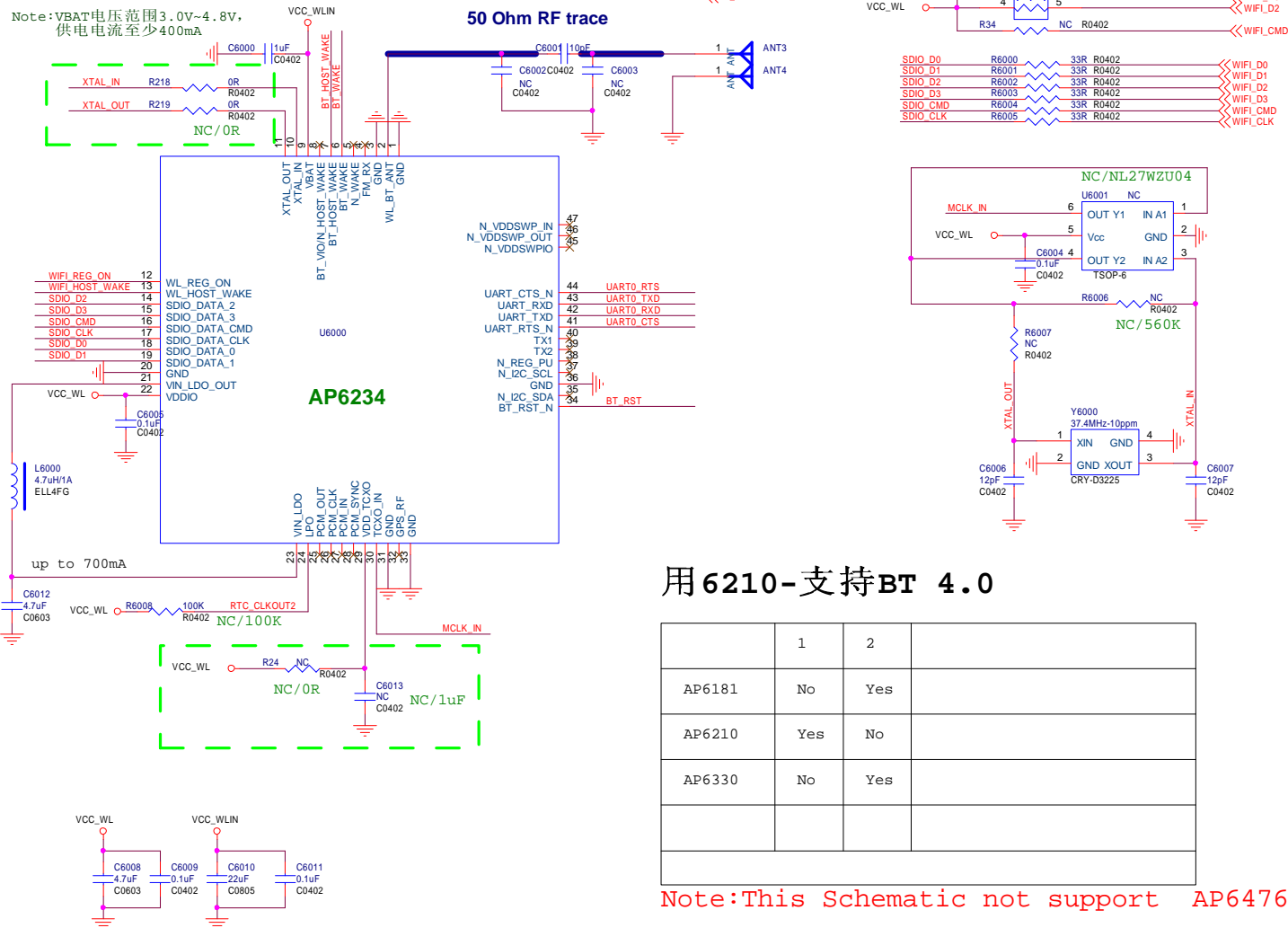
S977 需要贴, s105 不贴

eDP Panel & LVDS Panel

Rockchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: LCM-LVDS Panel (option)			
File: RK3288_REF			REV:V1.0
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Modify Date: Friday, January 23, 2015		Page Total: 49	

WIFI/BT MODULE

Note:VBAT电压范围3.0V~4.8V, 供电电流至少400mA



用6210-支持BT 4.0

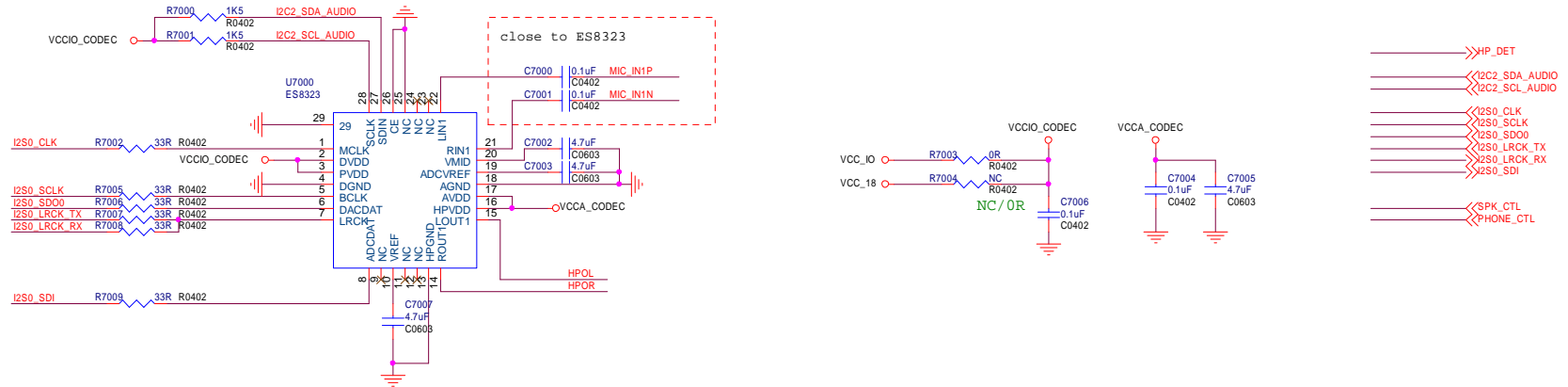
	1	2	
AP6181	No	Yes	
AP6210	Yes	No	
AP6330	No	Yes	

Note: This Schematic not support AP6476, AP6493

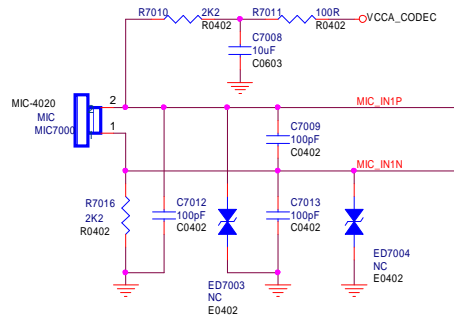
- AP6181: WIFI Only (BCM40181)
- AP6210: WIFI+BT4.0 (BCM40181+20710)
- AP6330: WIFI (2.4G and 5G)+BT4.0+FM (BCM4330X)
- AP6493: WIFI+BT4.0+FM+NFC (BCM43341)
- AP6476: WIFI+BT4.0+FM+GPS (BCM40181+2076)

福州瑞芯微电子有限公司		
Title: WIFI/BT-AP6210		
File: RK3288_REF	REV: V1.0	
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Modify Date: Friday, January 23, 2015	Page Total: 49	

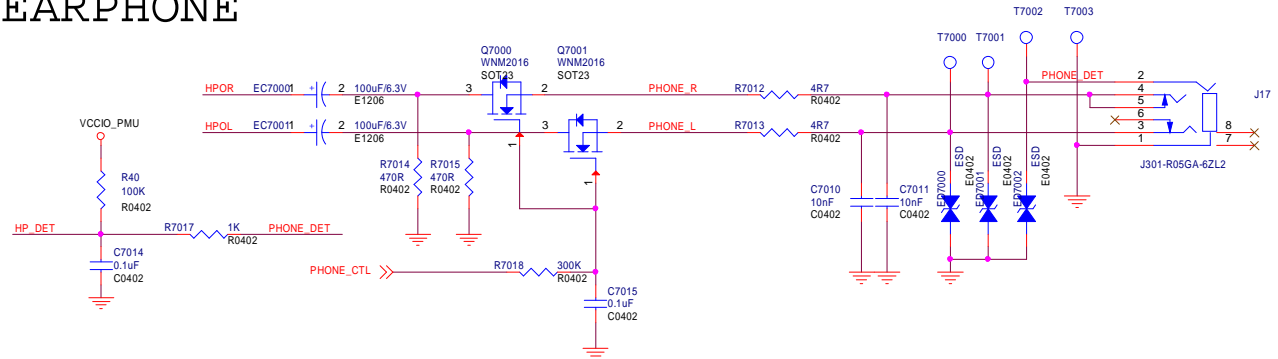
CODEC



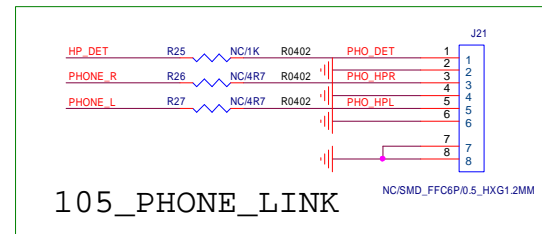
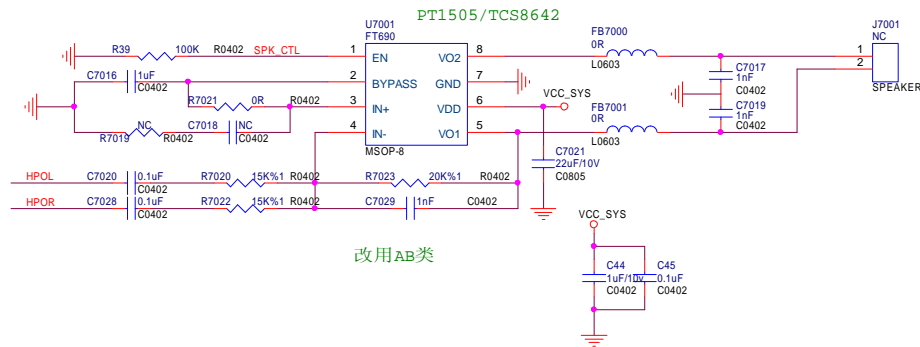
MIC



EARPHONE

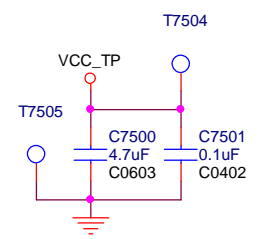
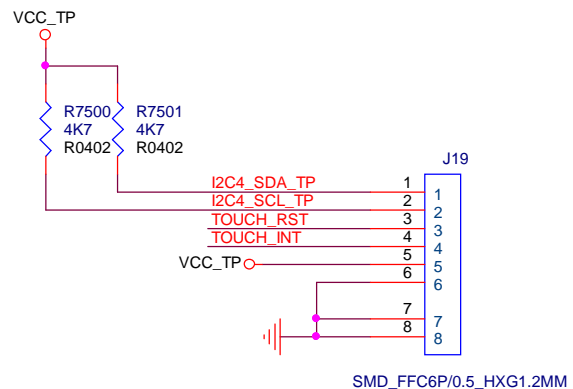


SPEAKER



Rackchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: Audio Codec-ES8323			
File: RK3288_REF		REV: V1.0	
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Touch Panel connector



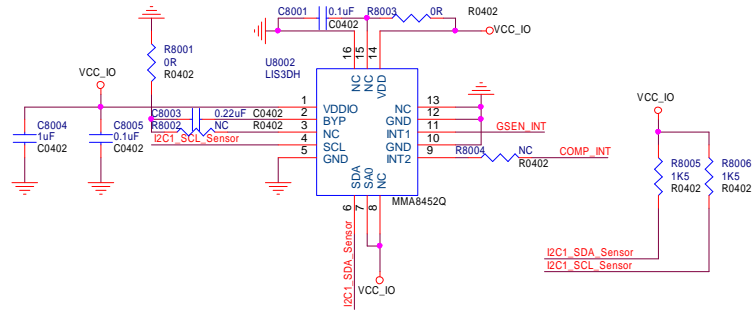
 瑞芯微电子		福州瑞芯微电子有限公司	
Title: TP COF			
File: RK3288_REF		REV:V1.0	
Create Date: Wednesday, February 26, 2014		Page Num:42	
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G-sensor

LSM303D with 3D Gsensor and E-compass

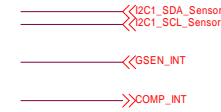
	LIS3DH	MMA8452Q	LSM303D
C8004	NC	NC	4.7uF
R8003	0ohm	NC	NC
R8001	NC	0ohm	NC
C8001	NC	0.1uF	0.22uF
R8002	NC	NC	OR
R8004	NC	NC	OR

LIS3DH/MMA8452Q/KXTIK-1013/LSM303D



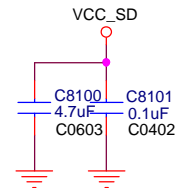
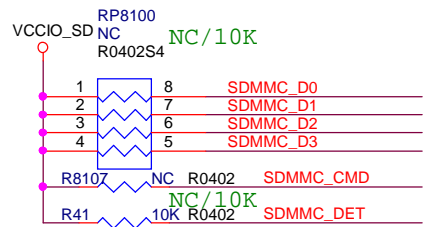
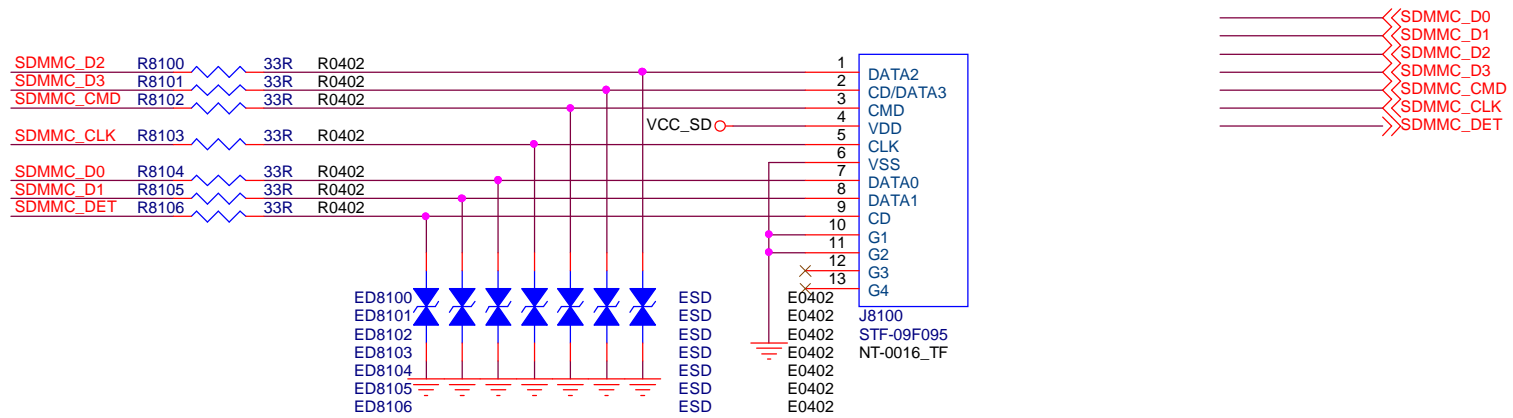
Compass


Note:
The first pin of AK8963C must be place on the lower left corner of PCB.

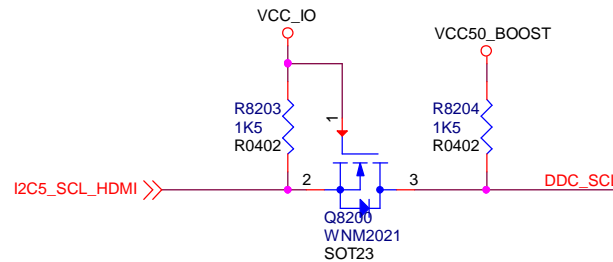
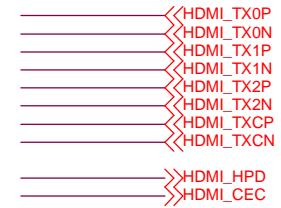
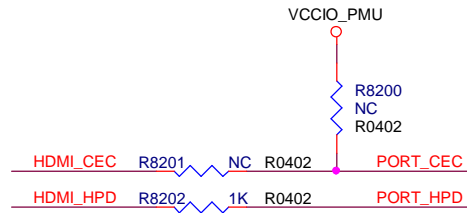
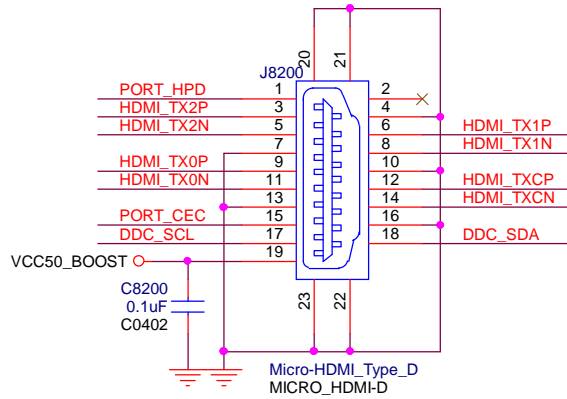


Rackchip 瑞芯微电子		福州瑞芯微电子有限公司	
Title: Sensor/VIB			
File: RK3288_REF		REV: V1.0	
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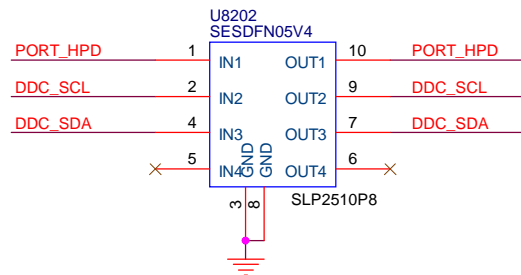
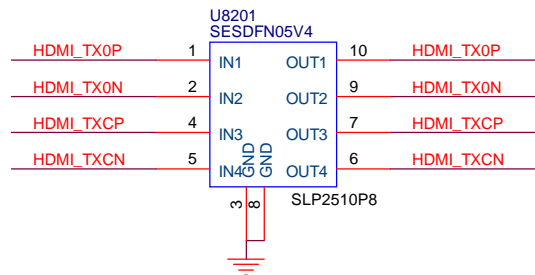
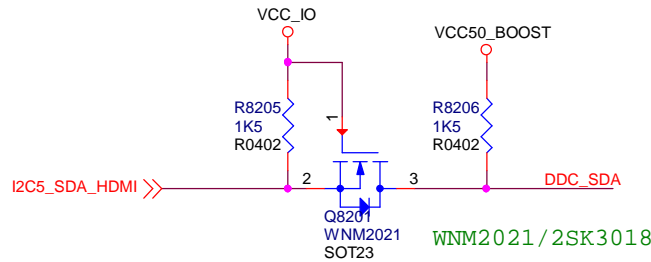
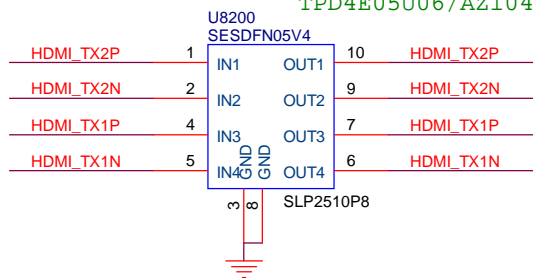
TF CARD



 福州瑞芯微电子有限公司 瑞芯微电子	
Title: TF Card	
File: RK3288_REF	REV:V1.0
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TPD4E05U06/AZ1045-04F



 福州瑞芯微电子有限公司 瑞芯微电子	
Title: HDMI Port	
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EFUSE Power

Note: Place the Component if need to write eFUSE



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RK3288cadence原理图、pads版PCB共享请联系QQ7643066

 瑞芯微电子		福州瑞芯微电子有限公司	
Title: eFUSE (option)			
File: RK3288_REF		REV:V1.0	
Create Date: Wednesday, February 26, 2014	Page Num: 49		
Modify Date: Friday, January 23, 2015	Page Total: 49		