




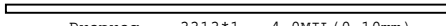
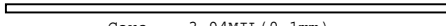
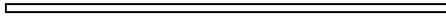
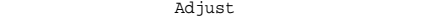
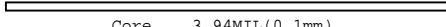
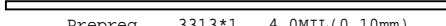
CONTENT INDEXING

01. INDEX
02. Block Diagram
03. SYSTEM POWER DIAGRAM
04. DC/CHARG
05. SYSTEM POWER
06. USB OTG/VIB
07. DDR3
08. FLASH/TF CARD
09. GPIO
10. AUDIO
11. LCD PANEL
12. TOUCH PANEL
13. HDMI
14. CAMERA/SENSOR/KEY
15. WIF/BT
16. AMP/EXP
17. Modify note

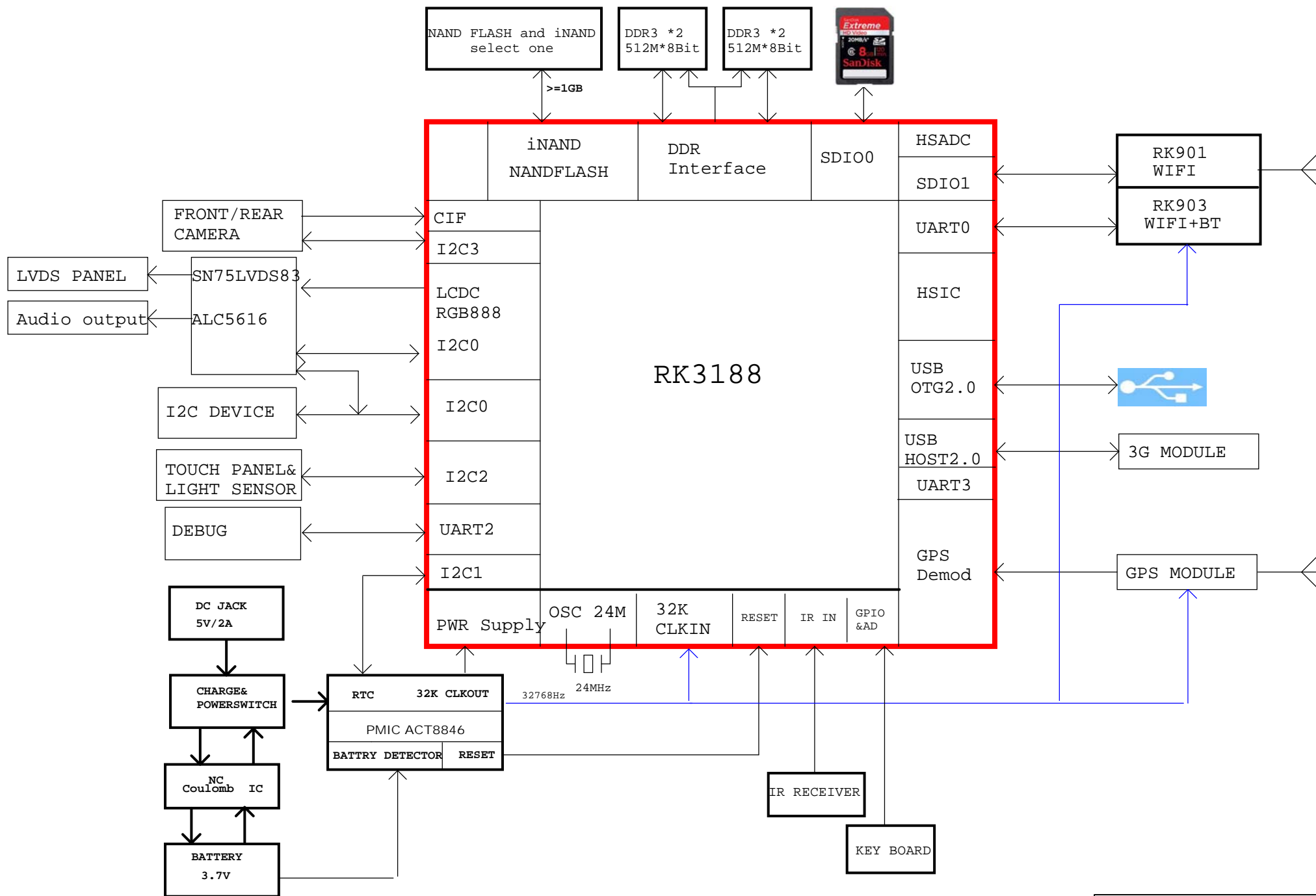
PCB POWER WIRE WIDTH INDICATE

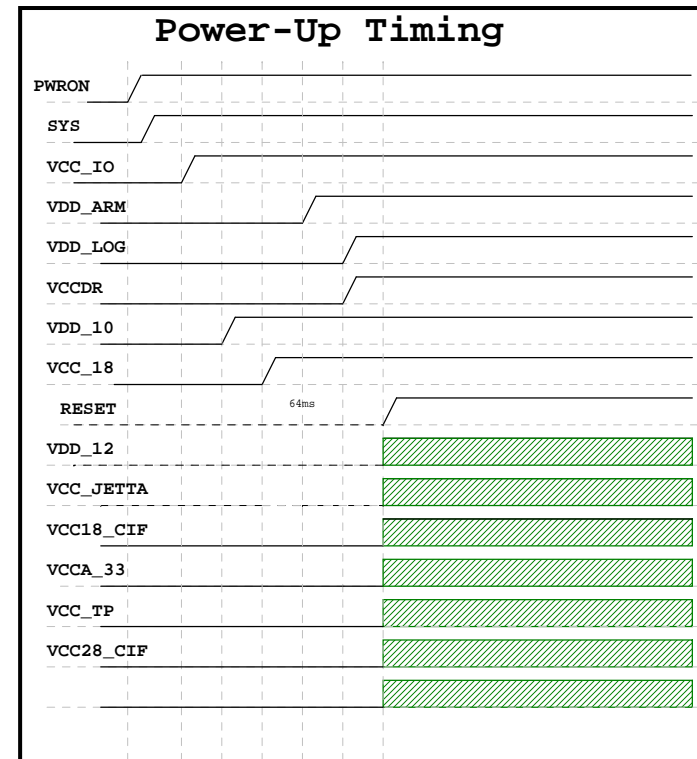
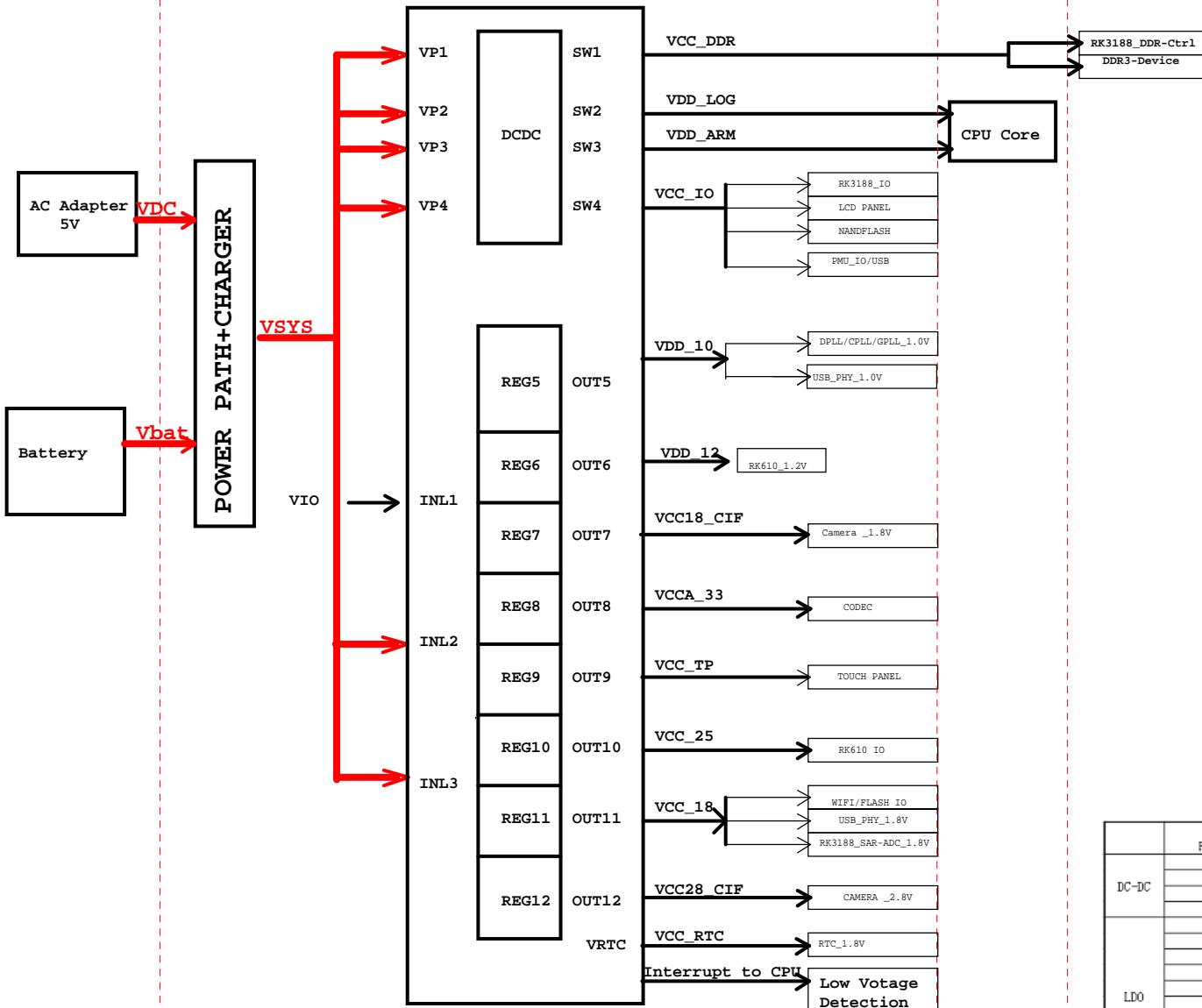
	above 80 miles
	above 50 miles
	above 30 miles
	above 16 miles
No indicate	Under needs

6 LAYERS PCB STACK

TOP		Hoz(18um) + plating copper(18um)
	Prepreg 3313*1 4.0MIL(0.10mm)	
GND		1oz(35um)
	Core 3.94MIL(0.1mm)	
POWER(S1)		1oz(35um)
	Adjust	
S1(S2)		1oz(35um)
	Core 3.94MIL(0.1mm)	
GND(POWER)		1oz(35um)
	Prepreg 3313*1 4.0MIL(0.10mm)	
S2(BOTTOM)		Hoz(18um) + plating copper(18um)

万利达 malata 万利达(厦门)技术中心			
Project		Document Number	
SMB-D7806		8557C	
Size	Title	Designer	Rev
Custom	Index	Yang Weiqiang	3.0
Date: Monday, August 12, 2013		Sheet	1 of 17

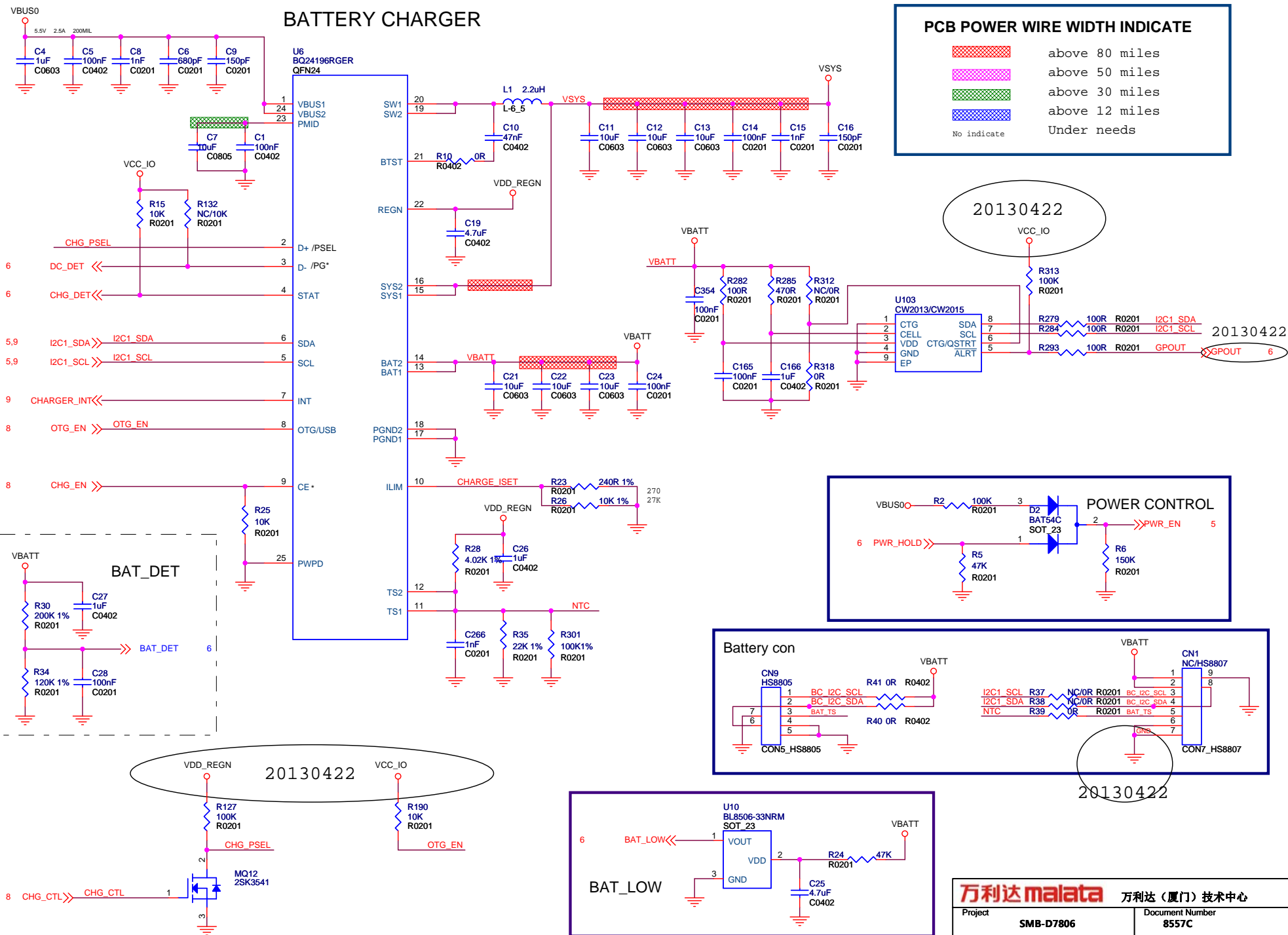


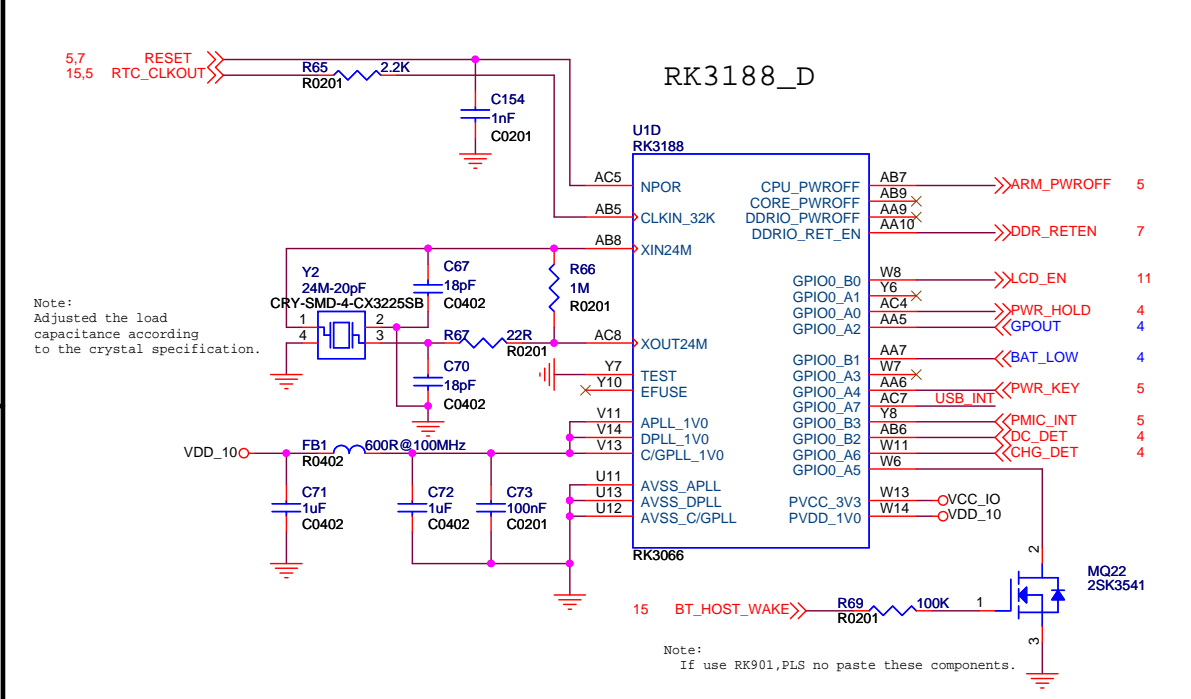
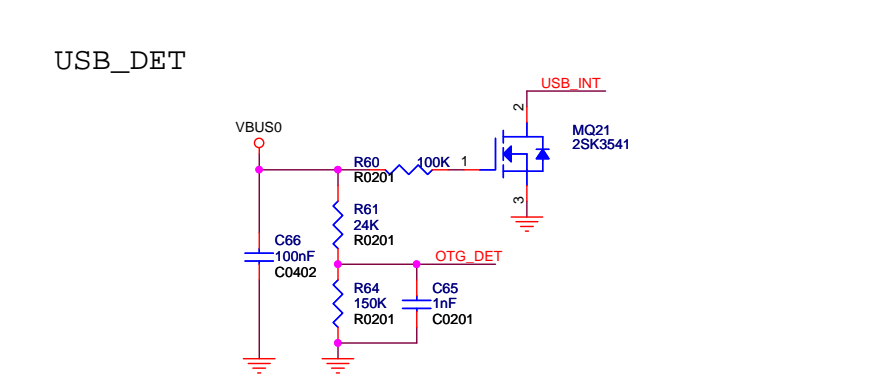
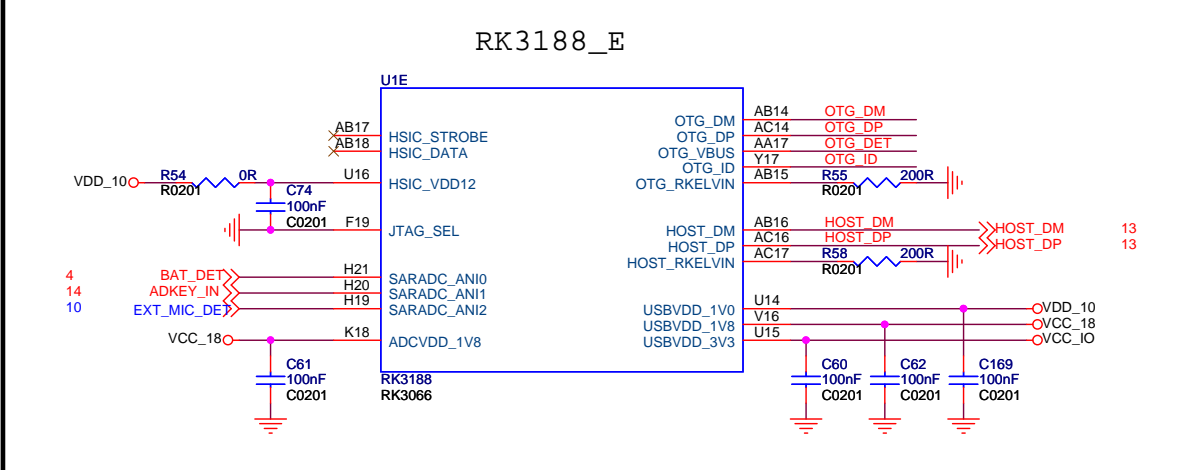
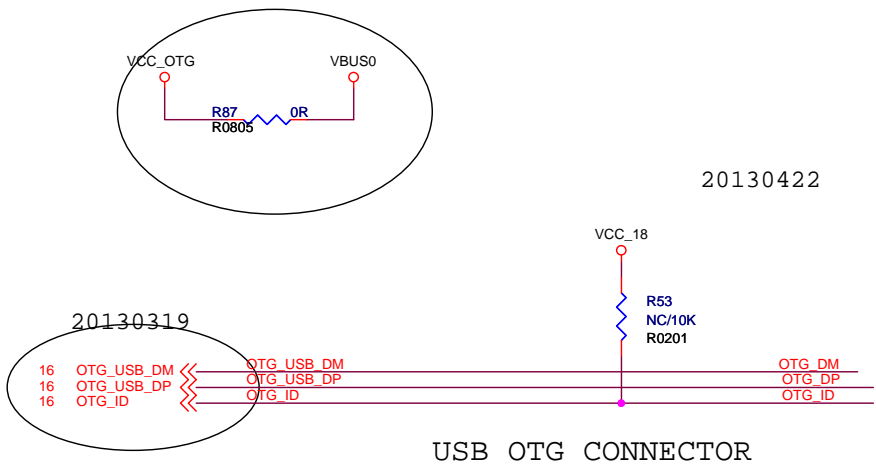


	ACT8846 REGULATOR	RK3188 POWER	MAX CURRENT	DEFAULT VOLTAGE	POWER UP ORDER	ON/OFF/SLEEP	备注
DC-DC	REG1	Vcc_DDR	1.5A	1.2V/ON	5		DDR
	REG2	Vdd_LOG	2.8A	1.0V/ON	5		LOGIC
	REG3	Vdd_ARM	2.8A	1.0V/ON	4	ARM OFF	ARM
	REG4	Vcc_IO	1.5A	3.0V/ON	1		I/O
LDO	REG5	Vdd_10	150mA	1.0V/ON	2		PLL, PMU
	REG6	VDD_12	150mA	1.2V/OFF			JETTA
	REG7	Vcc18_CIF	350mA	1.8V/OFF			CAMERA
	REG8	VccA_33	350mA	3.3V/OFF			CODEC
	REG9	Vcc TOUCH	350mA	3.3V/OFF			TP
	REG10	VCC JETTA	150mA	3.3V/OFF			JETTA
	REG11	Vcc_18	350mA	1.8V/ON	3		USB, ADC, FLASH IO/WIFI I/O
	REG12	Vcc28_CIF	350mA	2.8V/OFF			CAMERA
	REG13	VRTC	50mA	1.8V/ ALWAYS ON			

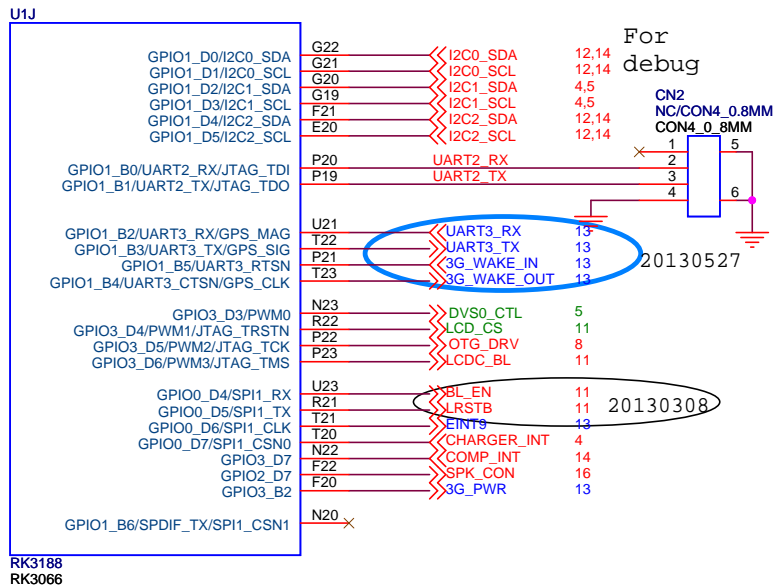
POWER DIAGRAM

BATTERY CHARGER

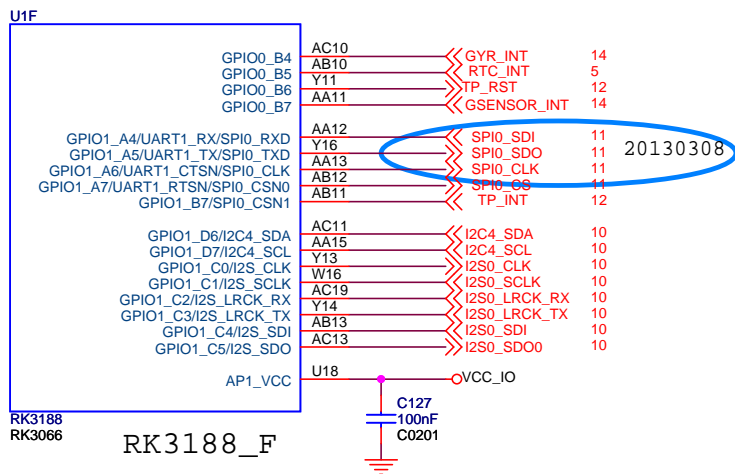




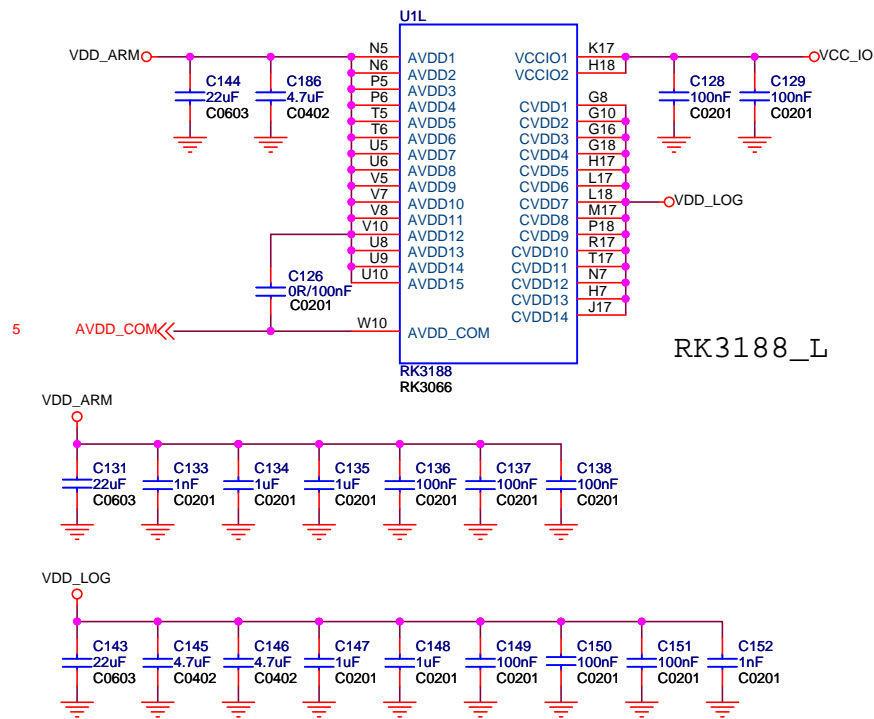
万利达 malata		万利达 (厦门) 技术中心	
Project	SMB-D7806	Document Number	8557C
Size	Custom	Designer	Yang Weiqiang
Date:	Tuesday, August 13, 2013	Sheet	6 of 17



RK3188_J

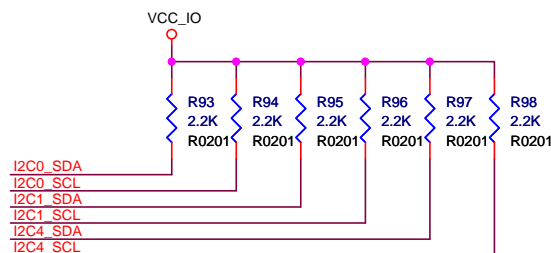


RK3188_F

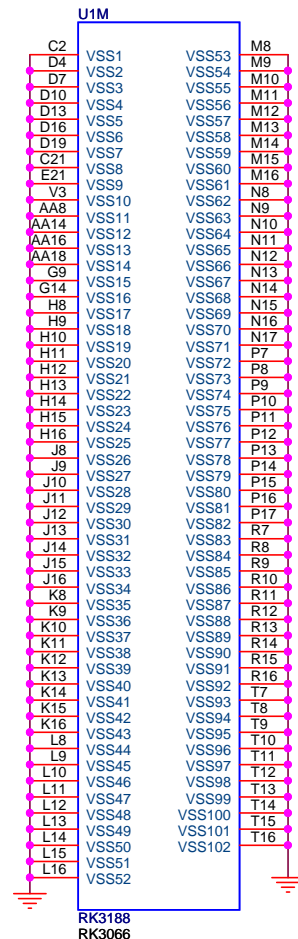


RK3188 CORE POWER FILTER

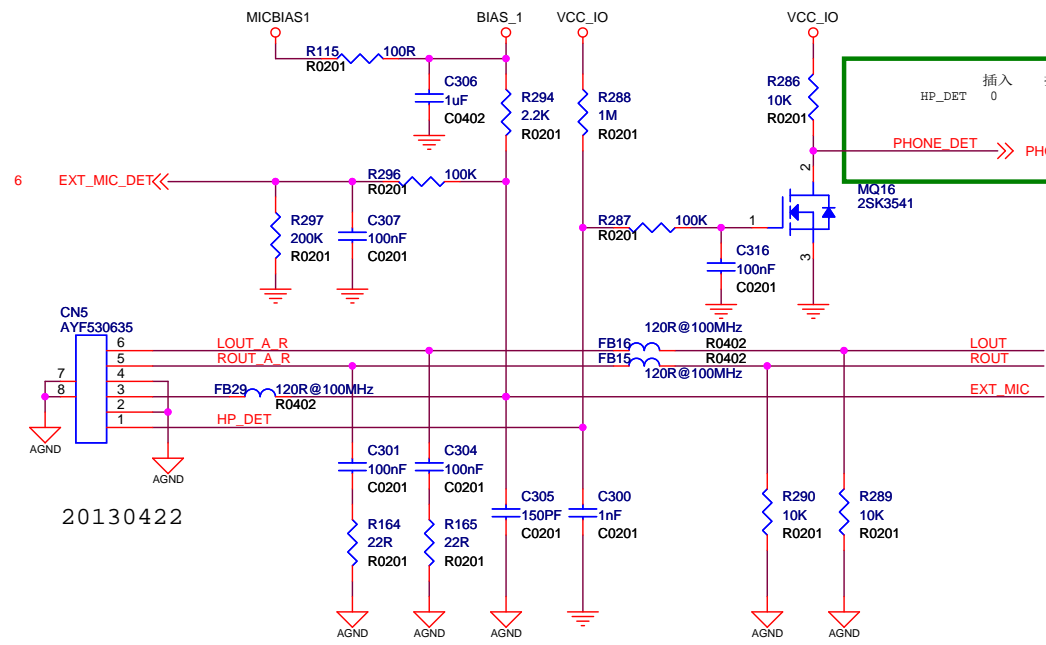
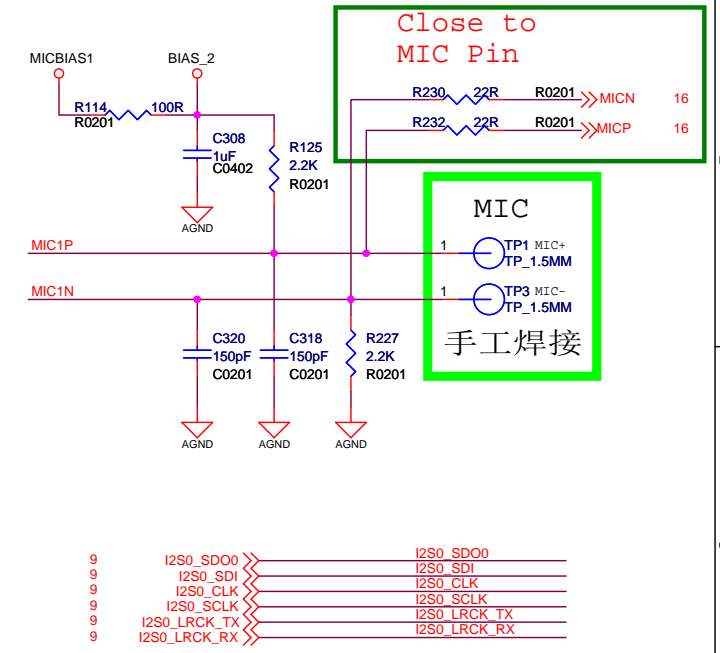
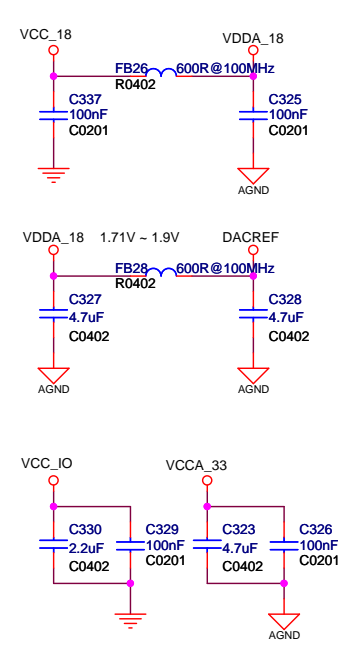
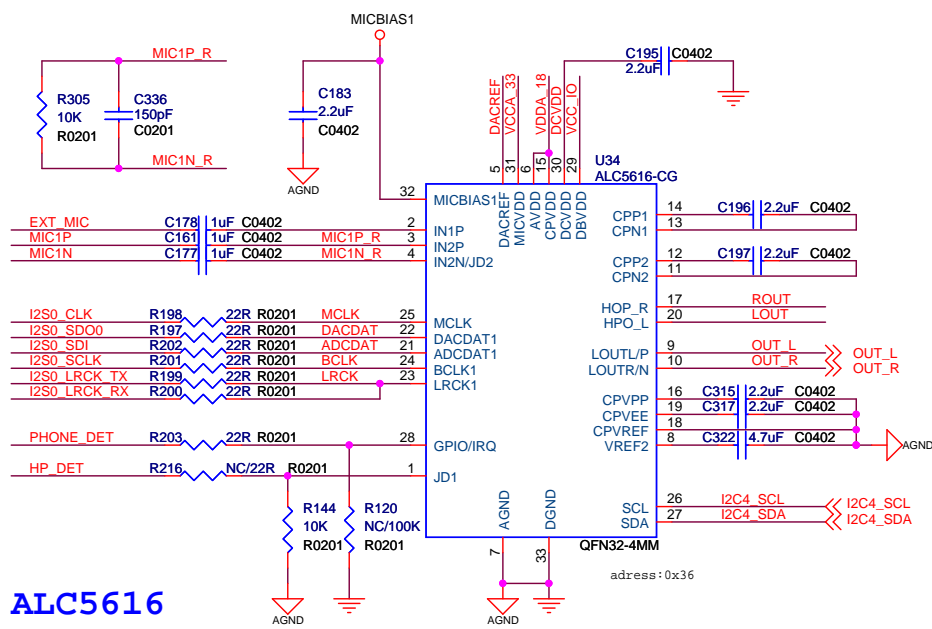
Note:
Place these filter capacitors under CPU.



RK3188_M



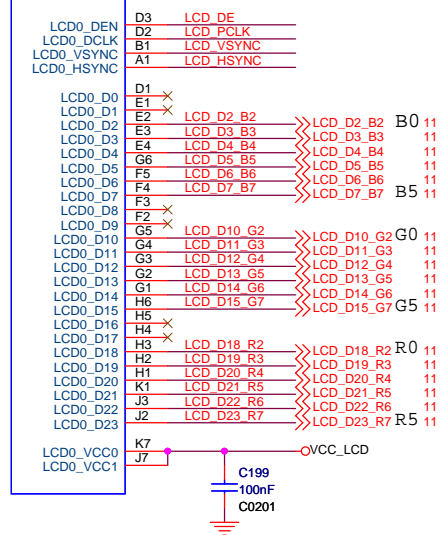
万利达 malata				万利达（厦门）技术中心	
Project		SMB-D7806		Document Number	
				8557C	
Size	Title	Designer		Rev	
Custom	GPIO	Yang Weiqiang		3.0	
Date:		Monday, August 12, 2013		Sheet	9 of 17



万利达 malata 万利达（厦门）技术中心			
Project		Document Number	
SMB-D7806		8557C	
Size	Title	Designer	Rev
Custom	Audio	Yang Weiqiang	3.0
Date: Monday, August 12, 2013		Sheet	10 of 17

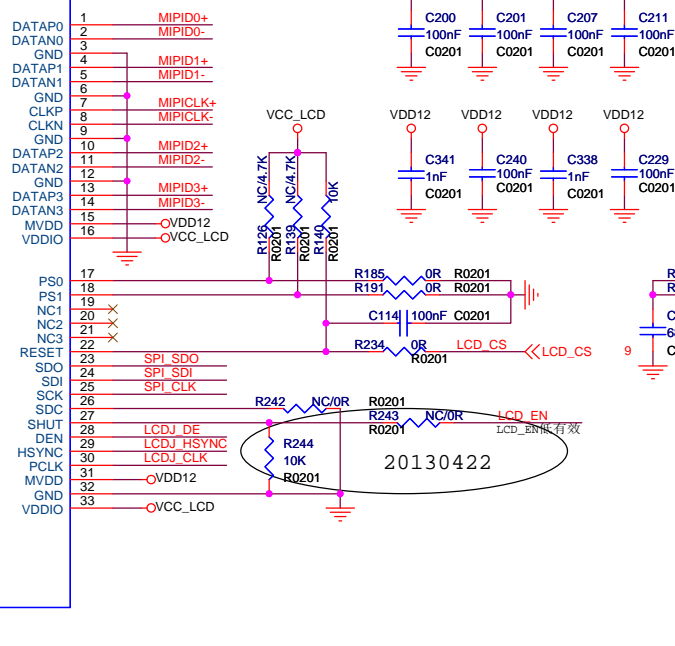
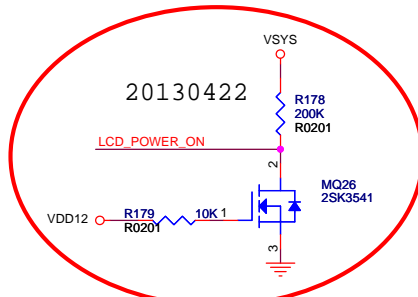
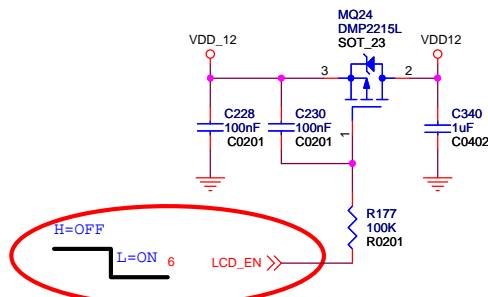
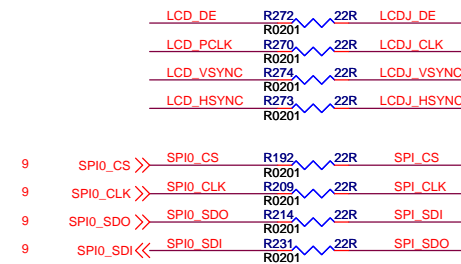
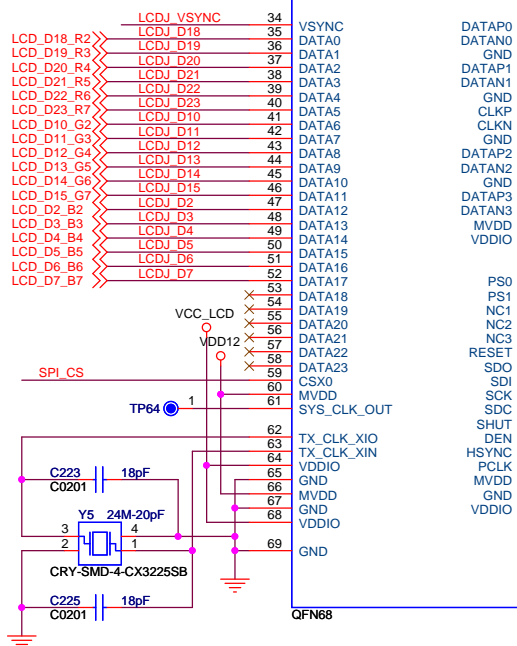
U1A
RK3188
RK3066

RK3188_A

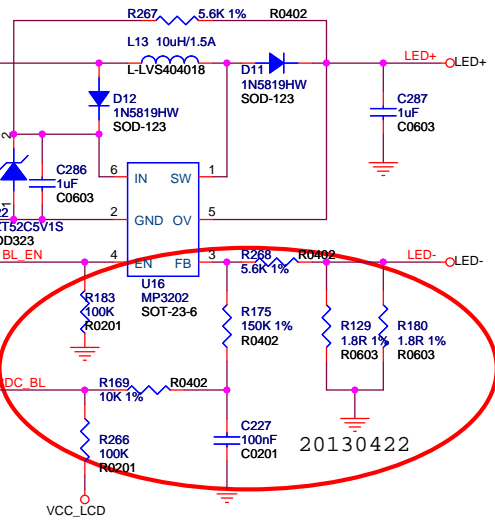
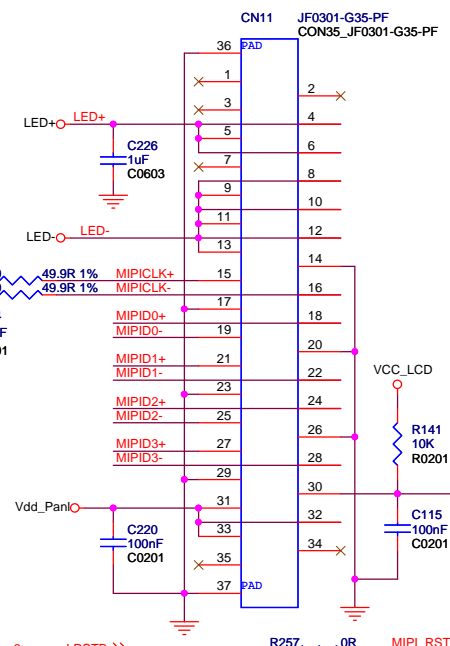
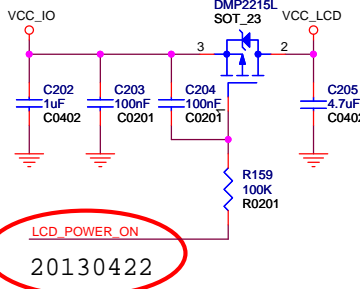
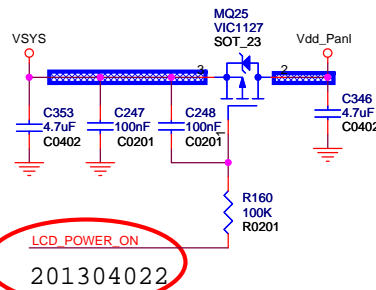


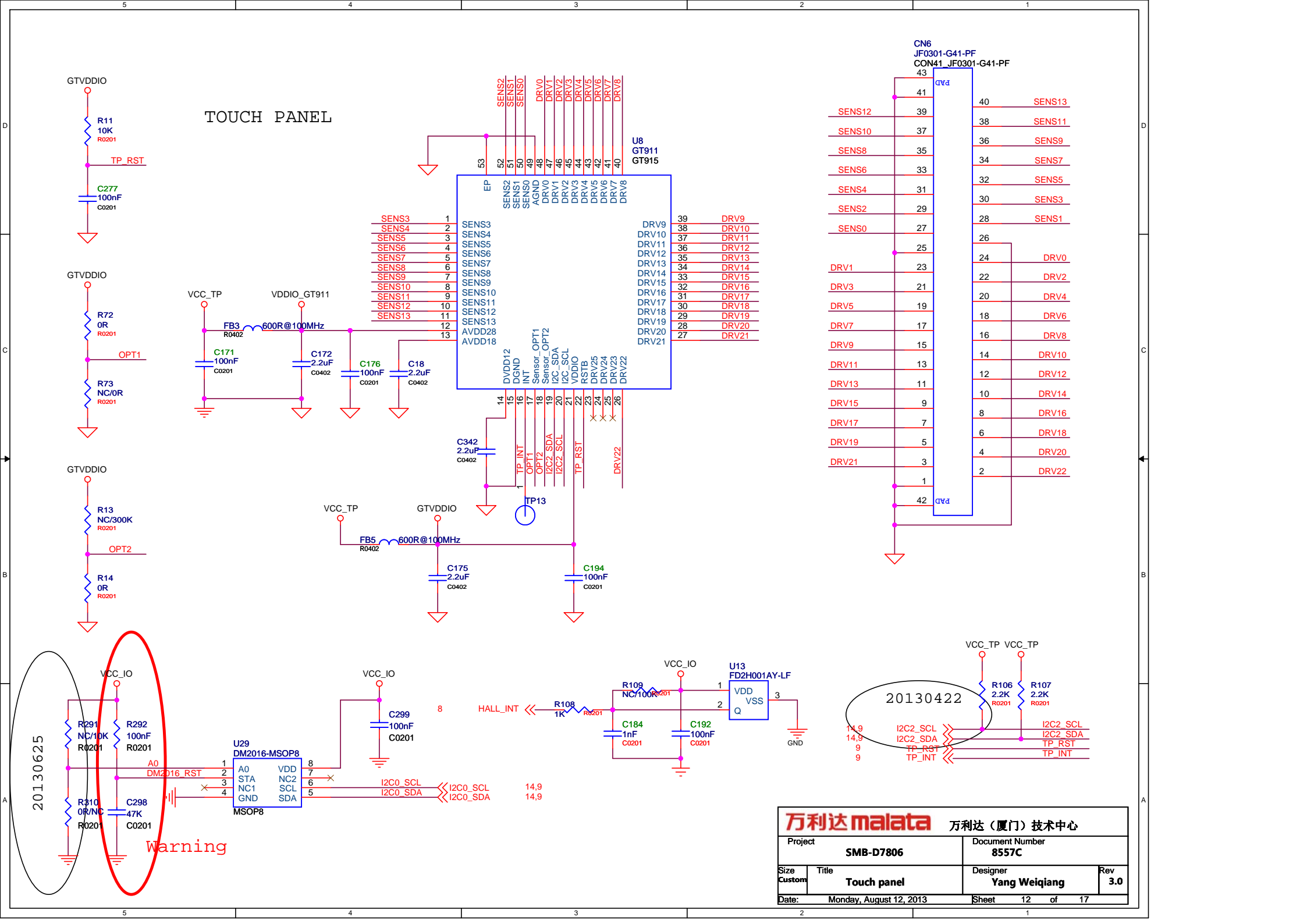
Correspondence between
LCDC DATA and RGB

LCDC_D2	B0	LCDC_D13	G3
LCDC_D3	B1	LCDC_D14	G4
LCDC_D4	B2	LCDC_D15	G5
LCDC_D5	B3		
LCDC_D6	B4	LCDC_D18	R0
LCDC_D7	B5	LCDC_D19	R1
		LCDC_D20	R2
LCDC_D10	G0	LCDC_D21	R3
LCDC_D11	G1	LCDC_D22	R4
LCDC_D12	G2	LCDC_D23	R5



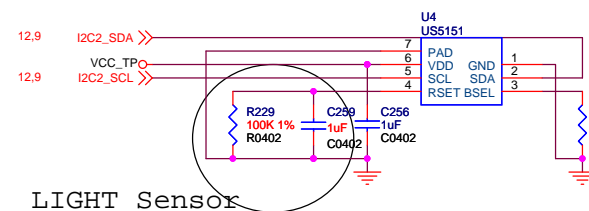
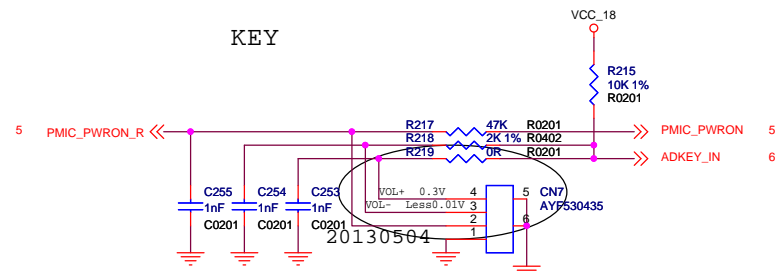
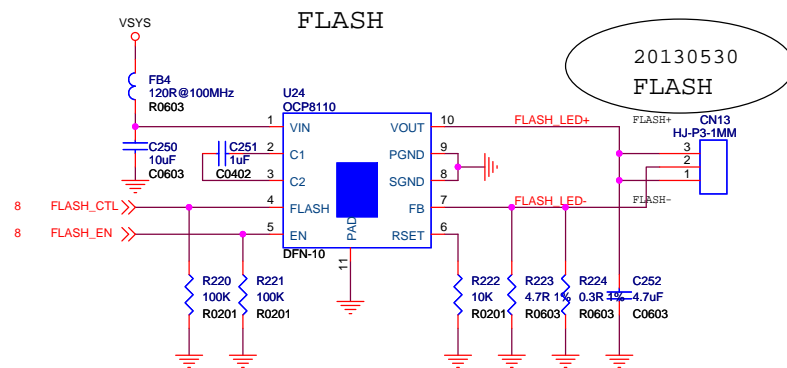
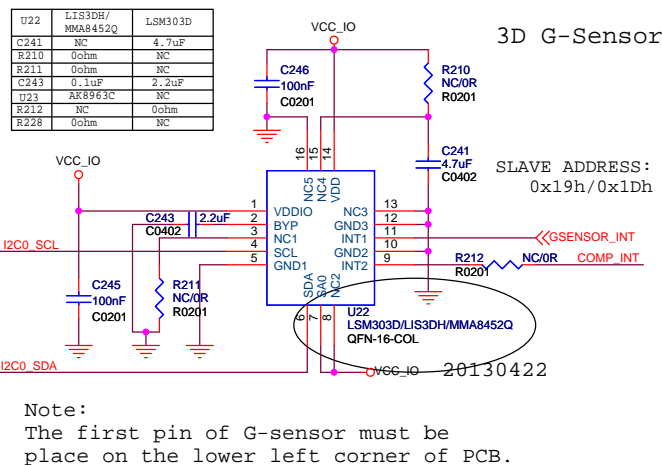
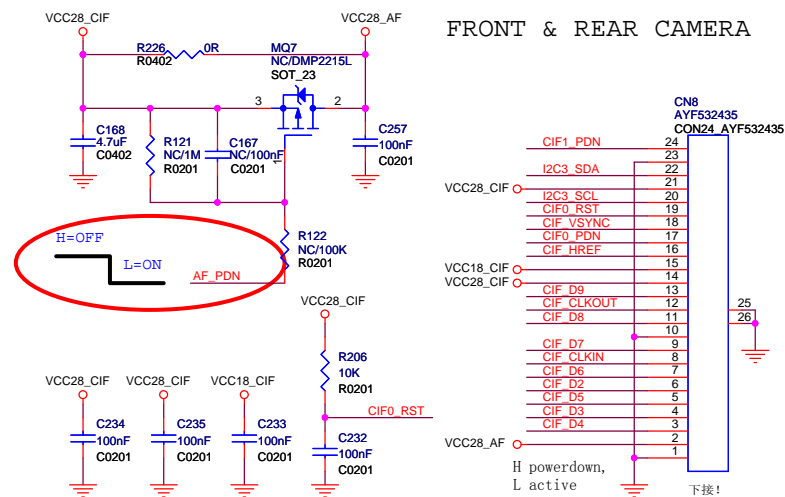
LCD PANEL POWER



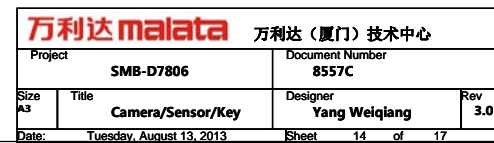


TOUCH PANEL

CN6 JF0301-G41-PF CON41_JF0301-G41-PF		
43	41	40
39	37	36
35	34	32
31	30	28
29	27	26
25	24	22
23	21	20
19	18	16
17	15	14
13	12	10
11	9	8
7	6	4
5	3	2
1	42	1

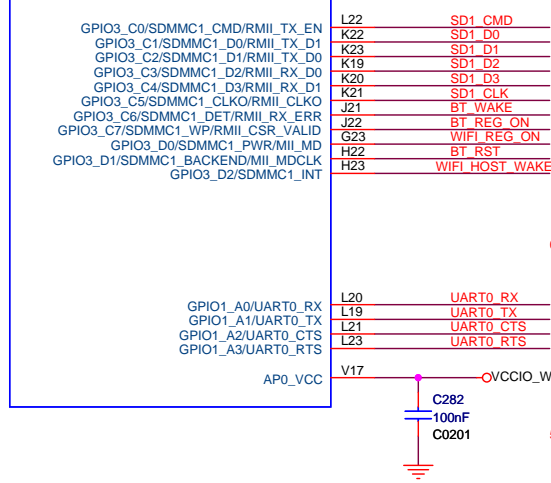


When the system power on, the Adkey_in level is 0V,
K3 enter into recovery mode.

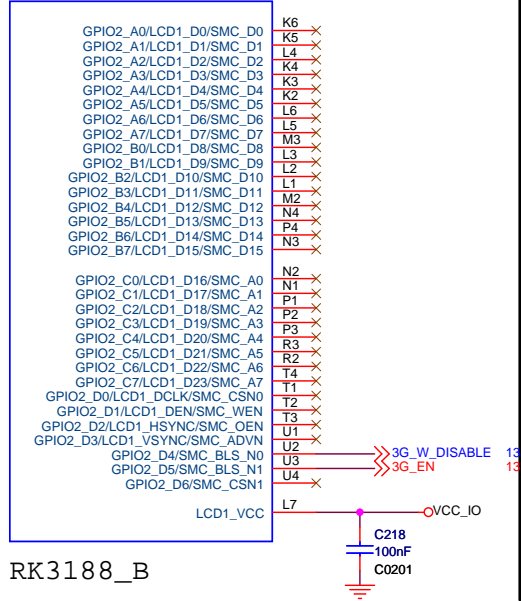


RK3188_H

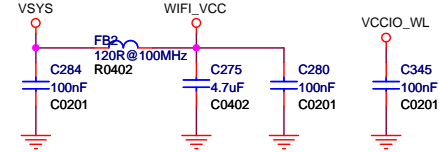
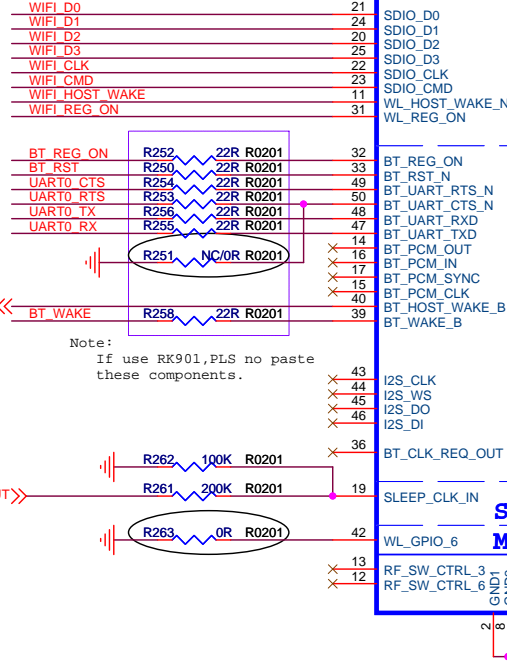
U1H
RK3188
RK3066



U1B
RK3188
RK3066

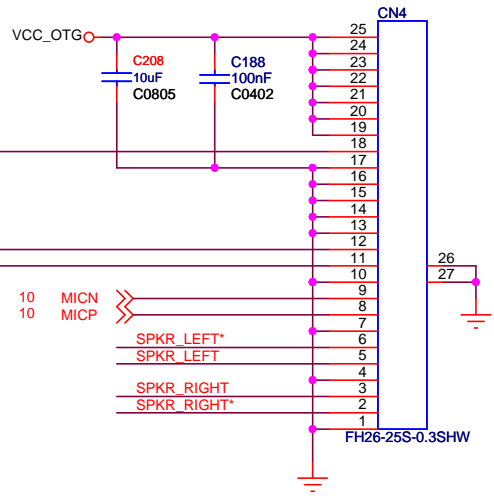
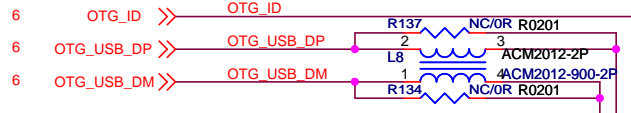
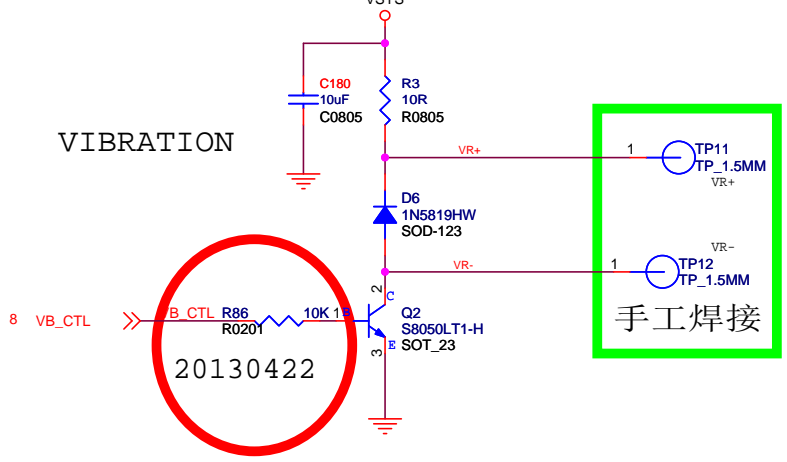


RK3188_B



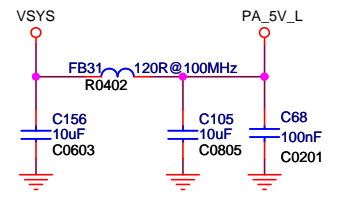
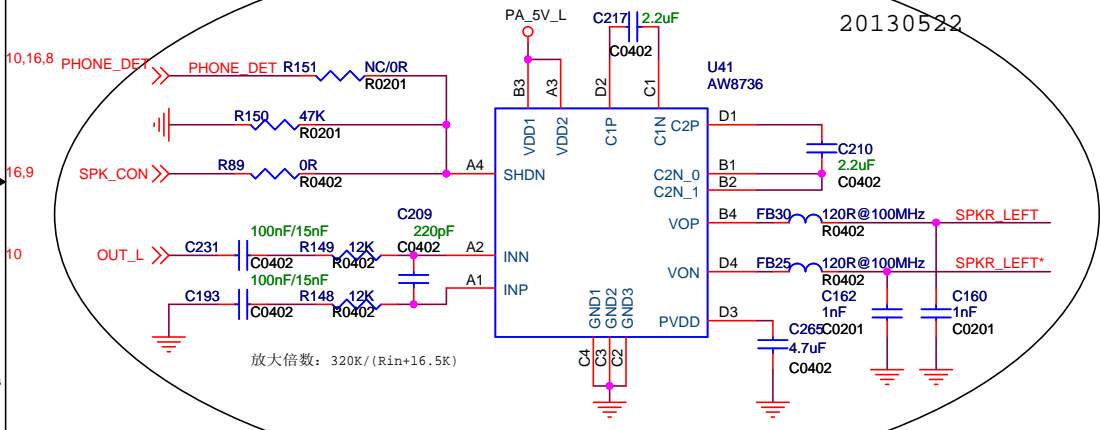
Note :PLS design the RF under RK RF LAYOUT guide;
For more suggestions, please refer to the SPEC
of the wireless IC

万利达 malata 万利达 (厦门) 技术中心			
Project		Document Number	
SMB-D7806		8557C	
Size		Designer	
Custom		Yang Weiqiang	
Title		Rev	
WIFI/BT		3.0	
Date:		Sheet	
Monday, August 12, 2013		15 of 17	



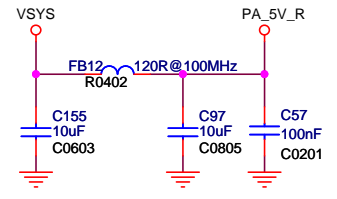
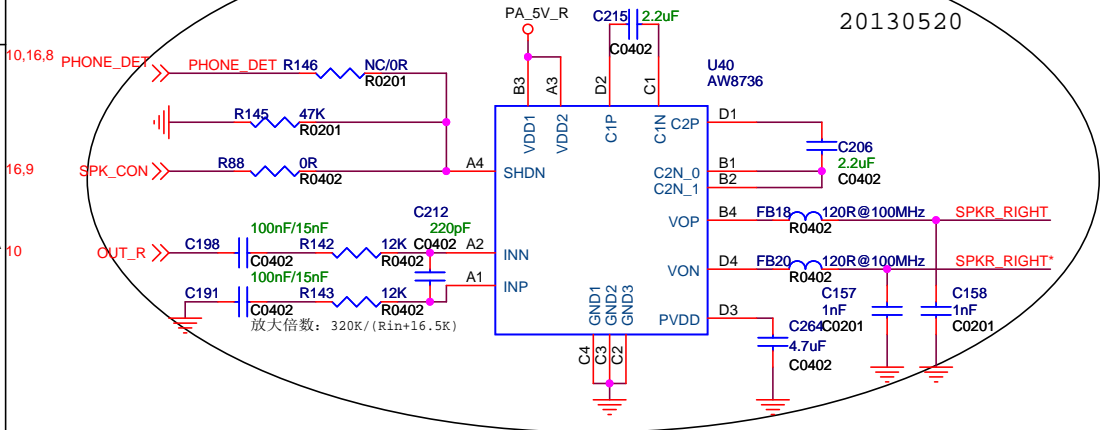
Audio Power Amplifier

20130522




Audio Power Amplifier

20130520



万利达 malata 万利达（厦门）技术中心			
Project		Document Number	
SMB-D7806		8557C	
Size	Title	Designer	Rev
Custom	AMP/EXP	Yang Weiqiang	3.0
Date:	Monday, August 12, 2013	Sheet	16 of 17

版本	标题	更改原因	更改内容
V1.0	DVT版本在7803基础上修改	1、修改电池电量管理IC为CW2013，兼容CW2015 2、修改音频运放为2个AW8736 3、删除HDMI所有电路 4、修改2个DDR3为4个DDR3部分围电路 5、修改TF卡座TF1为ST11S008V4D 6、修改耳机插座CN5为AUD00005606WT-R 7、增加3G Module，SIM为NANO 8、修改Flash电源拓扑	1、Page4： 增加CW2013/2015以及外围电路 2、Page16： 增加2个AW8736以及外围电路 7、增加U104以及外围电路 8、增加R4到R20上拉电阻，共10个
V2.0		1、修改SIM卡座为SF58S006VBA 2、增加RV1-RV3 3、修改CN4接口定义 4、修改R229和C259封装为0402 5、删除R171（封装0805） 6、增加R40、R41（封装0603） 7、增加C20 8、修改R229为100K 1%，C259为1nF 9、修改CN5接口顺序（取反） 10、增加TP13 11、修改TF1为GTF016-C1E 12、增加R306，预留NC 13、修改CN11引脚顺序 14、修改C54/C168为4.7uF	
V3.0		1、修改C243接地方式 2、增加R152 3、修改串口测试点为CN2座子 4、增加C209、C212 5、修改C32、C36、C39、C40、C58、C69为22uF 6、修改C131、C143、C144为0603 22uF 7、修改C126为0R 8、修改C67为18pF 9、修改R85、C182为0402封装 10、修改R134/R137为共模电感 11、修改C67、C70为0402封装	1、Page 14.Camera/Sensor/Key 2、Page 14.Camera/Sensor/Key 3、Page 09.GPIO 4、Page 16.AMP/EXP

		万利达（厦门）技术中心	
Project SMB-D7806		Document Number 8557C	
Size A	Title Modify note	Designer Yang Weiqiang	Rev 3.0
Date: Tuesday, August 13, 2013		Sheet 17 of 17	