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PCB POWER WIRE WIDTH INDICATE



above 80 miles
above 50 miles
above 30 miles
above 16 miles
Under needs

4 LAYERS PCB STACK

TOP	Prepreg 3313*1 4.0MIL(0.10mm)	Hoz(18um) + plating copper(16um)
GND	Adjust	1oz(35um)
POWER	Prepreg 3313*1 4.0MIL(0.10mm)	1oz(35um)
BOTTOM		Hoz(18um) + plating copper(18um)

Version	Date	Author	Change Note	Note
V1.0	20120718	LX	First editor	
V1.1	20120822	LGL	1. Change PMU VDIG1 to VCC1.5_CIF and connect it to camera DVDD 2. Correct the reset key and power key, Change D16, D12 footprint to SOD123, And C356 to C0805 3. Add NC/8.2K resister between PWM_LOG and GND 4. Update the part of RK2928L 5. Change the value of R57 to 10K, and R132 to 2.2K 6. Add test point and mark 6. Add R144(NC/0R) between the net of DCIN and VDC	
V1.1	20120911	HXS	1. Remove PMIC_GPIO 2. Remove VIB Circuit 3. Change TP_RST to RC Circuit	

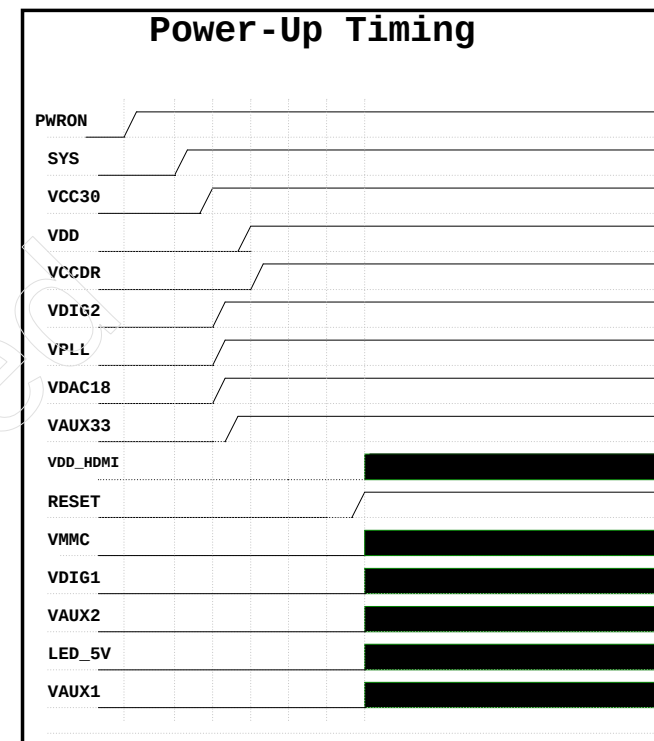
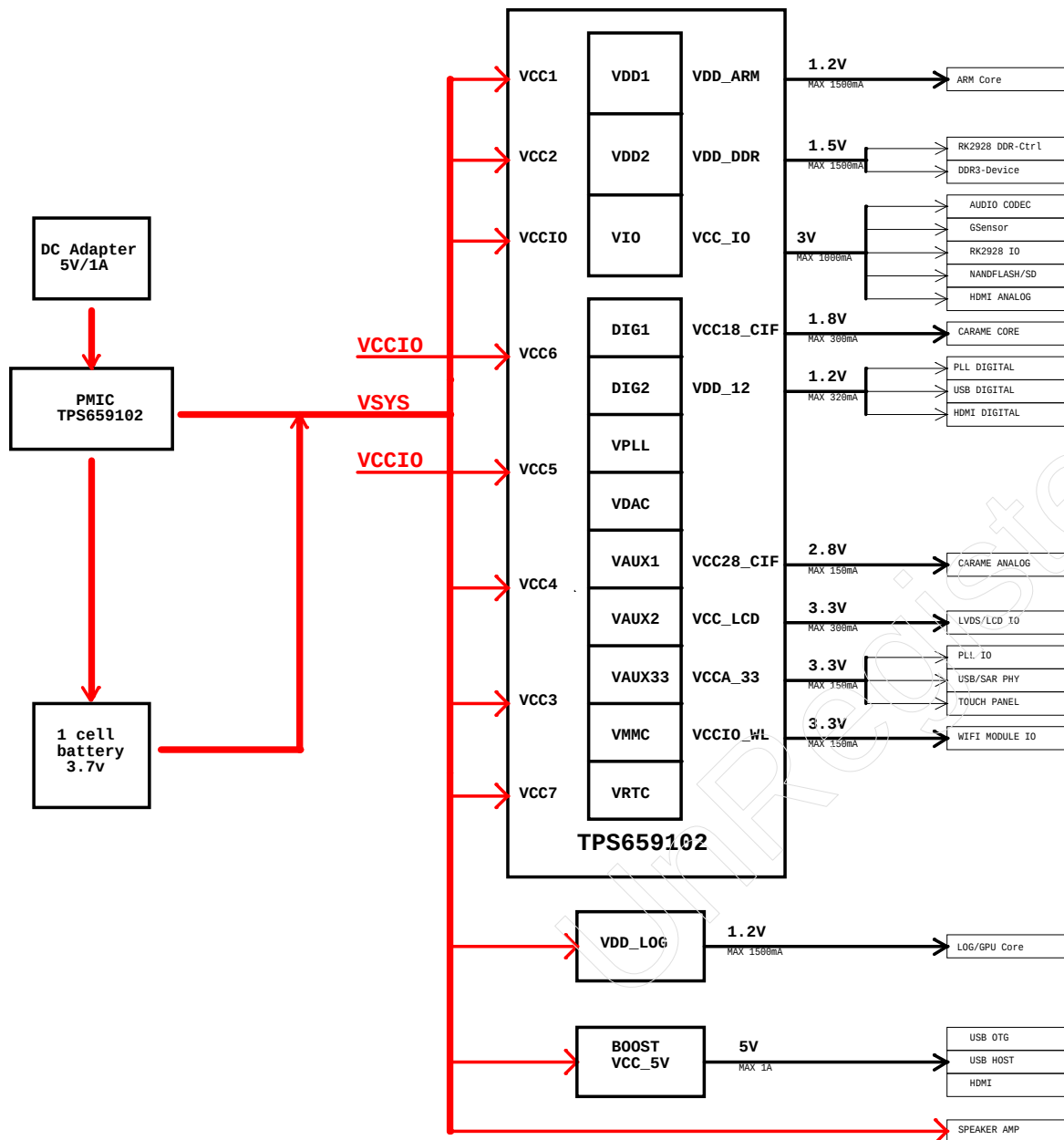
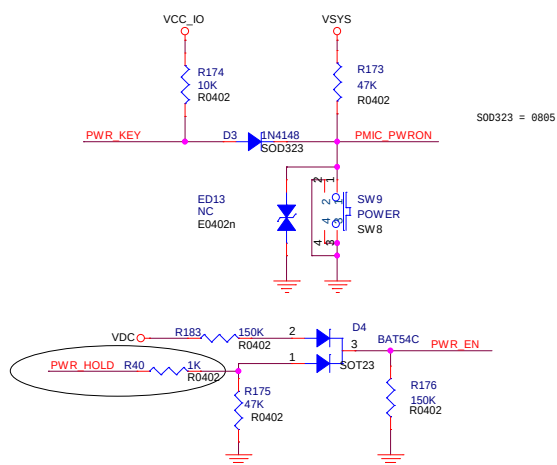
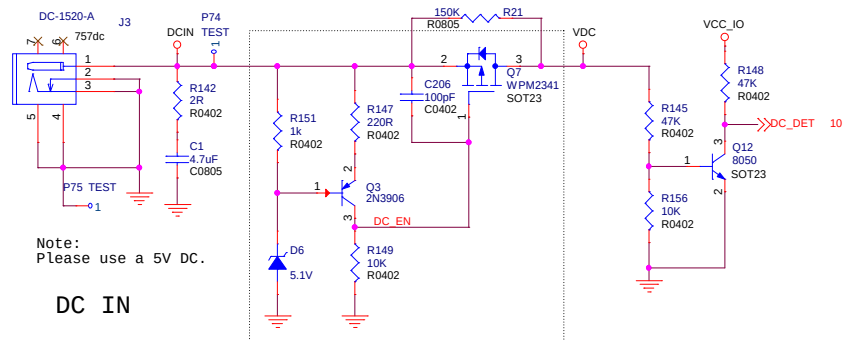


Table 12. Power Sources

RESOURCE	TYPE	VOLTAGES	POWER
VIO	SMPS	1.5 V / 1.8 V / 2.5 V / 3.3 V	1000 mA
VDD1	SMPS	0.6 ... 1.5 in 12.5-mV steps Programmable multiplication factor: x2, x3	1500 mA
VDD2	SMPS	0.6 ... 1.5 in 12.5-mV steps Programmable multiplication factor: x2, x3	1500 mA
VDD3	SMPS	5 V	100 mA
VDIG1	LDO	1.2 V, 1.5 V, 1.8 V, 2.7 V	300 mA
VDIG2	LDO	1 V, 1.1 V, 1.2 V, 1.8 V	300 mA
VPLL	LDO	1.0 V, 1.1 V, 1.8 V, 2.5 V	50 mA
VDAC	LDO	1.8 V, 2.8 V, 2.8 V, 2.85 V	150 mA
VAUX1	LDO	1.8 V, 2.5 V, 2.8 V, 2.85 V	300 mA
VAUX2	LDO	1.8 V, 2.8 V, 2.9 V, 3.3 V	150 mA
VAUX33	LDO	1.8 V, 2.0 V, 2.8 V, 3.3 V	150 mA
VMMC	LDO	1.8 V, 2.8 V, 3.0 V, 3.3 V	300 mA

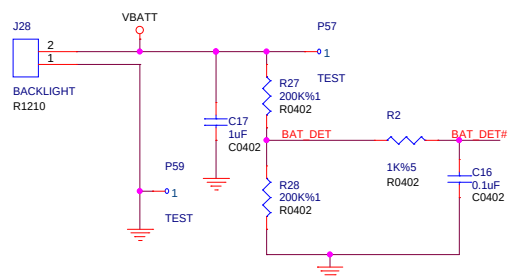
POWER DIAGRAM



Charging icon displayed if power key is long pressed when adapter or usb is exist!

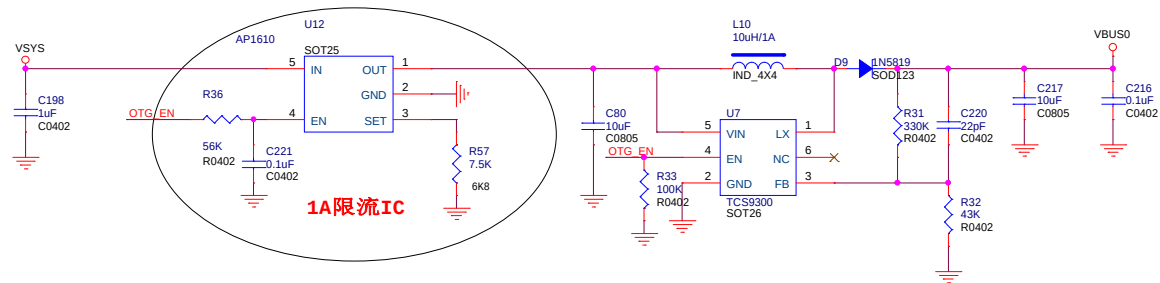
POWER CONTROL

BATTER

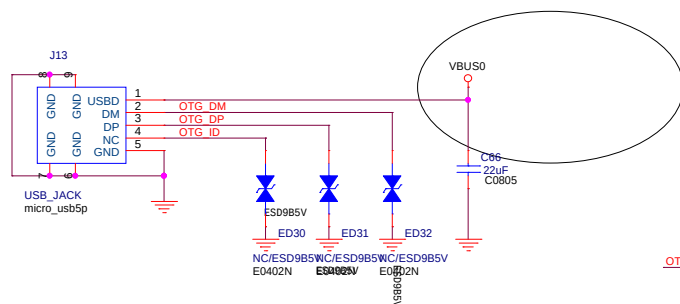


CHARG

EMC5040/RT9505: Icharge=830V/Rset, Used R151, No used R149
LP28011: Icharge=300X(2.5/Rset), Used R149, No used R151
Don't suggest charging current more than 800 mA;

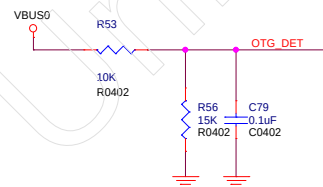
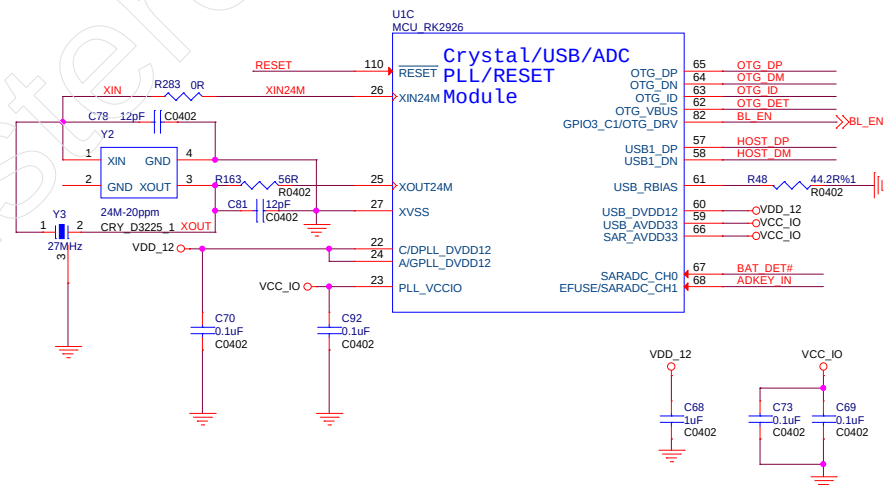


OTG POWER

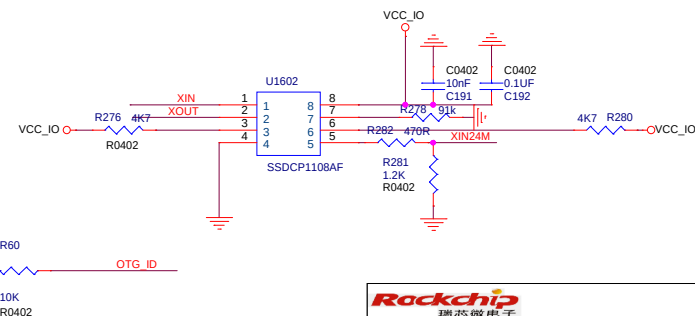


USB OTG CONNECTOR

Note:
Adjusted the load capacitance
according to the crystal specification.



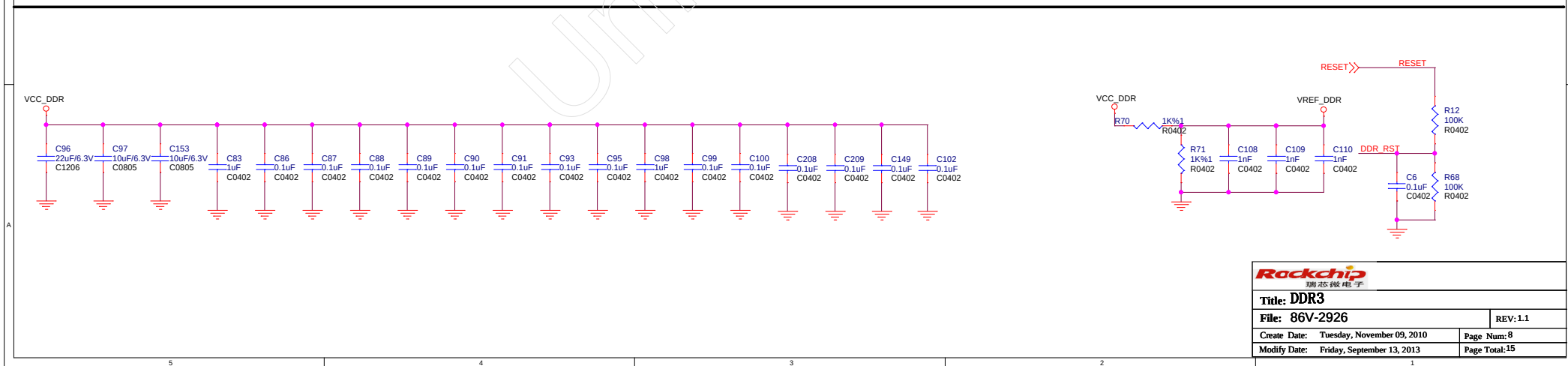
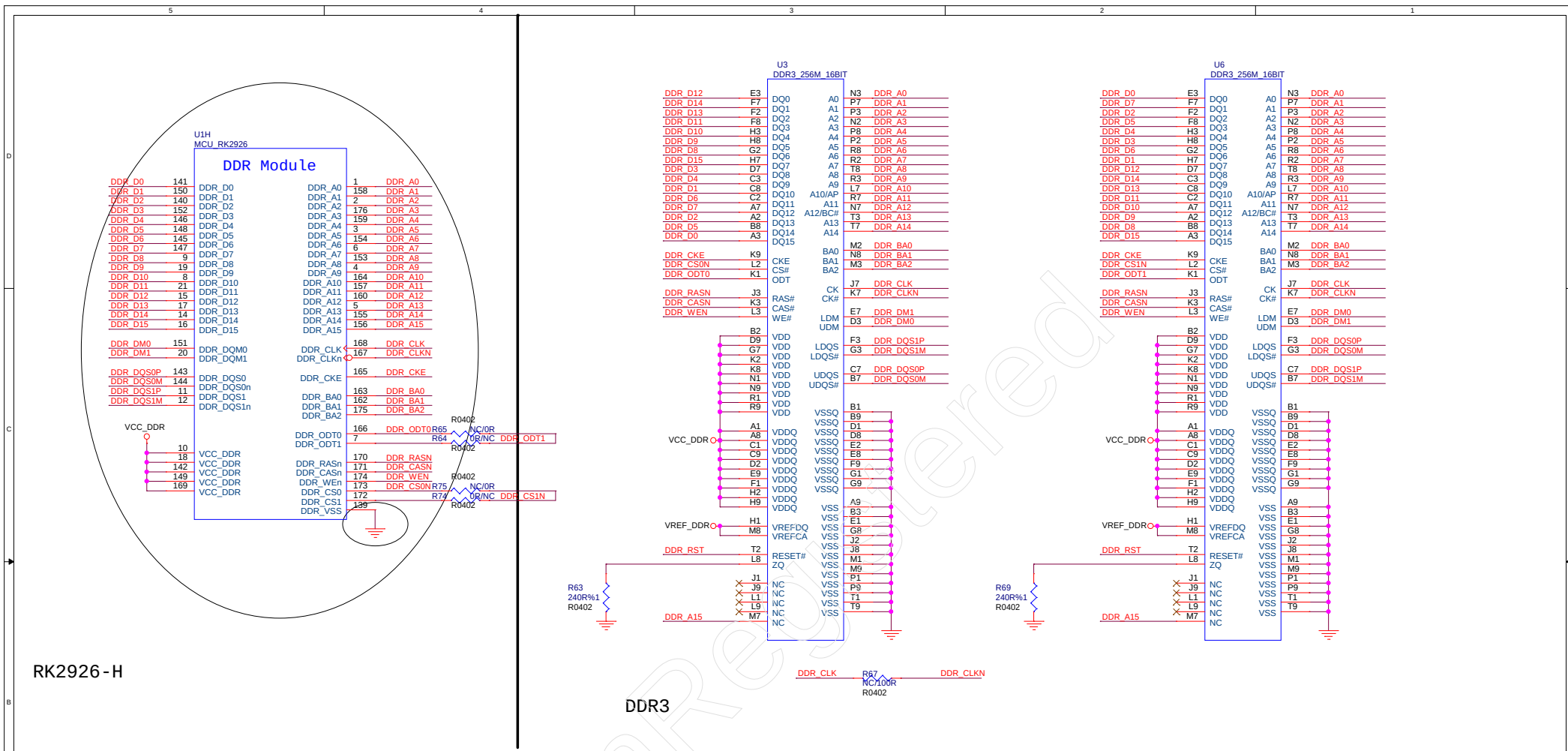
USB_DET



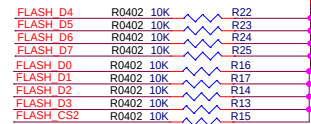
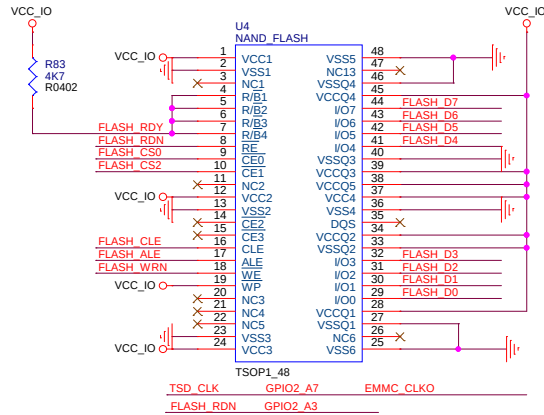
RK2926-C

VIBRATION

Rackchip 瑞芯微电子		
Title: USB OTG		
File: 86V-2926		REV: 1.1
Create Date: Tuesday, November 29, 2011	Page Num: 7	
Modify Date: Friday, September 13, 2013	Page Total: 15	

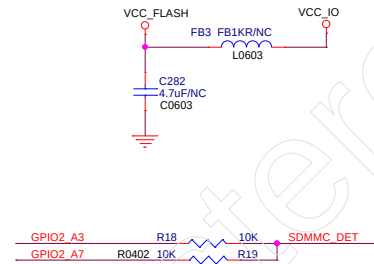


NAND FLASH



RK2926-D

INAND



**OPTION3
eMMC**

**OPTION1
IF not use, pls NC all the comment**

NAND FLASH

U1D
MCU_RK2926

SDMMC Module

GPIO1_C2/SDMMC_D0	114	SDMMC_D0
GPIO1_C3/SDMMC_D1	113	SDMMC_D1
GPIO1_C4/SDMMC_D2	112	SDMMC_D2
GPIO1_C5/SDMMC_D3	111	SDMMC_D3
GPIO1_C0/SDMMC_CLKO	116	SDMMC_CLK
GPIO1_B7/SDMMC_CMD	127	SDMMC_CMD

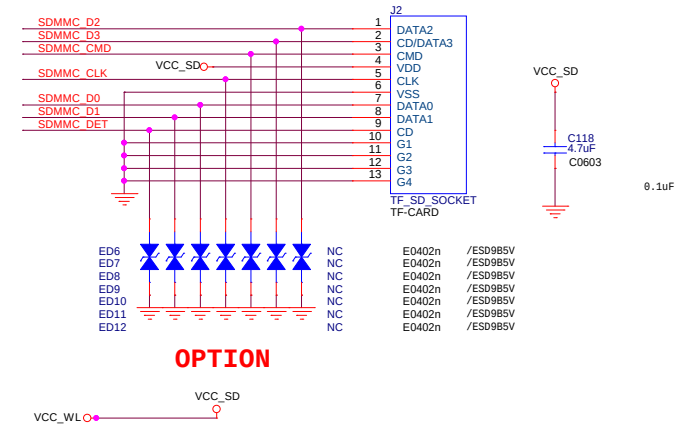
U1E
MCU_RK2926

NAND FLASH Module

GPIO1_D0/FLASH_D0	93	FLASH_D0
GPIO1_D1/FLASH_D1	94	FLASH_D1
GPIO1_D2/FLASH_D2	95	FLASH_D2
GPIO1_D3/FLASH_D3	96	FLASH_D3
GPIO1_D4/FLASH_D4	97	FLASH_D4
GPIO1_D5/FLASH_D5	98	FLASH_D5
GPIO1_D6/FLASH_D6	99	FLASH_D6
GPIO1_D7/FLASH_D7	100	FLASH_D7
GPIO2_A0/FLASH_ALE	102	FLASH_ALE
GPIO2_A1/FLASH_CLE	103	FLASH_CLE
GPIO2_A2/FLASH_WRN	104	FLASH_WRN
GPIO2_A3/FLASH_RDN	105	GPIO2_A3
GPIO2_A4/FLASH_RDY	106	FLASH_RDY
GPIO2_A5/FLASH_CS0	107	FLASH_CS0
GPIO2_A6/FLASH_CS2	92	FLASH_CS2
GPIO2_A7/FLASH_DQS	109	GPIO2_A7

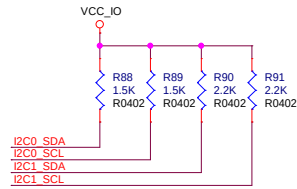
RK2926-E

TF CARD



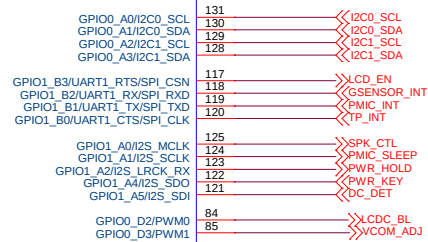
OPTION

Rackchip 瑞芯微电子			
Title: Flash/TF card			
File: 86V-2926			REV: 1.1
Create Date: Thursday, October 14, 2010	Page Num: 9		
Modify Date: Friday, September 13, 2013	Page Total: 15		

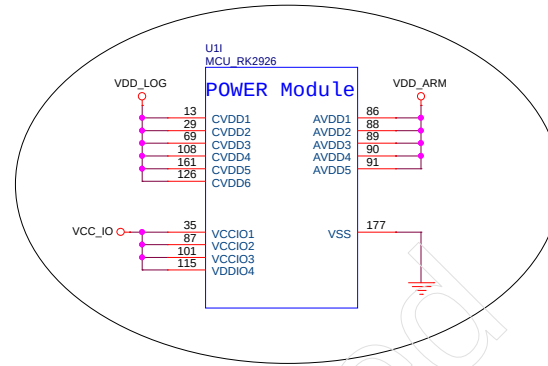


U1G
MCU_RK2926

GPIO/UART/PWM I2C/I2S Module

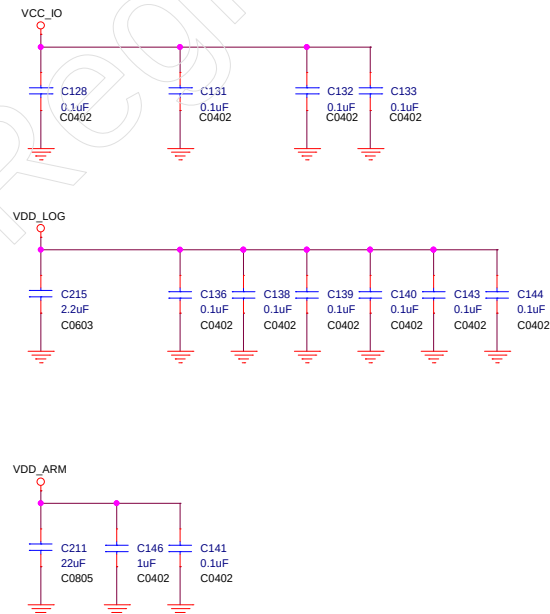


RK2926-G



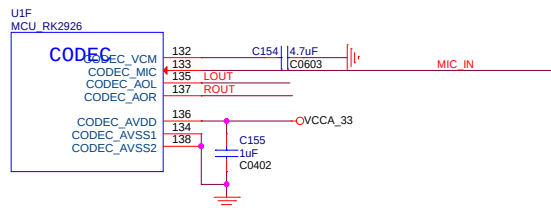
Note:
Place these filter capacitors under CPU.

RK2926-I

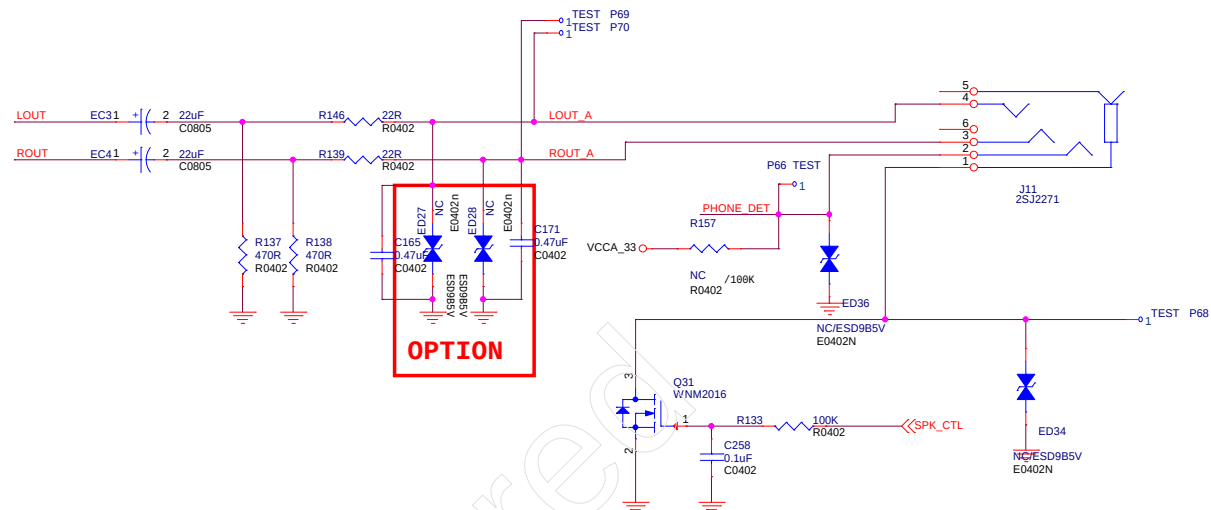


RK2928 CORE POWER FILTER

Rackchip 瑞芯微电子		
Title: GPIO/POWER		
File: 86V-2926		REV: 1.1
Create Date: Monday, October 18, 2010	Page Num: 10	
Modify Date: Friday, September 06, 2013	Page Total: 15	



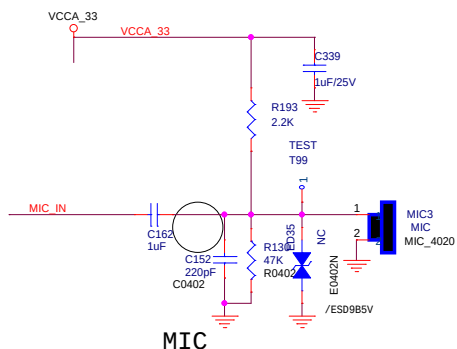
RK2926-F



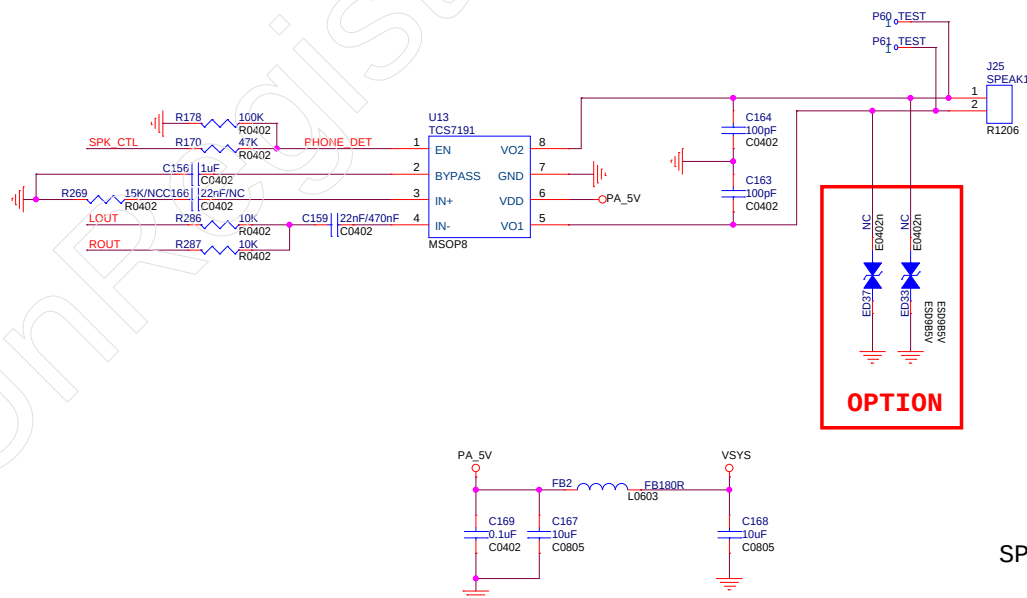
HEADPHONE

MIC :

* C157	2.2nF	0R
* C340	100pF	NC
* Q25	8850	NC
* Q26	8850	NC
* C161	100pF	NC
* C166	1uF	NC
* R192	1M	0R
* R195	1M	NC



MIC

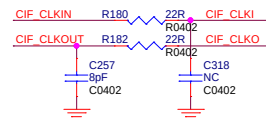


SPEAKER DRIVER

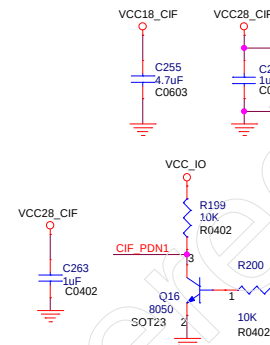
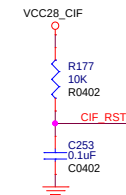
U1B
MCU_RK2926

VIP Module

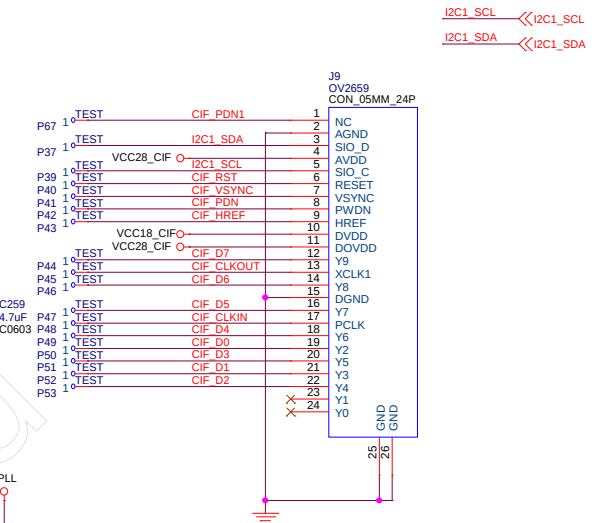
CIF_D0	70	CIF D0
CIF_D1	71	CIF D1
CIF_D2	72	CIF D2
CIF_D3	73	CIF D3
CIF_D4	74	CIF D4
CIF_D5	75	CIF D5
CIF_D6	76	CIF D6
CIF_D7	77	CIF D7
CIF_D7	78	CIF VSYNC
CIF_VSYNC	79	CIF HREF
CIF_HREF	83	CIF_PDN
GPIO3_B3/CIF_PDN	80	CIF_CLKI
CIF_CLKI	81	CIF_CLKO



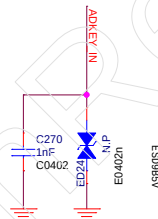
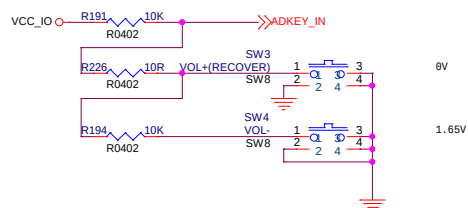
RK2926-B



FRONT&REAR CAMERA

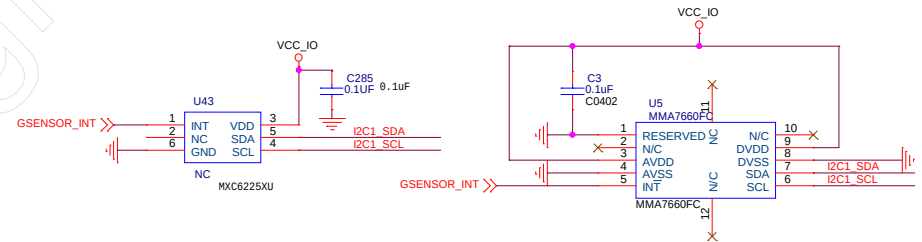


KEY BAORD



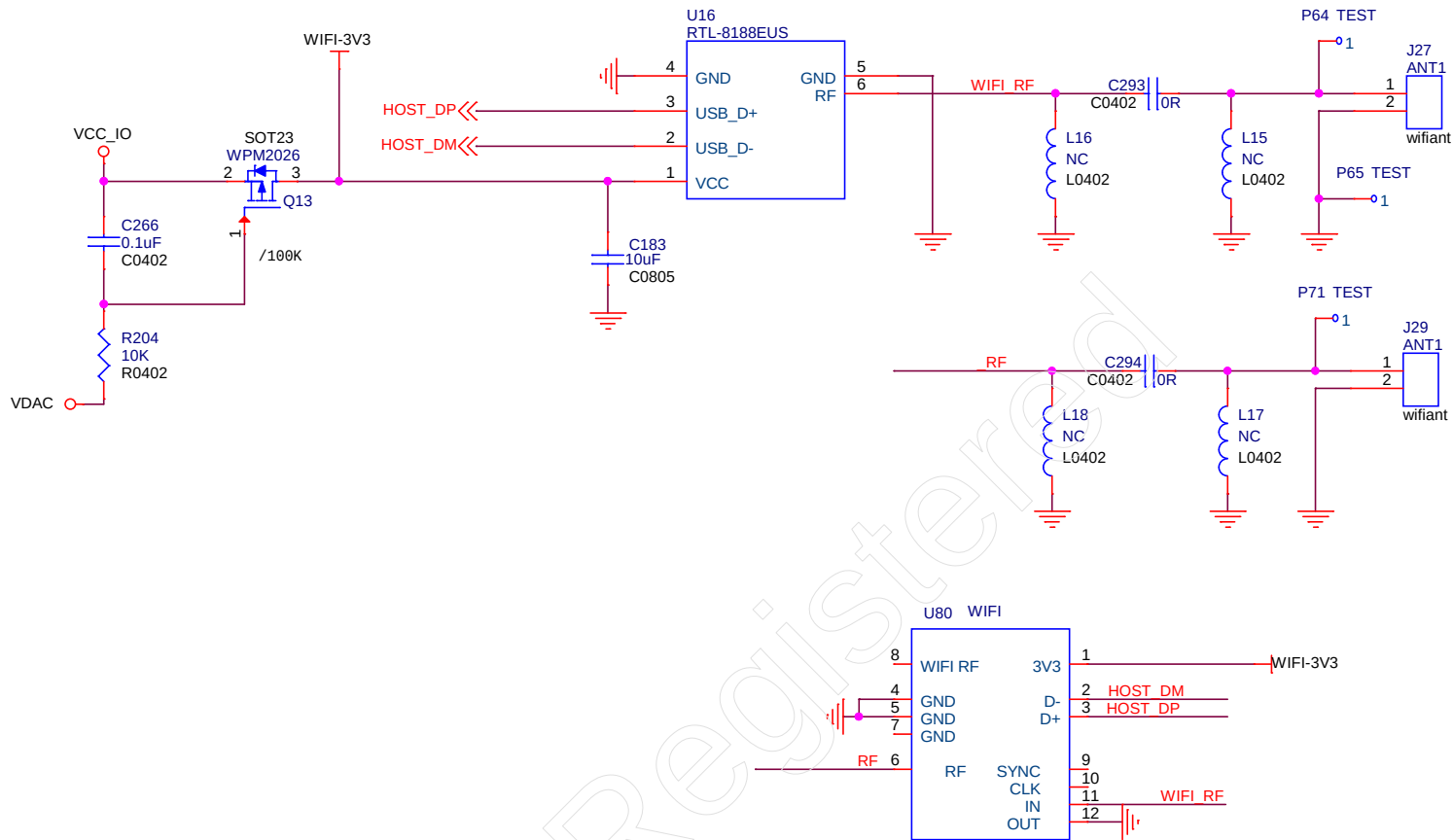
When the system power on, the Adkey_in level is 0V,
RK2928 enter into loader mode.

3D G-Sensor



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

Rackchip 瑞芯微电子			
Title: Camera/G_Sensor/Key			
File: 86V-2926			REV: 1.1
Create Date: Friday, October 15, 2010	Page Num: 14		
Modify Date: Friday, September 06, 2013	Page Total: 15		



Rockchip
瑞芯微电子

Title: USB WIFI

File:

REV: 1.1

Create Date: Friday, May 04, 2012

Page Num: 15

Modify Date: Friday, September 06, 2013

Page Total: 15

