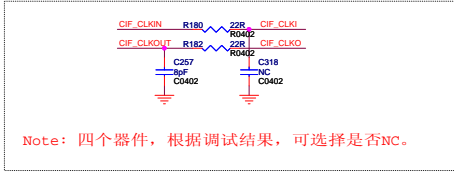


深圳市百能达电子有限公司		
Title BCL-RK2926-88V		
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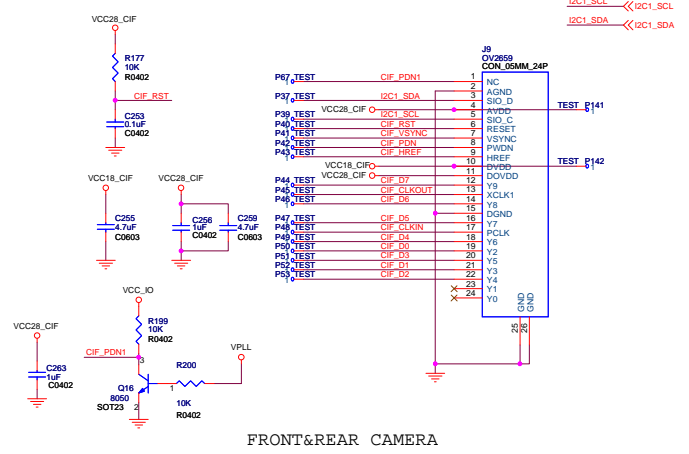
USB WIFI

U18
MCU_RK2928

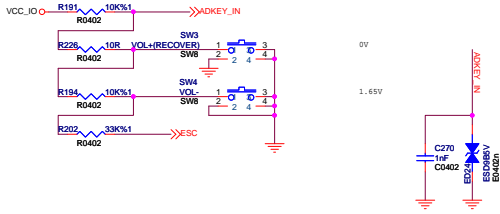
VIP Module		
CIF_D0	70	CIF_D0
CIF_D1	71	CIF_D1
CIF_D2	72	CIF_D2
CIF_D3	73	CIF_D3
CIF_D4	74	CIF_D4
CIF_D5	75	CIF_D5
CIF_D6	76	CIF_D6
CIF_D7	77	CIF_D7
CIF_VSYNC	78	CIF_VSYNC
CIF_HREF	79	CIF_HREF
GPI03_B3CIF_PDN	83	CIF_PDN
CIF_CLKI	89	CIF_CLKI
CIF_CLKO	81	CIF_CLKO



RK2926-B

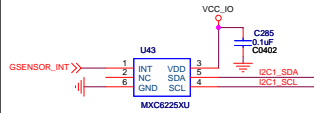


KEY BAORD



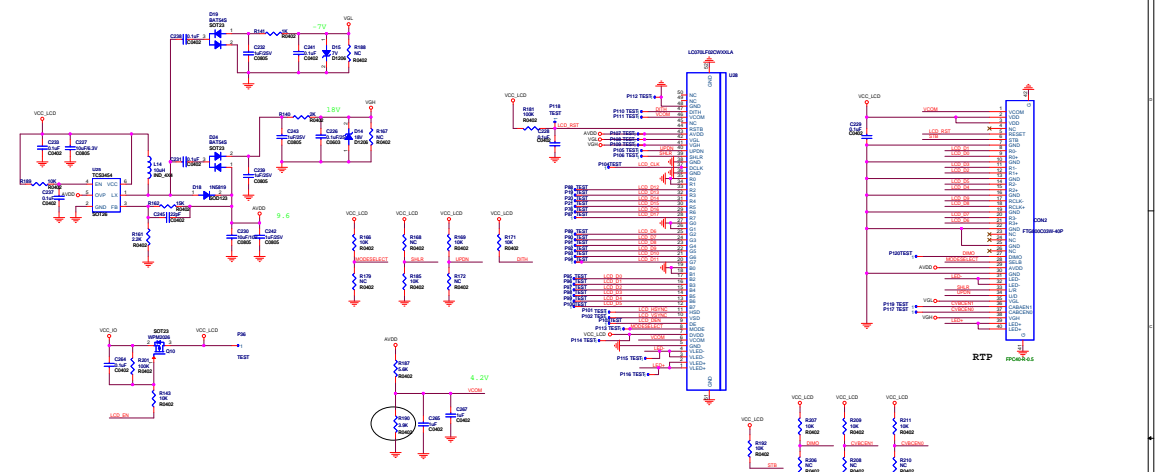
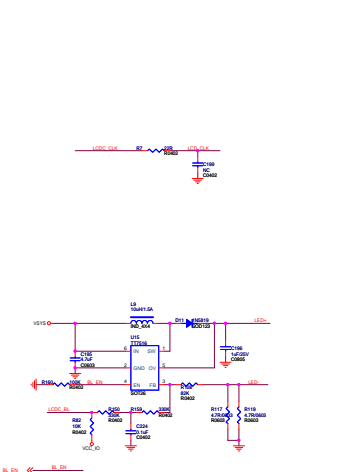
When the system power on, the Adkey_in level is 0V, RK2928 enter into loader mode.

3D G-Sensor

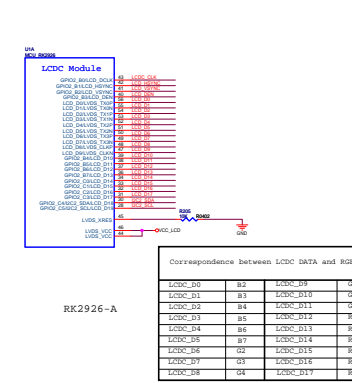


Note:
The first pin of G-sensor must be place on the lower left corner of PCB.

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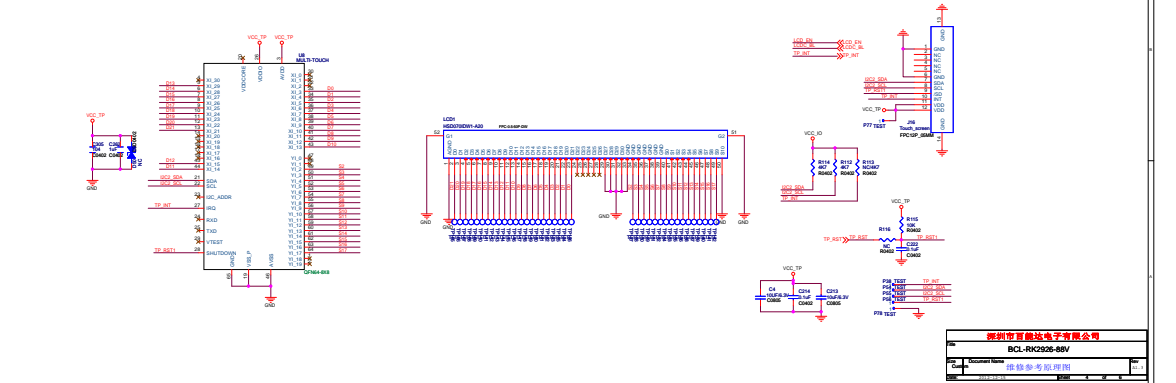


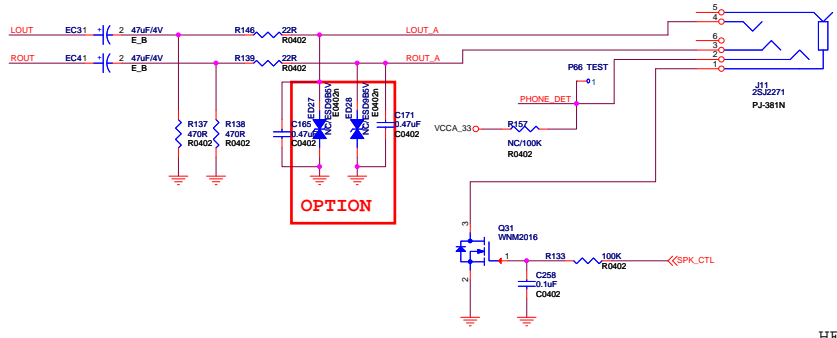
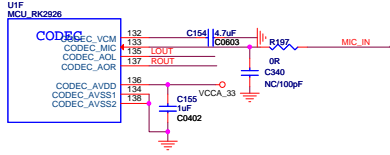
LCD PANEL CONNECTOR



Correspondence between LCD DATA and RGB

LCD_D0	B2	LCD_D9	G5
LCD_D1	B3	LCD_D10	G6
LCD_D2	B4	LCD_D11	G7
LCD_D3	B5	LCD_D12	B8
LCD_D4	B6	LCD_D13	B9
LCD_D5	B7	LCD_D14	B10
LCD_D6	B8	LCD_D15	B11
LCD_D7	B9	LCD_D16	B12
LCD_D8	B10	LCD_D17	B13

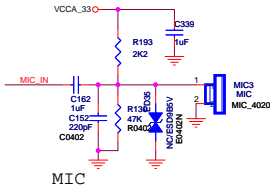




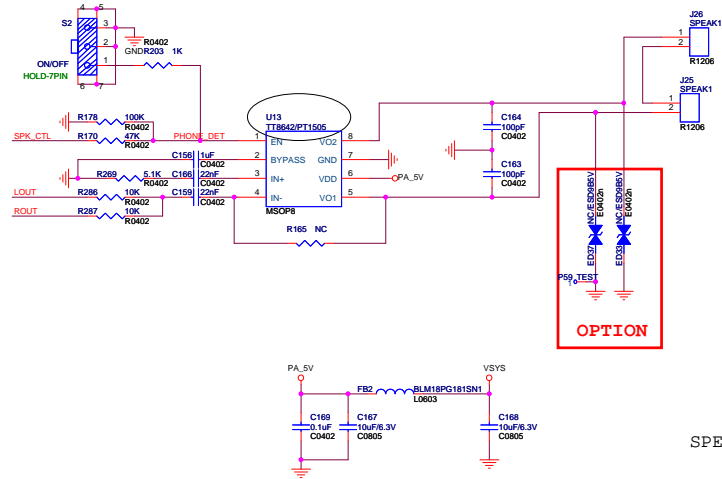
HEADPHONE

RK2926-F

MIC

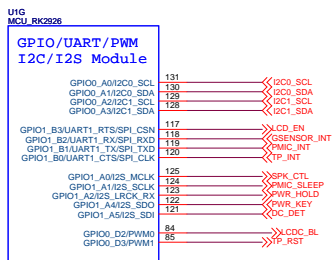
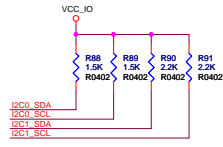


MIC

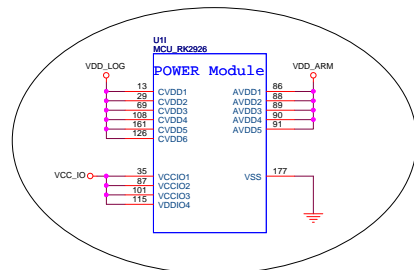


SPEAKER DRIVER

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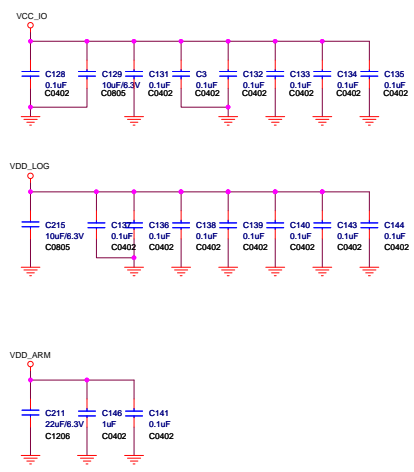


RK2926-G



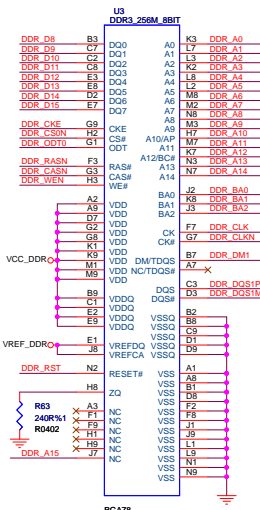
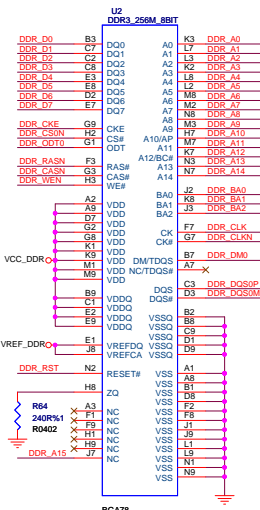
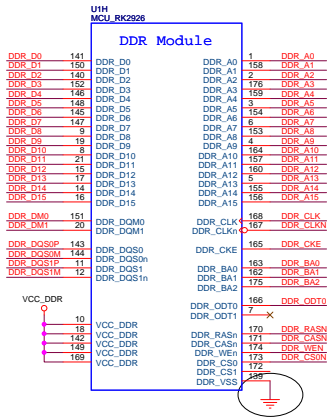
Note:
Place these filter capacitors under CPU.

RK2926-I



RK2928 CORE POWER FILTER

深圳市百能达电子有限公司		
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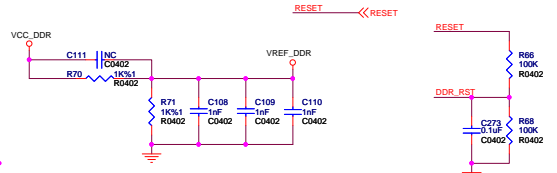
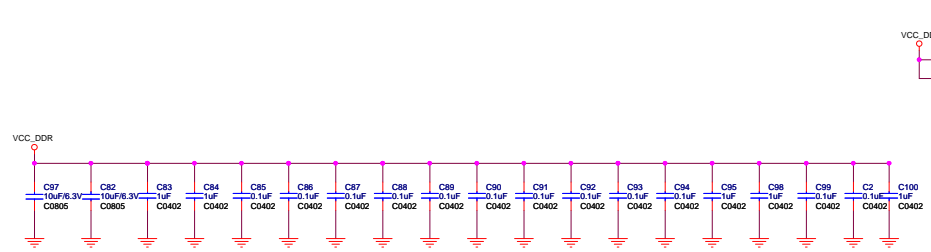


RK2926-H

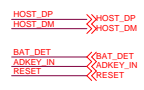
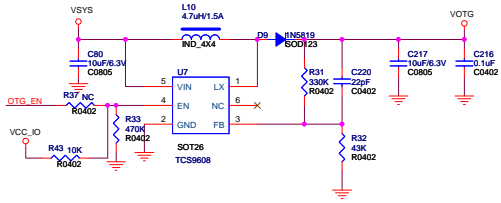
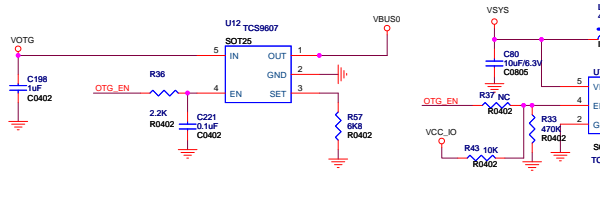
DDR3



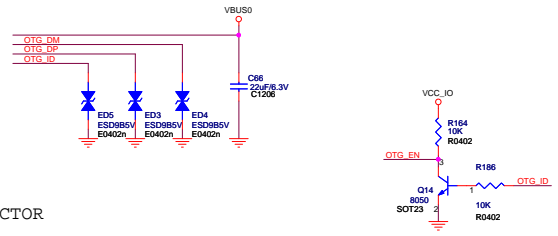
DDR FILTER



深圳市百能达电子有限公司		
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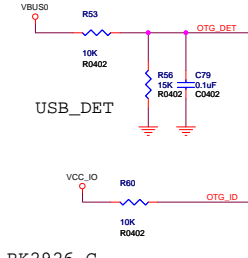
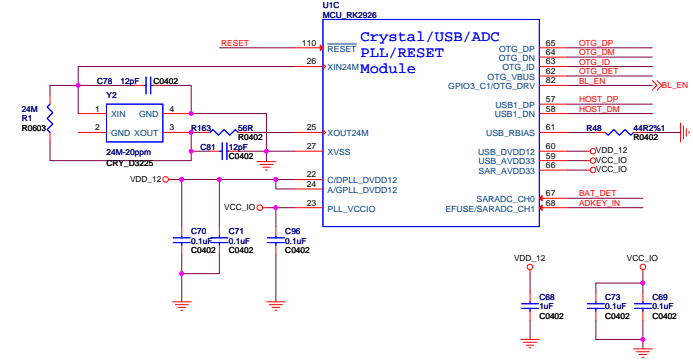


OTG POWER

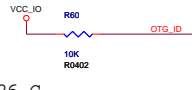


USB OTG CONNECTOR

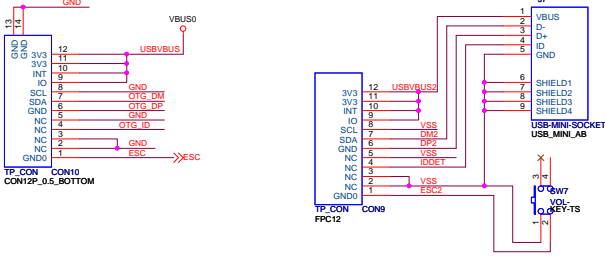
Note:
Adjusted the load capacitance according to the crystal specification.



USB_DET



OTG_ID





TP_CON CON10

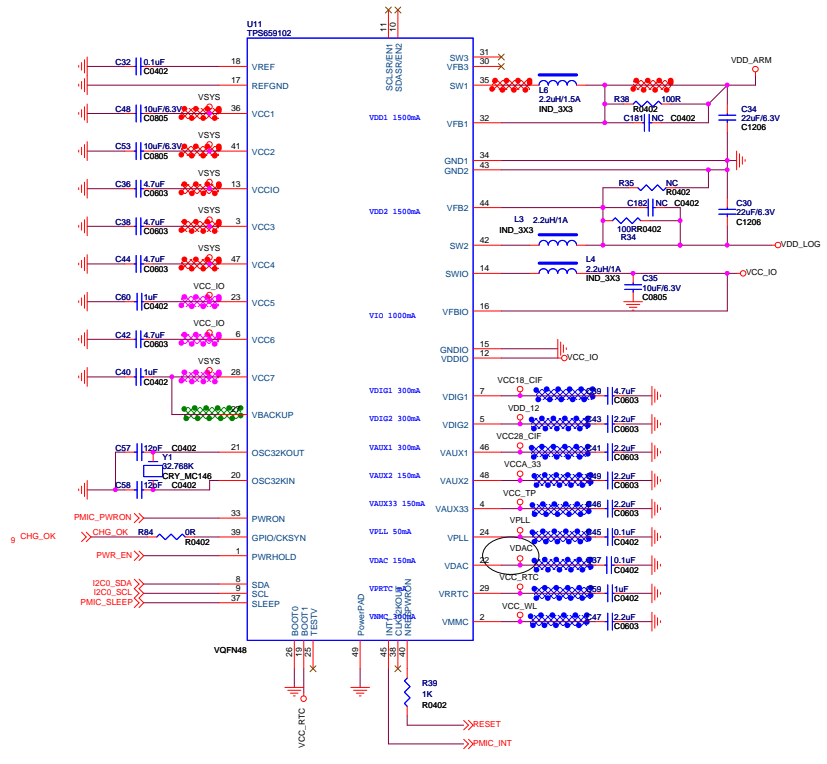
TP_CON CON9

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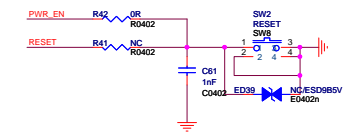
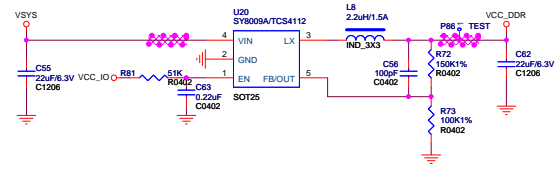
RK2926-C

PCB POWER WIRE WIDTH INDICATE

-  above 80 miles
-  above 50 miles
-  above 30 miles
-  above 12 miles
-  Under needs

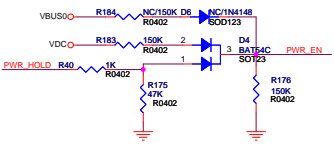
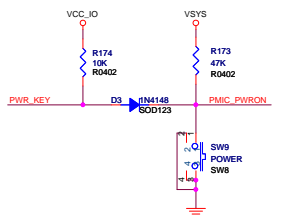
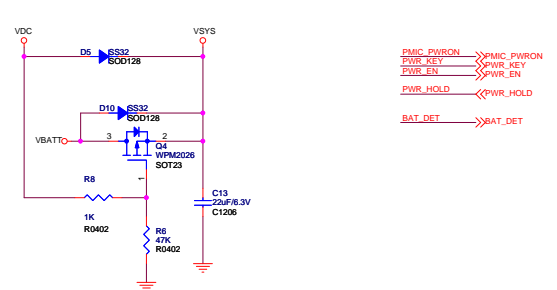
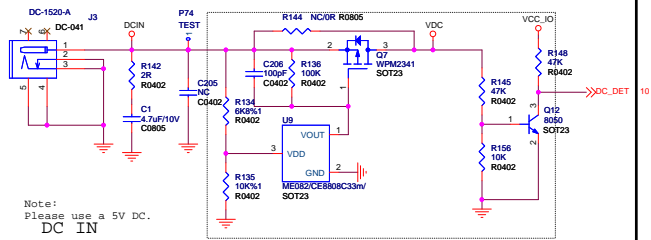


Note: Please use a 1.5A or above power supply IC.



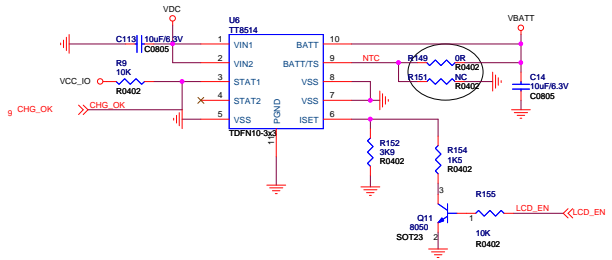
SYSTEM POWER

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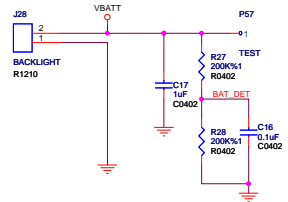
Charging icon displayed if power key is long pressed when adapter or usb is exist!

POWER CONTROL



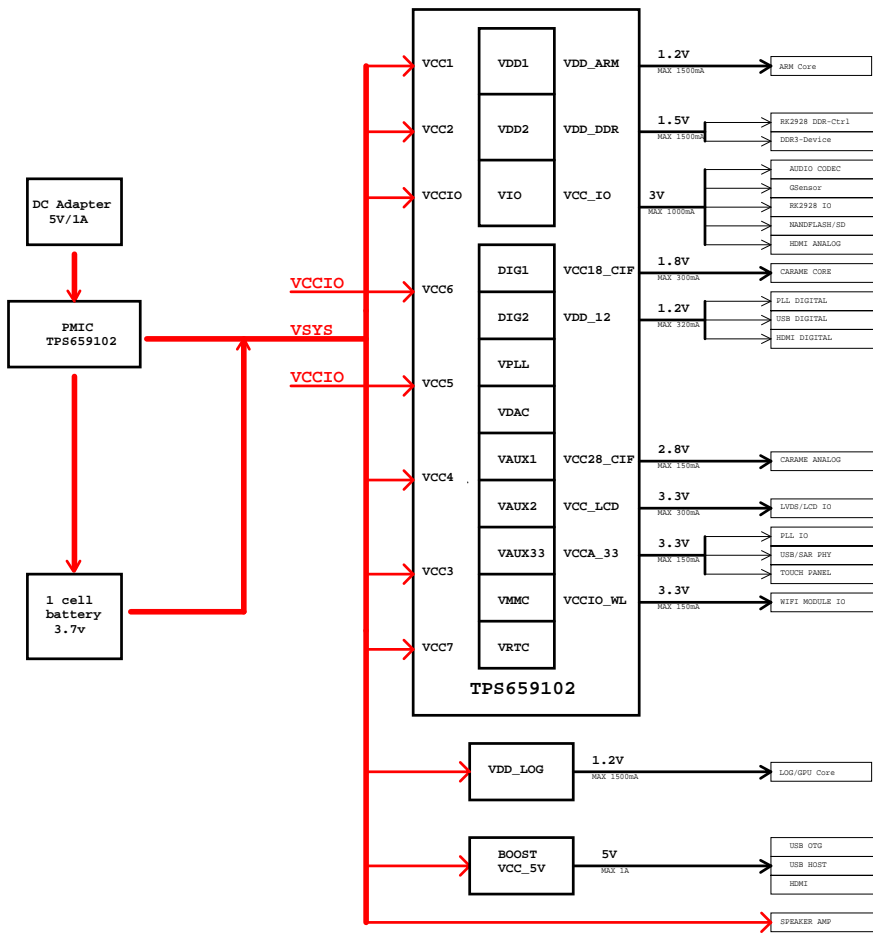
CHARGE

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;



BATTER

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POWER DIAGRAM

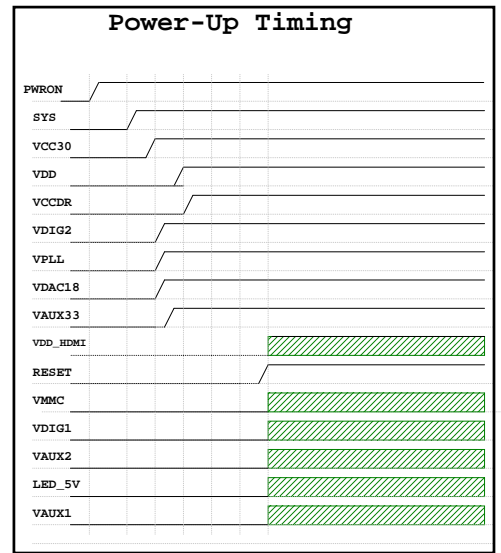
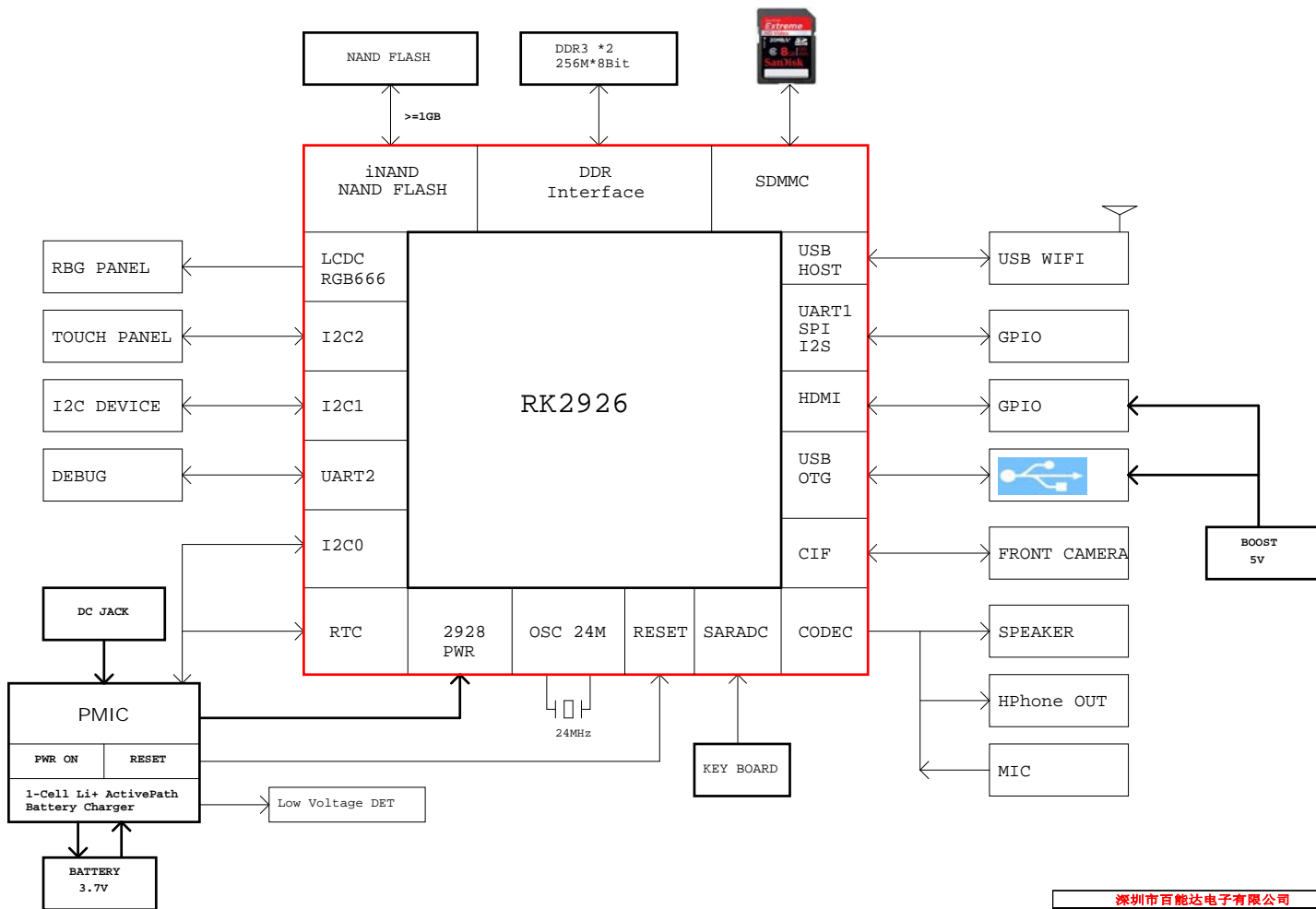


Table 12. Power Sources

RESOURCE	TYPE	VOLTAGES	POWER
VIO	SMPS	1.5V/1.8V/2.5V/3.3V	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
VCC3	SMPS	5V	100 mA
VDIG1	LDO	1.2V, 1.5V, 1.8V, 2.7V	300 mA
VDIG2	LDO	1V, 1.1V, 1.2V, 1.8V	300 mA
VPLL	LDO	1.0V, 1.1V, 1.8V, 2.5V	50 mA
VDAC	LDO	1.8V, 2.6V, 2.8V, 2.85V	150 mA
VAUX1	LDO	1.8V, 2.5V, 2.8V, 2.85V	300 mA
VAUX2	LDO	1.8V, 2.8V, 2.9V, 3.3V	150 mA
VAUX33	LDO	1.8V, 2.0V, 2.8V, 3.3V	150 mA
VMMC	LDO	1.8V, 2.8V, 3.0V, 3.3V	300 mA

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Version	Date	Author	Change Note	Note
V1.0	20120718	LX	First edictor	
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 resistor 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/OR) 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	

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02. Modify note
03. Block Diagram
04. SYSTEM POWER DIAGRAM
05. DC/CHARG
06. SYSTEM POWER
07. USB OTG
08. DDR3
09. FLASH/TF CARD
10. GPIO/POWER
11. AUDIO
12. HDMI
13. LCD PANEL/TOUCH PANEL
14. CAMERA/G_SENSOR/KEY
15. USB WIFI

PCB POWER WIRE WIDTH INDICATE

	above 80 miles
	above 50 miles
	above 30 miles
	above 16 miles
No indicate	Under needs

4 LAYERS PCB STACK

TOP	Prepreg 3313*1 4.0MIL(0.10mm)	Hoz(18um) + plating copper(18um)
GN1	Adjust	1oz(35um)
POWER	Prepreg 3313*1 4.0MIL(0.10mm)	1oz(35um)
BOTTOM	Prepreg 3313*1 4.0MIL(0.10mm)	Hoz(18um) + plating copper(18um)

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