






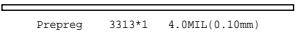

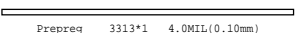

## CONTENT INDEXING

01. INDEX
02. MODIFY NOTE
03. BLOCK DIAGRAM
04. SYSTEM POWER DIAGRAM
05. DC/CHARGE
06. SYSTEM POWER
07. USB OTG/VIB/RTC
08. DDR3
09. FLASH/TF CARD
10. GPIO/POWER
11. AUDIO
12. HDMI
12. LCD PANEL/TOUCH PANEL
13. CAMERA/SENSOR/KEY
15. WIFI
15. GPS

## PCB POWER WIRE WIDTH INDICATE

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

## 4 LAYERS PCB STACK

TOP		Hoz(18um) + plating copper(18um)
GND		1oz(35um)
POWER		1oz(35um)
BOTTOM		Hoz(18um) + plating copper(18um)

Version	Date	Author	Change Note	Note
V1.0	20120920	LX	First edictor	

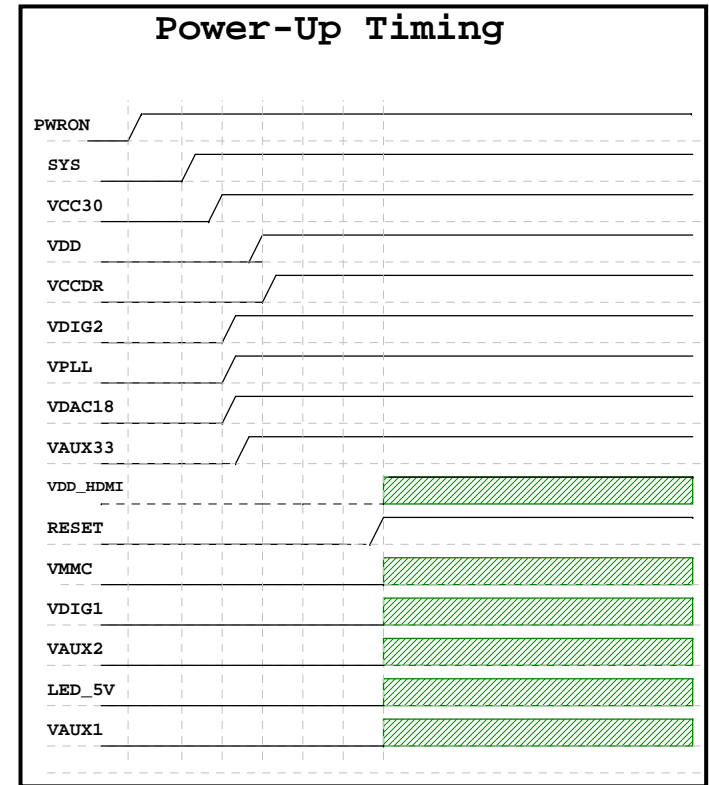
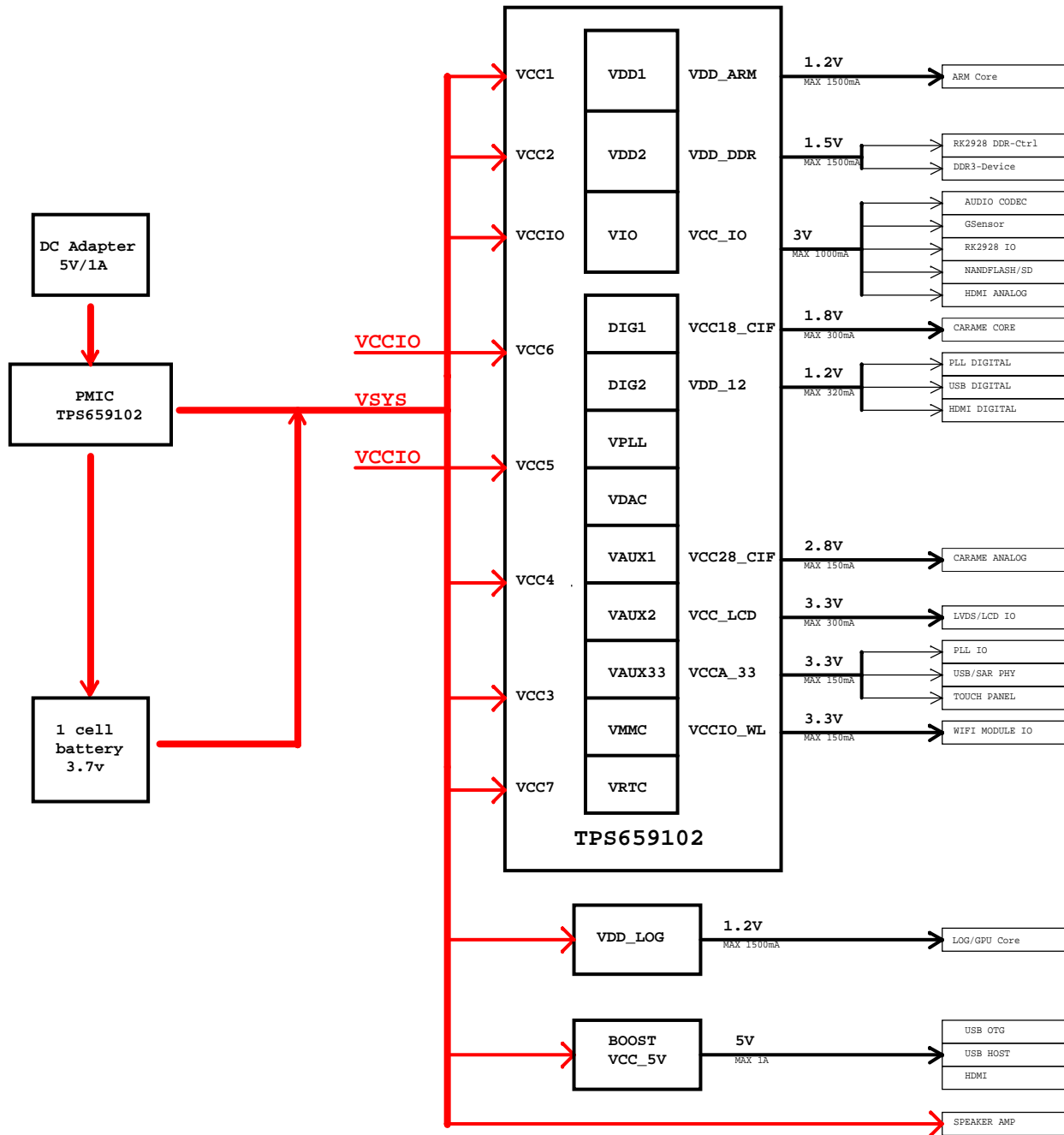
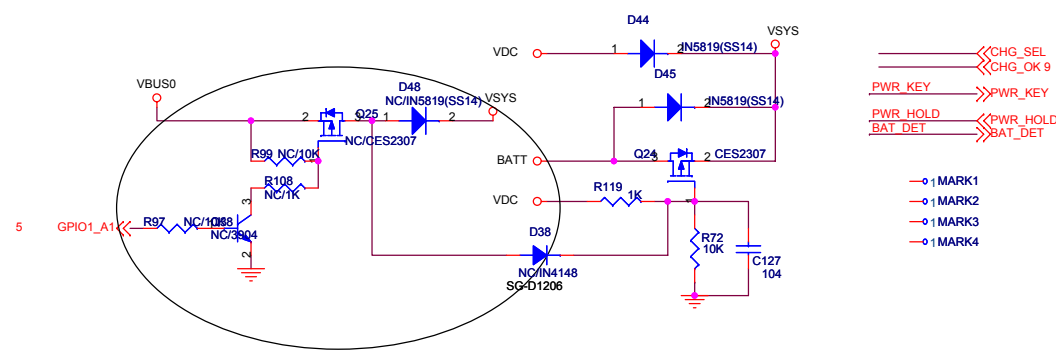
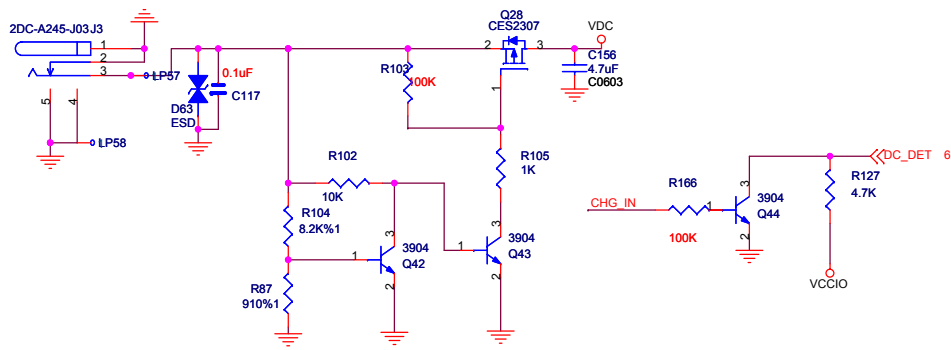


Table 12. Power Sources

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, 2.6 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

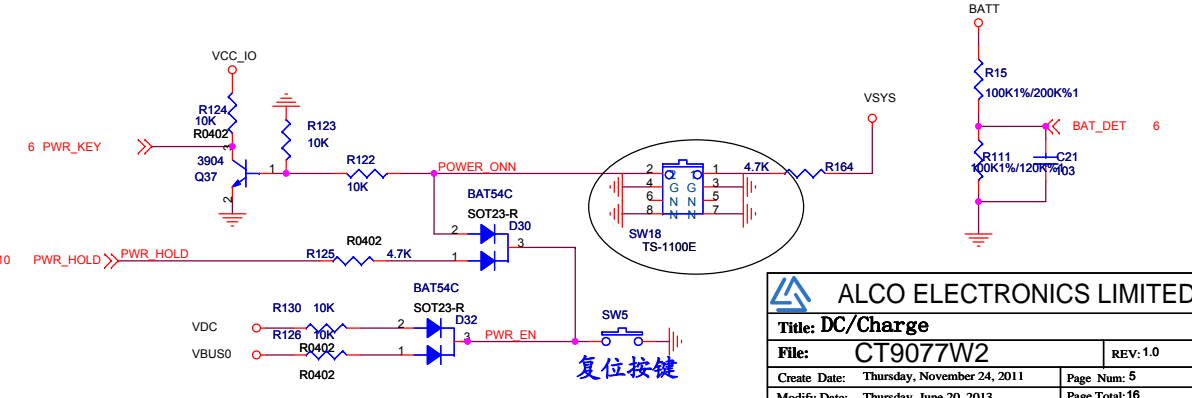
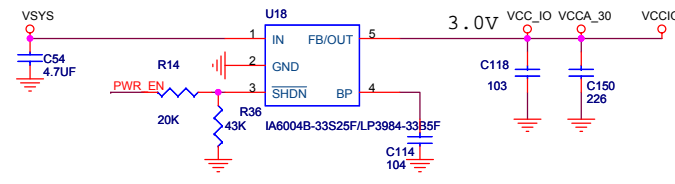
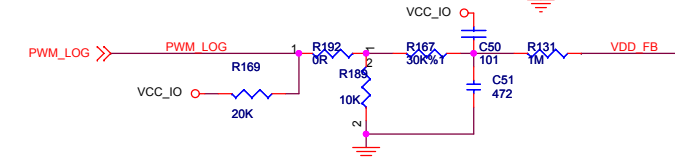
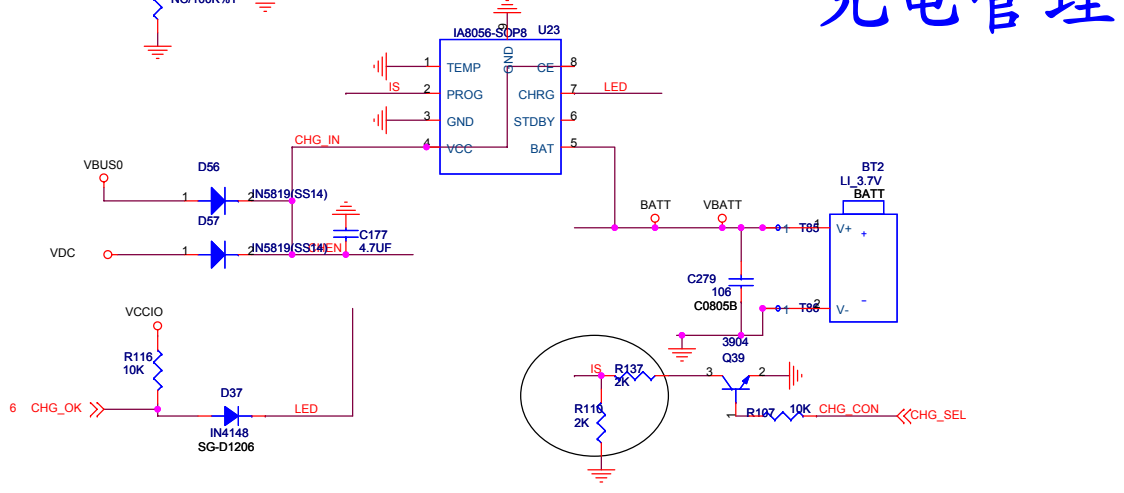
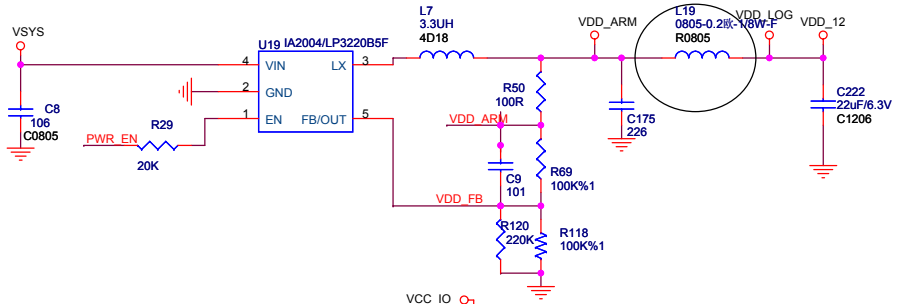
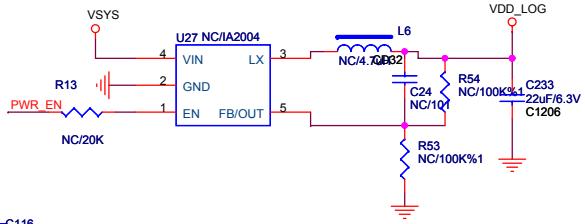
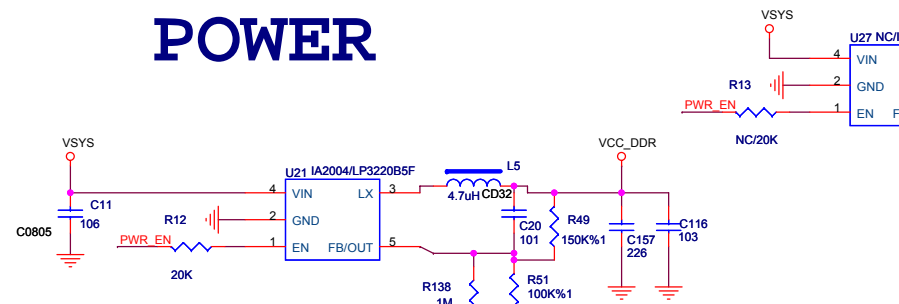
POWER DIAGRAM



- CHG\_SEL <math>\leftrightarrow</math> CHG\_SEL 9
- PWR\_KEY <math>\leftrightarrow</math> PWR\_KEY
- PWR\_HOLD <math>\leftrightarrow</math> PWR\_HOLD
- BAT\_DET <math>\leftrightarrow</math> BAT\_DET
- MARK1
- MARK2
- MARK3
- MARK4

# POWER

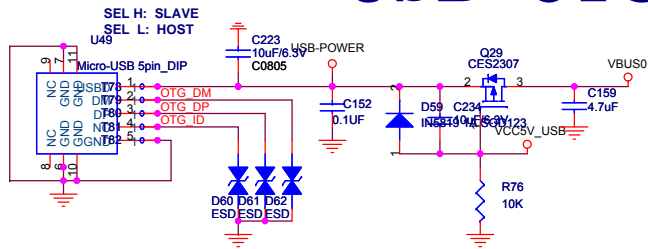
# 充电管理



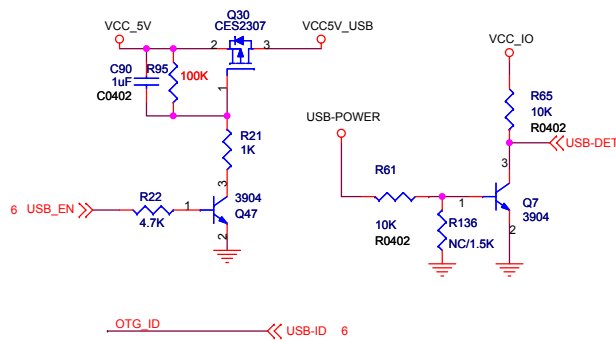
<b>ALCO ELECTRONICS LIMITED</b>	
<b>Title: DC/Charge</b>	
<b>File: CT9077W2</b>	REV: 1.0
Create Date: Thursday, November 24, 2011	Page Num: 5
Modify Date: Thursday, June 20, 2013	Page Total: 16

复位按键

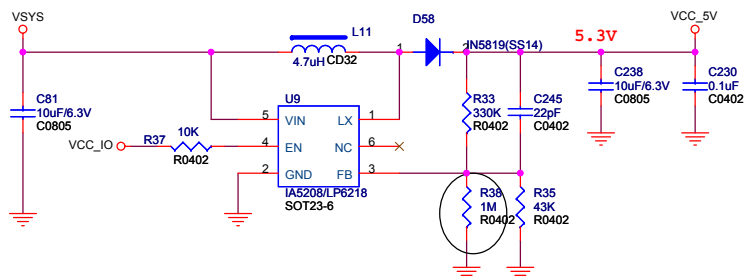
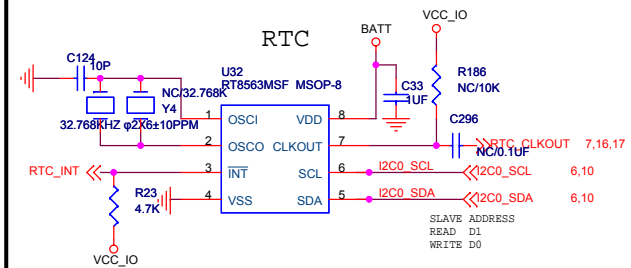
# USB OTG



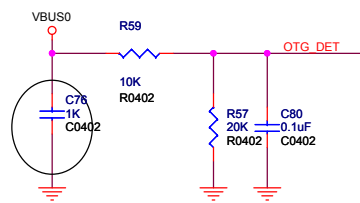
USB OTG PORT



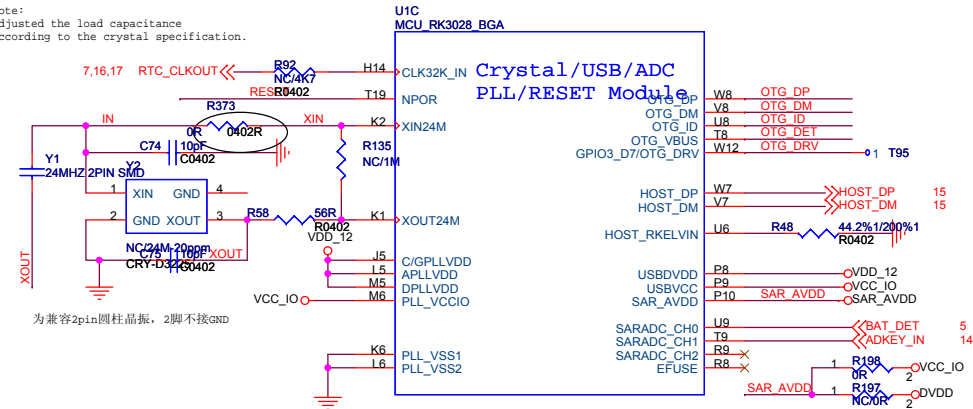
OTG POWER



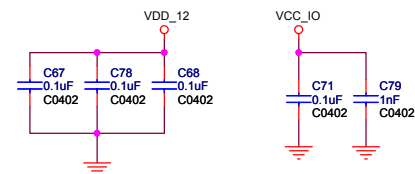
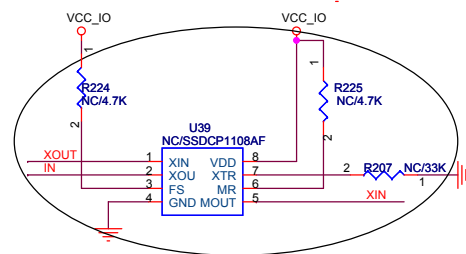
VCC\_5V POWER



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



为兼容2pin圆柱晶振，2脚不接GND



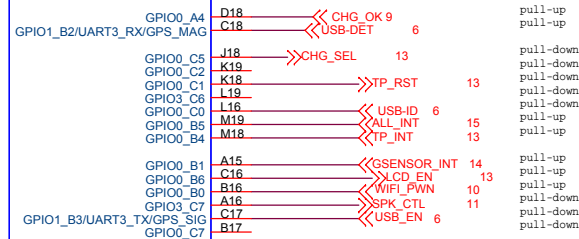
RK2928-C





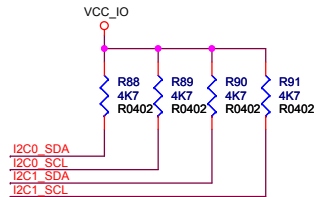
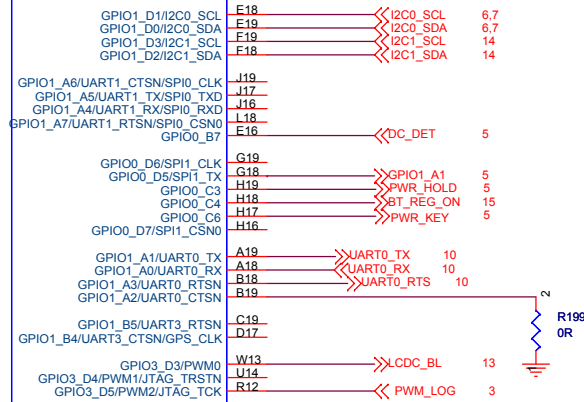
U1K  
MCU RK3028 BGA

**GPIO**



U1G  
MCU RK3028 BGA

**UART/PWM/I2C  
I2S Module**



RK2928-G

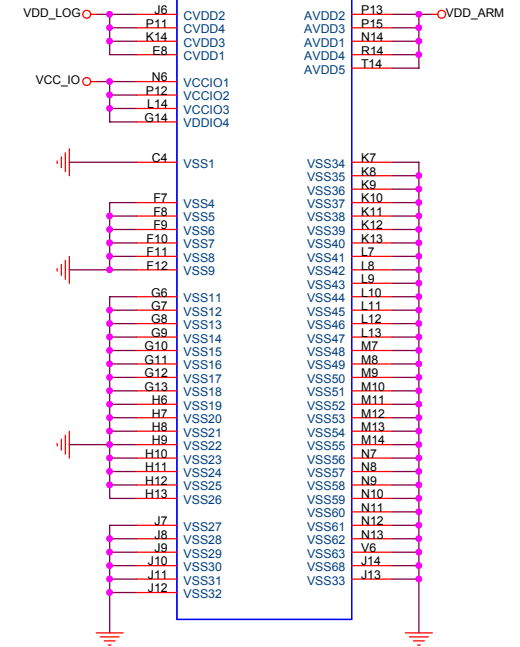
U1J  
MCU RK3028 BGA

**JTAG Module**



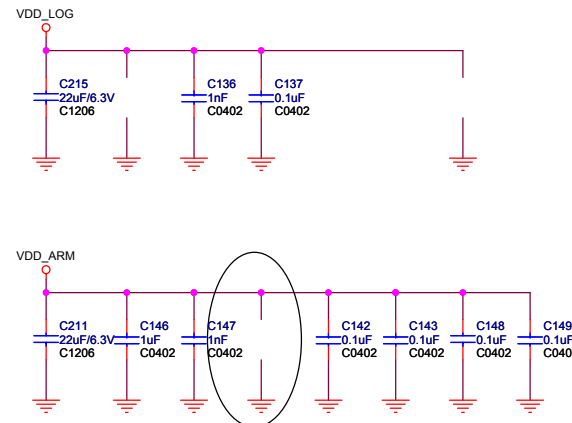
U1I  
MCU RK3028 BGA

**POWER**



Note:  
Place these filter capacitors under CPU.

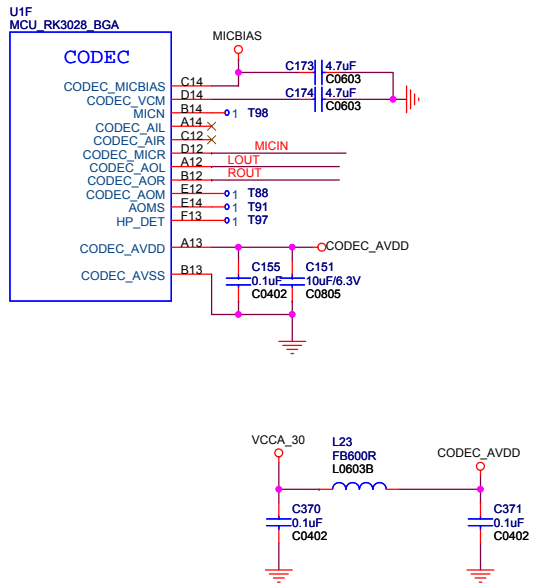
RK2928-I



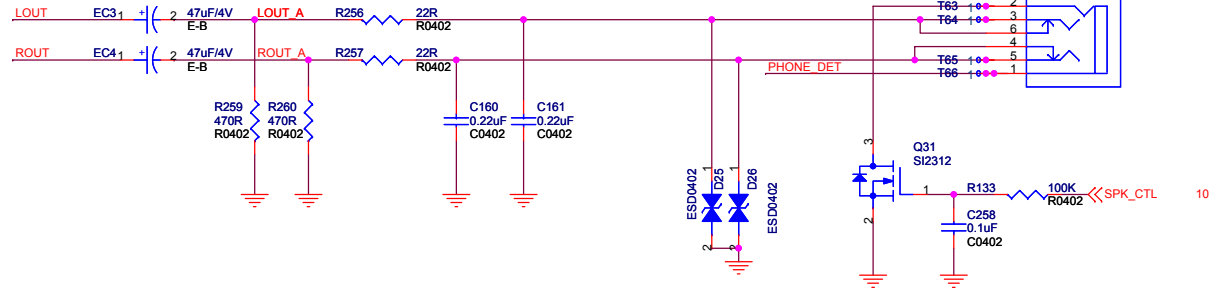
RK2928 POWER FILTER

Title: GPIO/POWER		
File: CT9077W2	REV: 1.0	
Create Date: Monday, October 18, 2010	Page Num: 10	
Modify Date: Thursday, June 20, 2013	Page Total: 16	

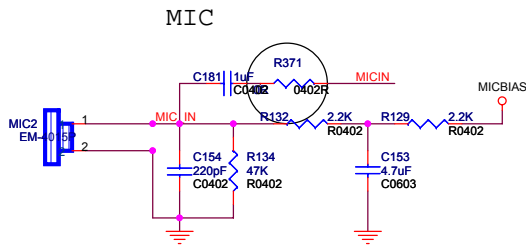




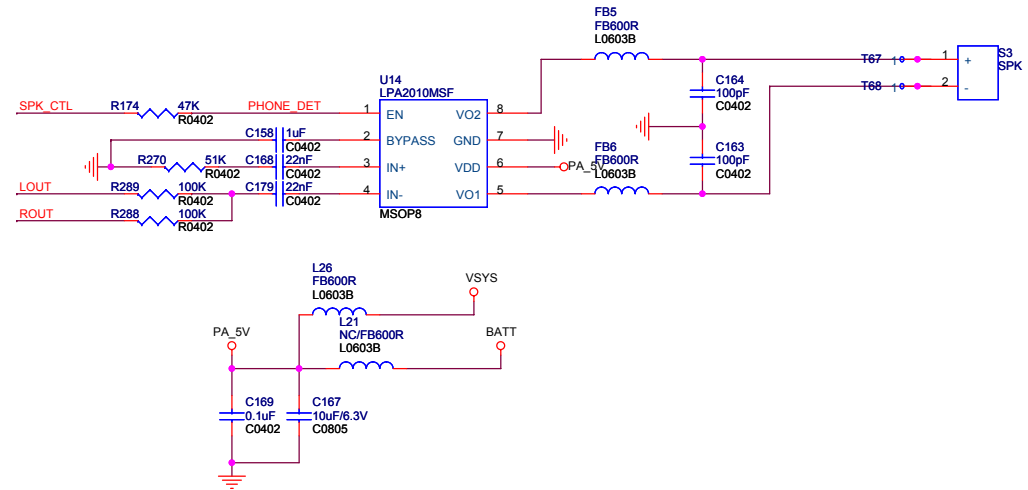
RK2928-F



HEADPHONE



SPEAKER DRIVER



ALCO ELECTRONICS LIMITED

Title: AUDIO

File: CT9077W2

REV: 1.0

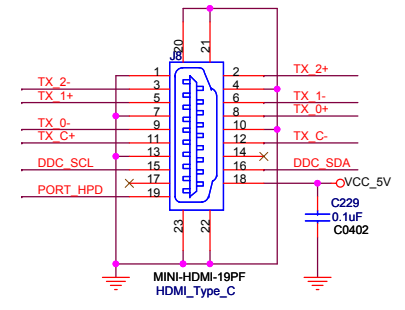
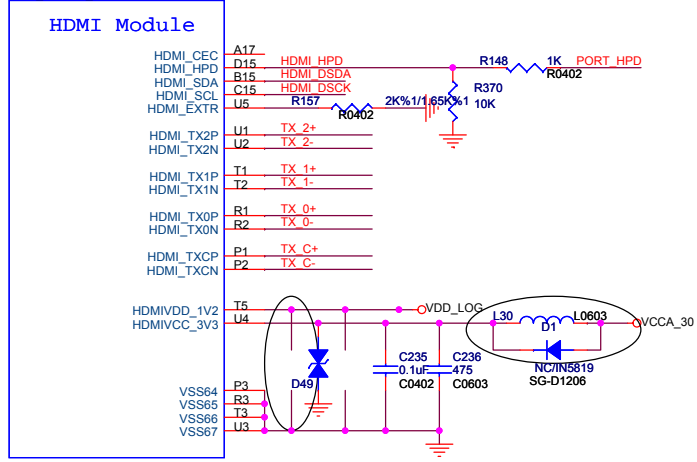
Create Date: Friday, May 04, 2012

Page Num: 11

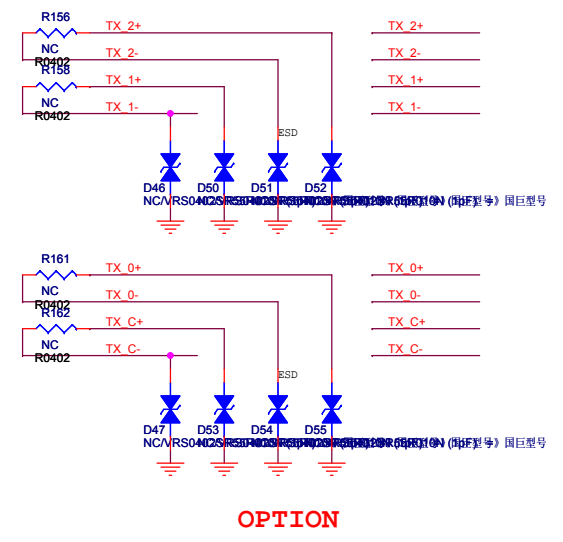
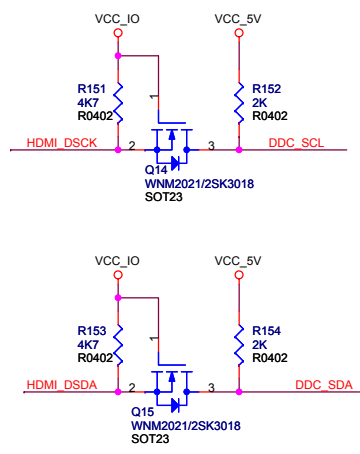
Modify Date: Thursday, June 20, 2013

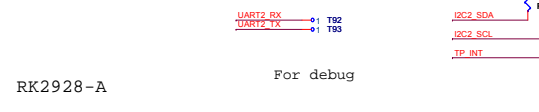
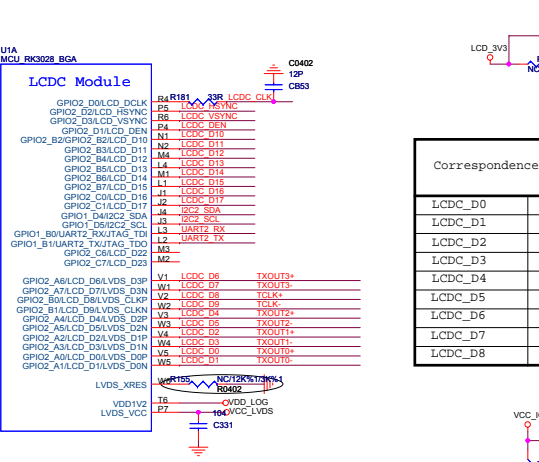
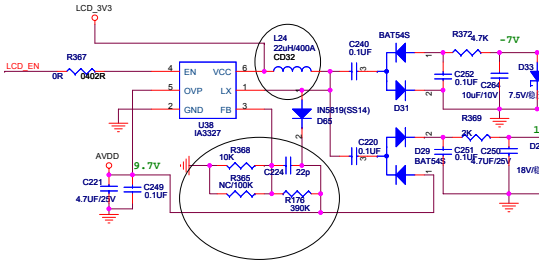
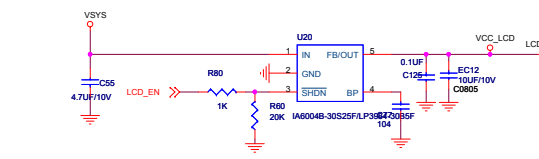
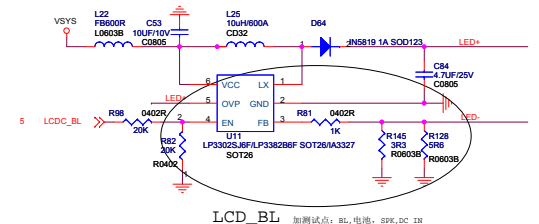
Page Total: 16

U1L  
MCU\_RK3028\_BGA



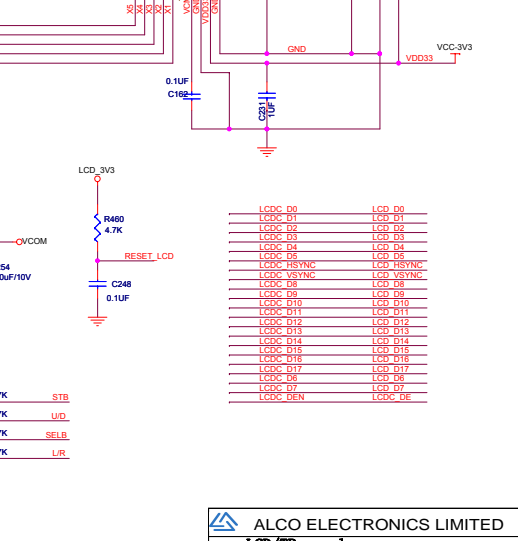
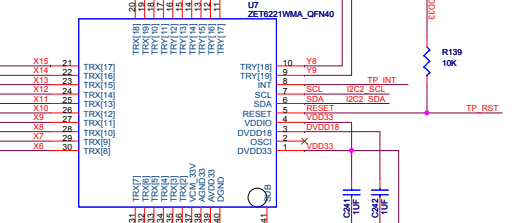
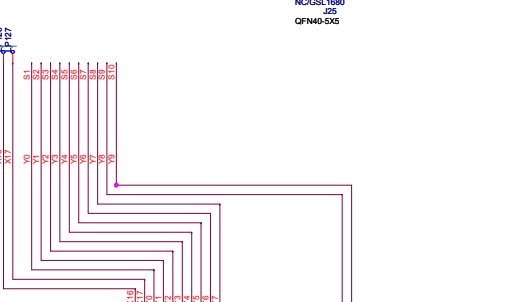
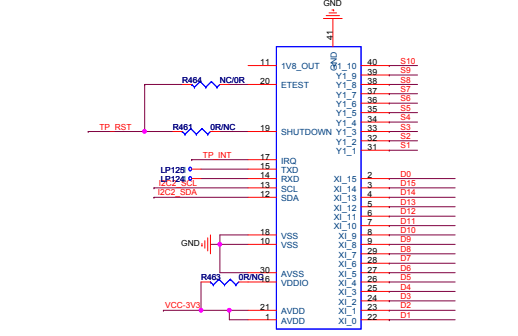
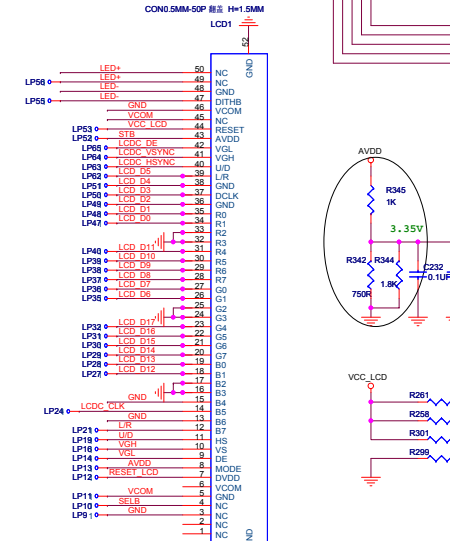
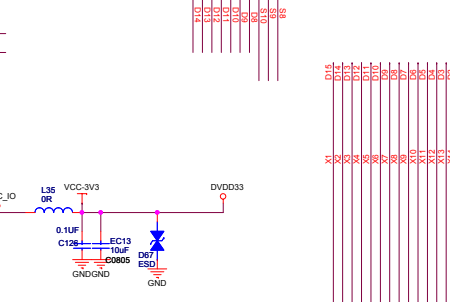
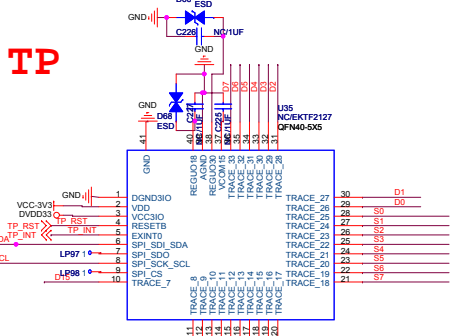
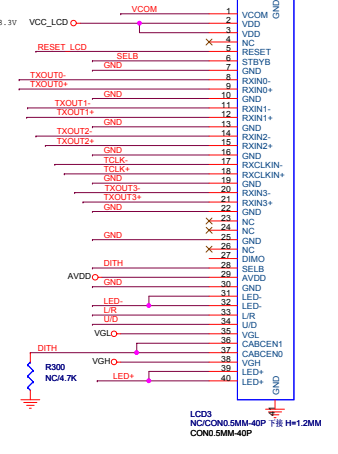
RK2928-L





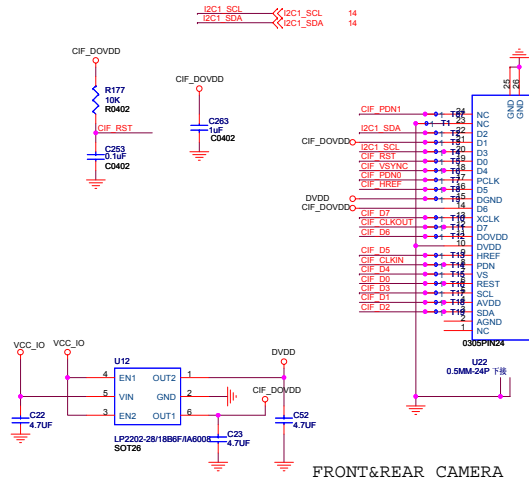
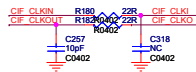
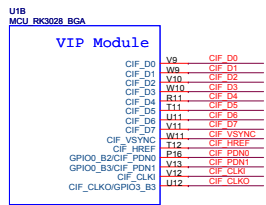
Correspondence between LCDC DATA and RGB

LCDC_D0	B2	LCDC_D9	G5
LCDC_D1	B3	LCDC_D10	G6
LCDC_D2	B4	LCDC_D11	G7
LCDC_D3	B5	LCDC_D12	R2
LCDC_D4	B6	LCDC_D13	R3
LCDC_D5	B7	LCDC_D14	R4
LCDC_D6	G2	LCDC_D15	R5
LCDC_D7	G3	LCDC_D16	R6
LCDC_D8	G4	LCDC_D17	R7



RK2928-A

For debug

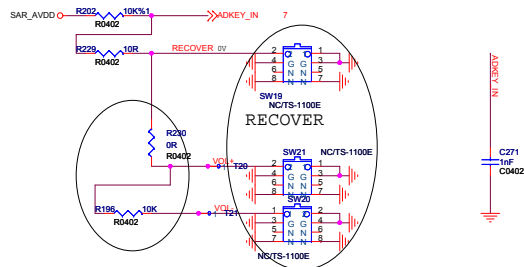


RK2928-B

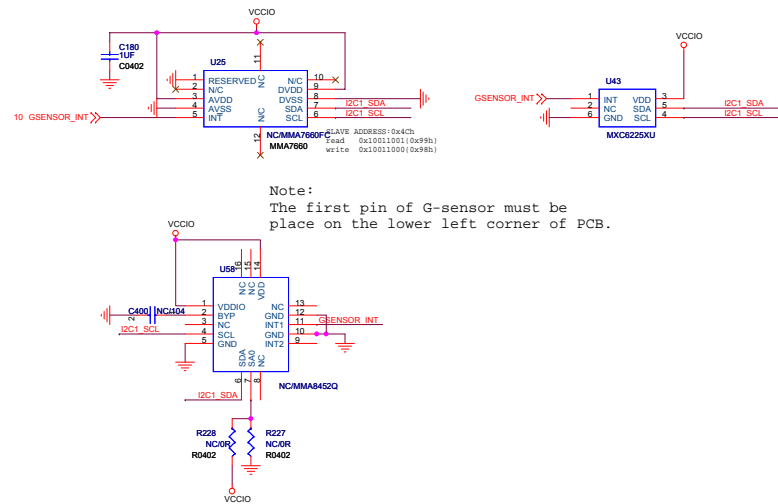
Note: If using other sensor modules, follow to the requirements of SPEC on the power supply.

KEY BAORD

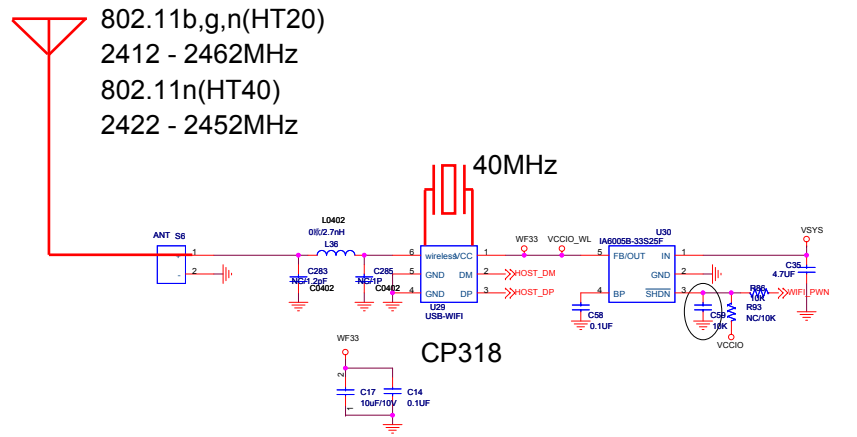
When the system power on, the Adkey\_in level is 0V, RK2928 enter into loader mode.



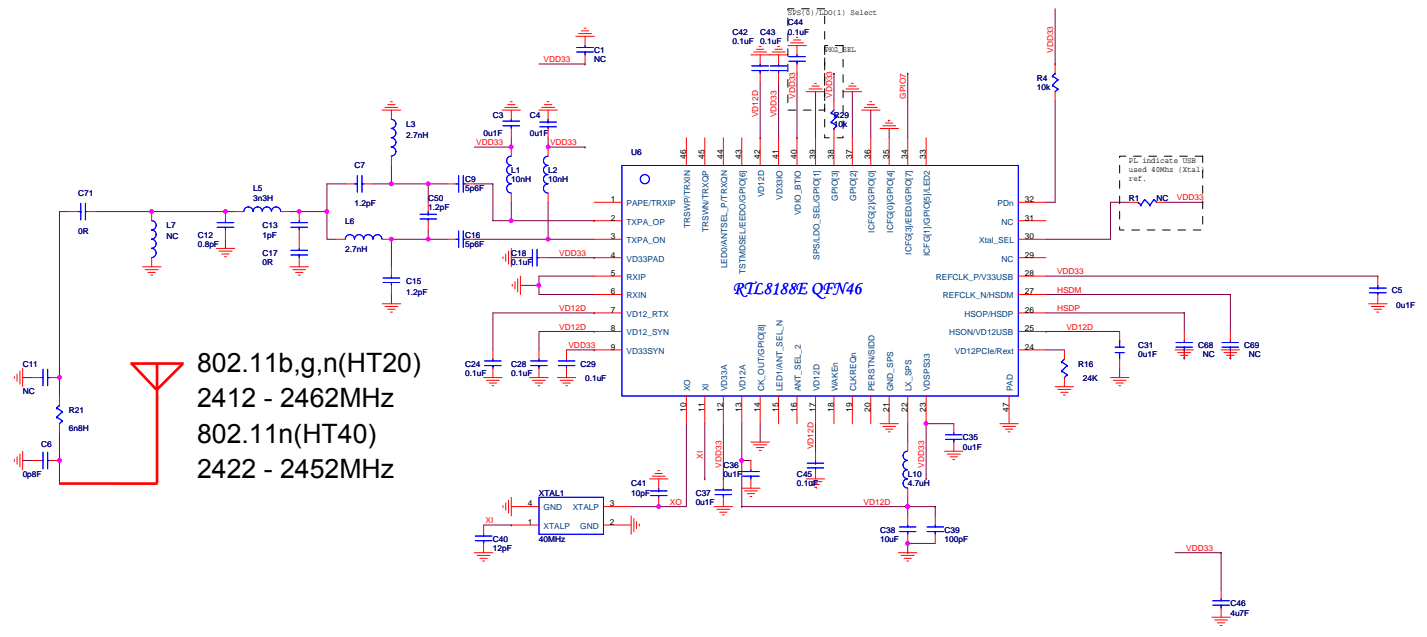
3D G-Sensor



NET&PIN	WIFI&BT&GPS	WIFI&BT	WIFI
SYSRST_B 1	SYSRST	WIFI RESET	
BGF_INT_B 2	BT/GPS/FM INT	WIFI EN	
3	external clock EN	NC	
WB_EN 4	POWER EN	NC	
ANTSSEL2 5	antenna selection	SET 0	
ANTSSEL3 6	NC	BT RESET	
WIFI_INT_B 8	WIFI INT	BT_INT	
RTC_CLKOUT 29	32K CLOCK	NC	
HOST_DP 30	NC	NC	USB
HOST_DM 31	NC	NC	
GPS_LNA 33	LNA EN	BT POWER EN	
GPS_SYNC 34	GPS SYNC signal	NC	



UD88E00-1V0	Initial	20120117
UD88E00-1V0	delete R3, R10, R11, R32, R40	20120210
UD88E00-1V0	add C30, C31	20120210
UD88E00-1V0	update JNF matching value, L5, C1	20120325



WiFi Module CP318

Title		
UD88E00-1V0		
Size	Document Number	Rev
CustomDoc-		1V0
Date:	Thursday, April 05, 2012	Sheet 1 of 1