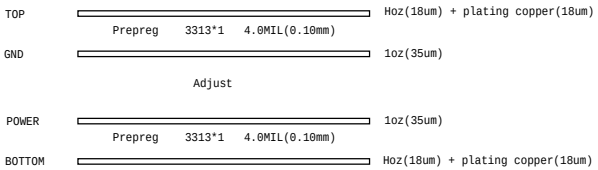
CONTENT INDEXING

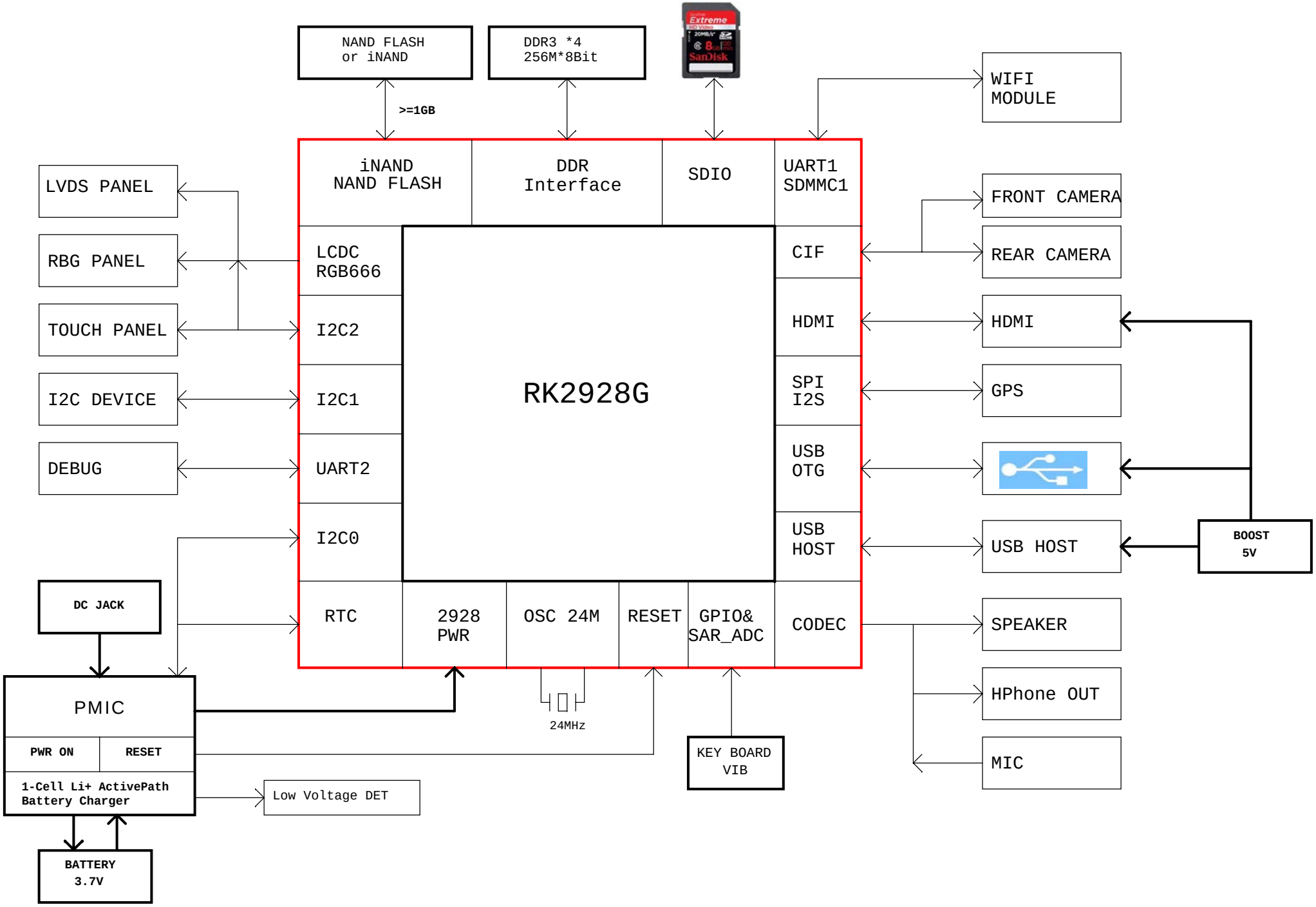
PCB POWER WIRE WIDTH INDICATE

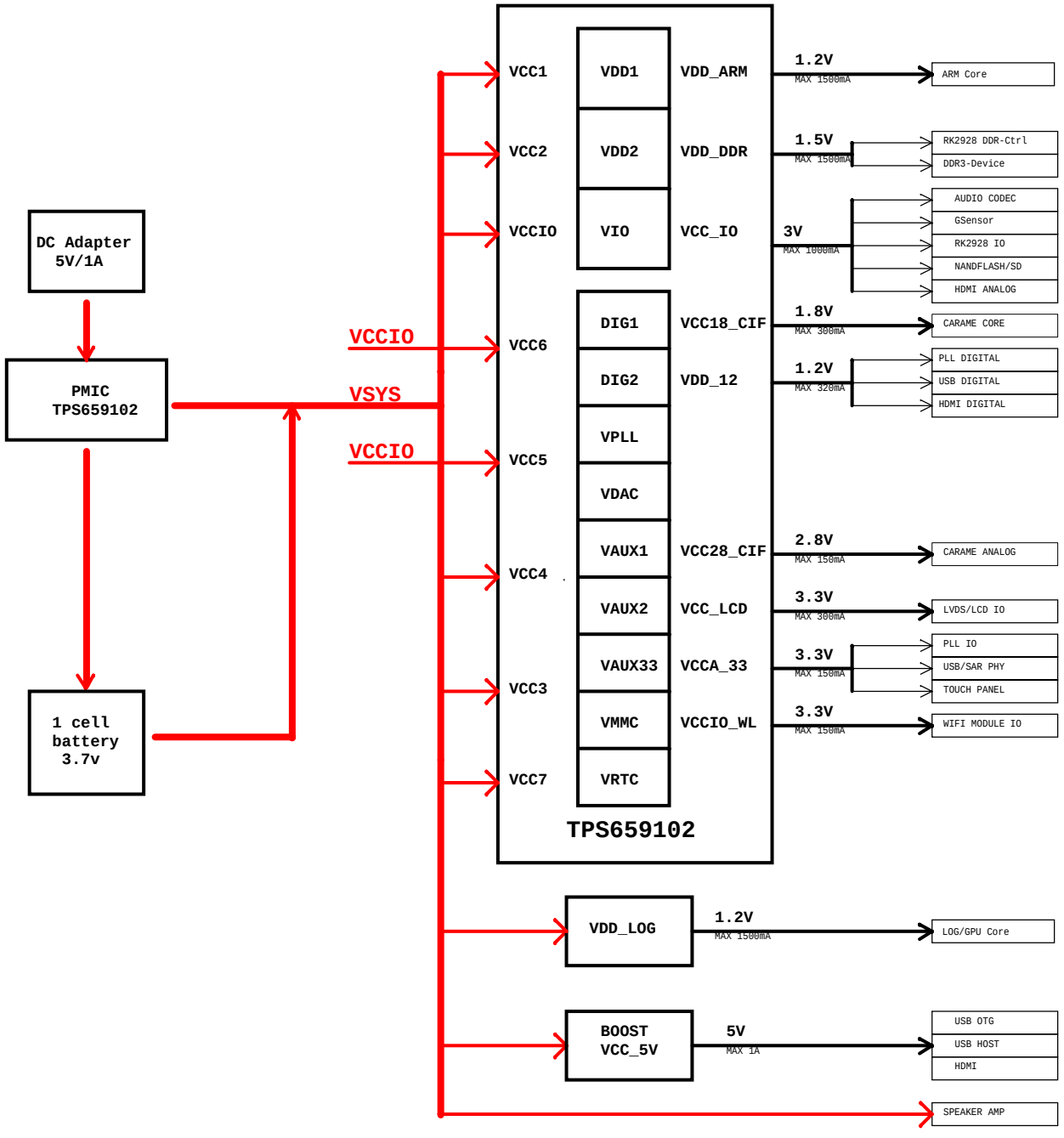
	above 80 miles
	above 50 miles
	above 30 miles
	above 16 miles
No indicate	Under needs
	Feedback Line

4 LAYERS PCB STACK



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


NAND FLASH
or iNAND
DDR3 *4
256M*8Bit
>=1GB
WIFI
MODULE
iNAND
NAND FLASH
DDR
Interface
SDIO
UART1
SDMMC1
LVDS PANEL
RBG PANEL
TOUCH PANEL
I2C DEVICE
DEBUG
LCDC
RGB666
I2C2
I2C1
UART2
I2C0
RK2928G
CIF
HDMI
SPI
I2S
USB
OTG
USB
HOST
FRONT CAMERA
REAR CAMERA
HDMI
GPS
USB HOST
BOOST
5V
DC JACK
PMIC
PWR ON
RESET
1-Cell Li+ ActivePath
Battery Charger
BATTERY
3.7V
Low Voltage DET
RTC
2928
PWR
OSC 24M
RESET
GPIO&
SAR_ADC
CODEC
24MHz
KEY BOARD
VIB
SPEAKER
HPhone OUT
MIC



Power-Up Timing

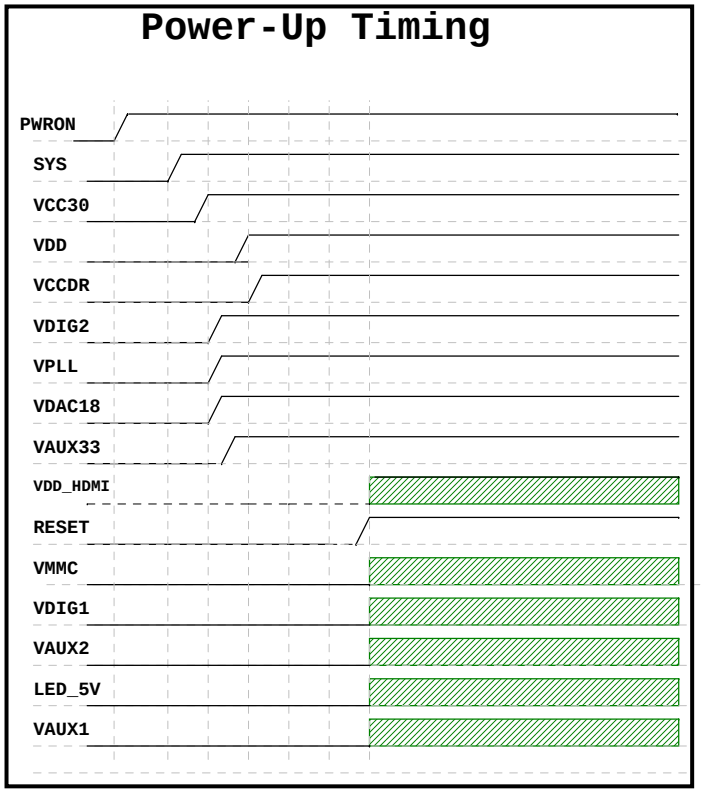
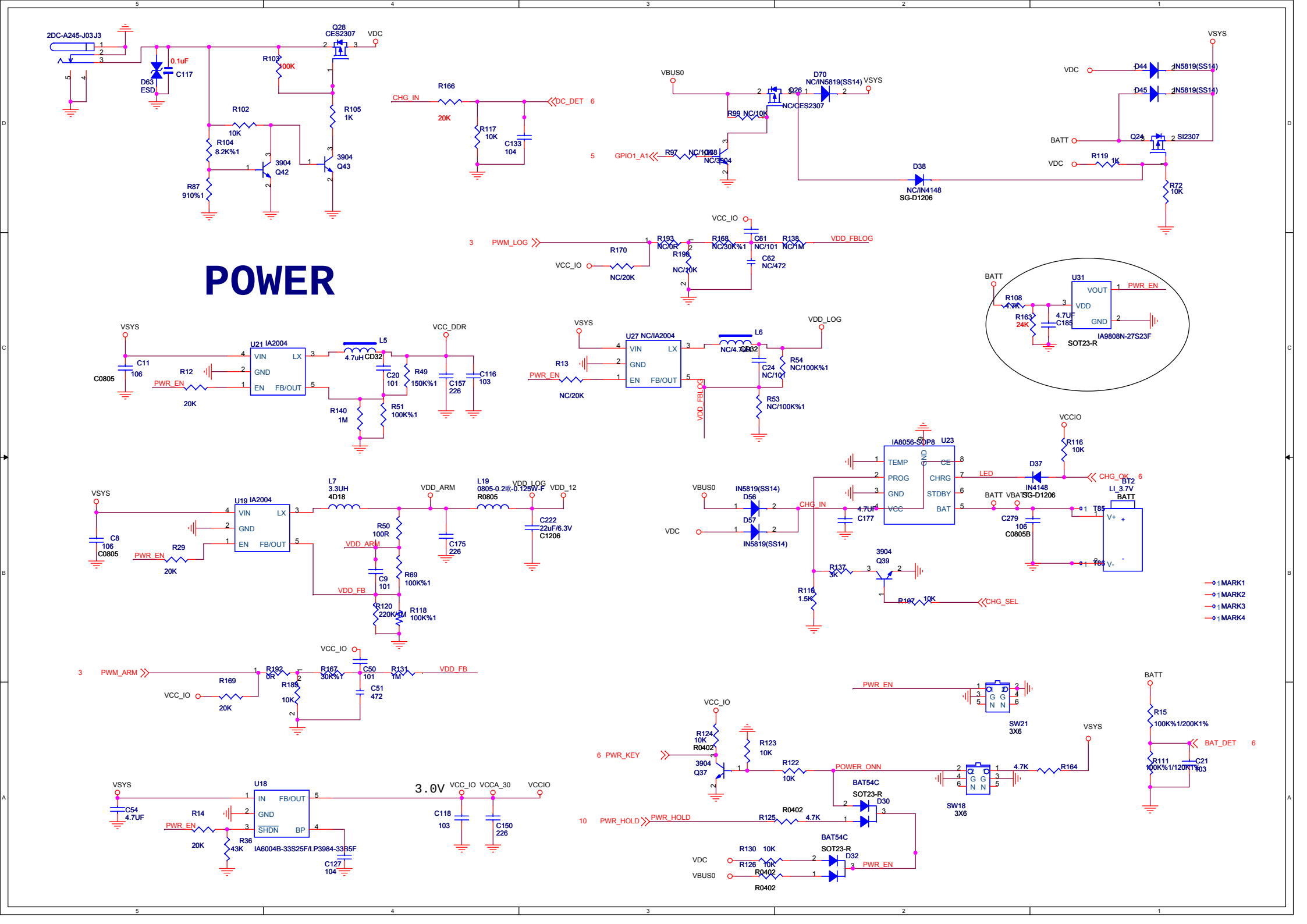


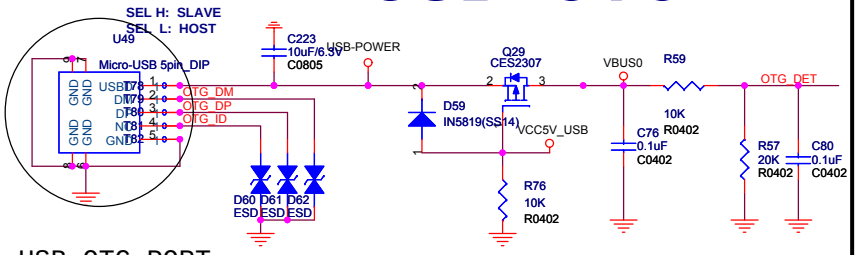
Table 12. Power Sources

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

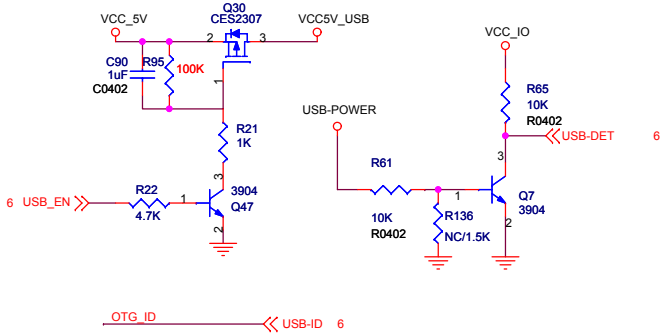
POWER DIAGRAM


POWER
2DC-A245-J03 J3
Q28 CES2307
VDC
0.1uF
C117
D63 ESD
R103 100K
R102 10K
R104 8.2K%1
R87 910%1
3904 Q42
3904 Q43
R105 1K
R166 20K
CHG_IN
DC_DET 6
R117 10K
C133 104
VBUS0
D70 NC/IN5819(SS14)
VSYS
Q26 NC/CES2307
R99 NC/10K
GPIO1_A1 5
R97 NC/10K
NC/3904
D38 NC/IN4148 SG-D1206
D44 IN5819(SS14)
D45 IN5819(SS14)
BATT
Q24 SI2307
R119 1K
R72 10K
PWM_LOG 3
VCC_IO
R170 NC/20K
R193 NC/0R
R196 NC/10K
R168 NC/30K%1
C61 NC/101
R138 NC/1M
C62 NC/472
VDD_FBLOG
U31
VOUT
VDD
GND
PWR_EN
R108 4.7K
R163 24K
4.7UF C185
IA9808N-27S23F
SOT23-R
U21 IA2004
VIN
LX
GND
EN
FB/OUT
L5 4.7uH CD32
VCC_DDR
C11 106
C0805
R12 20K
PWR_EN
C20 101
R49 150K%1
C157 226
C116 103
R140 1M
R51 100K%1
U27 NC/IA2004
L6 NC/4.7uH CD32
VDD_LOG
R13 NC/20K
R54 NC/100K%1
C24 NC/101
R53 NC/100K%1
VDD_FBLOG
U19 IA2004
L7 3.3UH 4D18
VDD_ARM
L19 0805-0.2欧-0.125W-F R0805
VDD_12
C8 106 C0805
R29 20K
R50 100R
C9 101
R69 100K%1
C175 226
C222 22uF/6.3V C1206
VDD_FB
R120 220K%1M
R118 100K%1
U23 IA8056-SOP8
TEMP
PROG
GND
VCC
CE
CHRG
STDBY
BAT
LED
D37 IN4148 SG-D1206
CHG_OK 6
VCCIO
R116 10K
BT2 LI_3.7V BATT
C279 106 C0805B
T85
T86
D56 IN5819(SS14)
D57 IN5819(SS14)
4.7UF C177
R137 3K
3904 Q39
R116 1.5K
R107 10K
CHG_SEL
MARK1
MARK2
MARK3
MARK4
PWM_ARM 3
R169 20K
R192 0R
R185 10K
R167 30K%1
C50 101
R131 1M
C51 472
U18
IN
FB/OUT
GND
SHDN
BP
3.0V
VCC_IO
VCCA_30
VCCIO
C54 4.7UF
R14 20K
R36 43K
IA6004B-33S25F/LP3984-33B5F
C127 104
C118 103
C150 226
PWR_EN
R124 10K R0402
R123 10K
6 PWR_KEY
3904 Q37
R122 10K
POWER_ONN
BAT54C SOT23-R D30
R125 R0402 4.7K
10 PWR_HOLD
R130 10K
R126 10K R0402
BAT54C SOT23-R D32
R0402
SW21 3X6
SW18 3X6
R164 4.7K
R15 100K%1/200K1%
R111 100K%1/120K1%
C21 103
BAT_DET 6

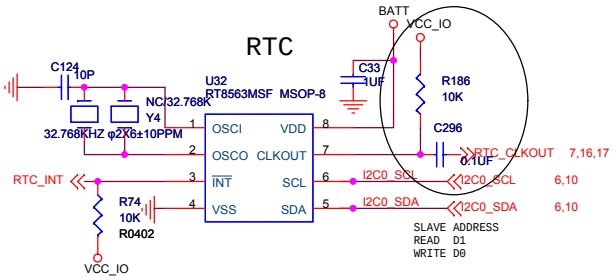
USB OTG

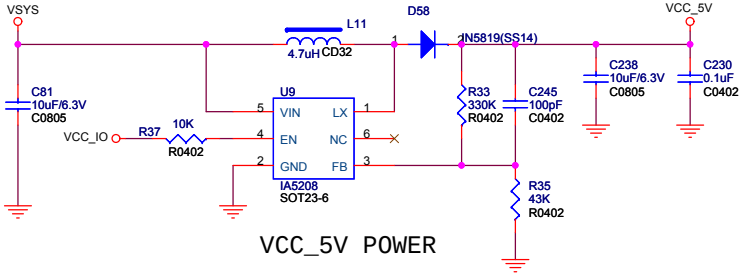


USB OTG PORT

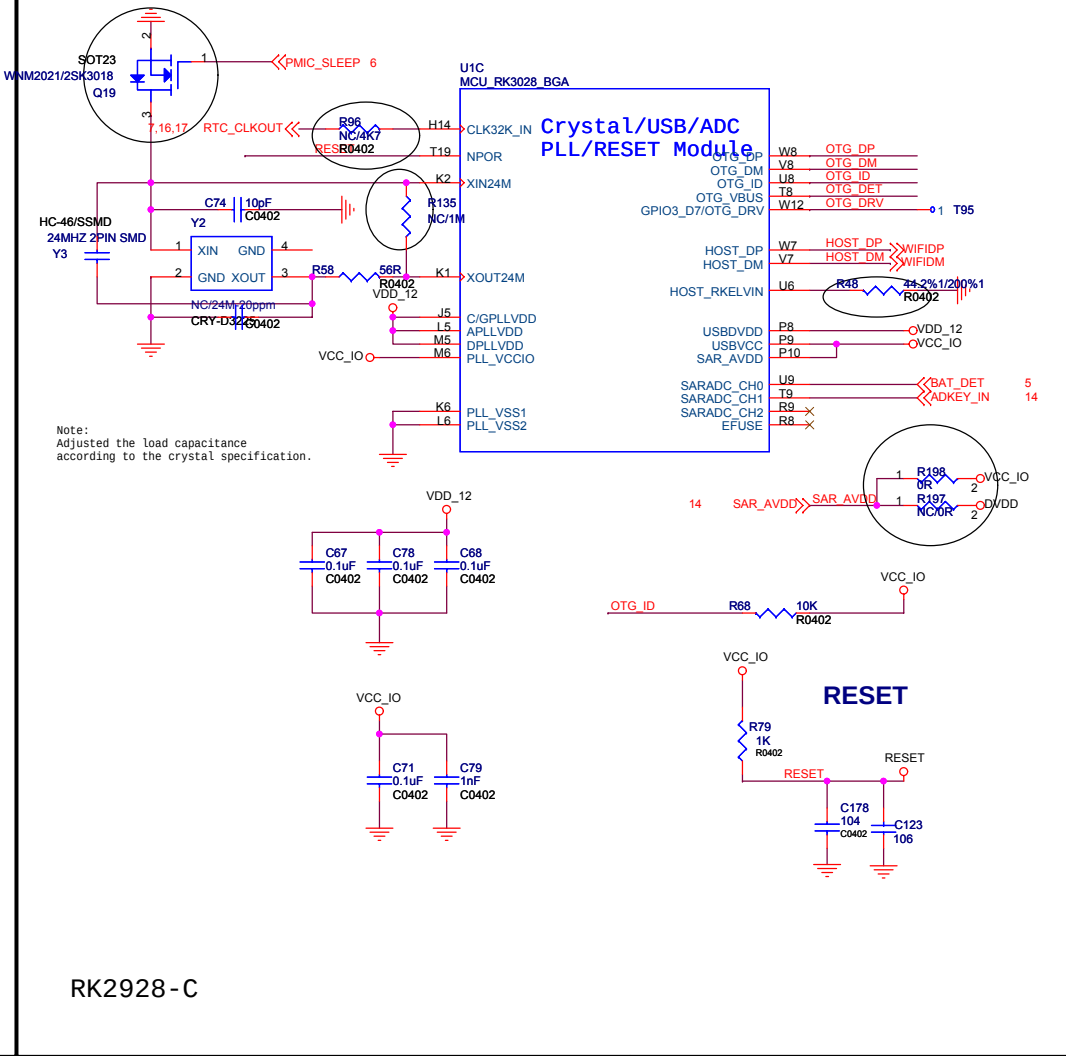


OTG POWER

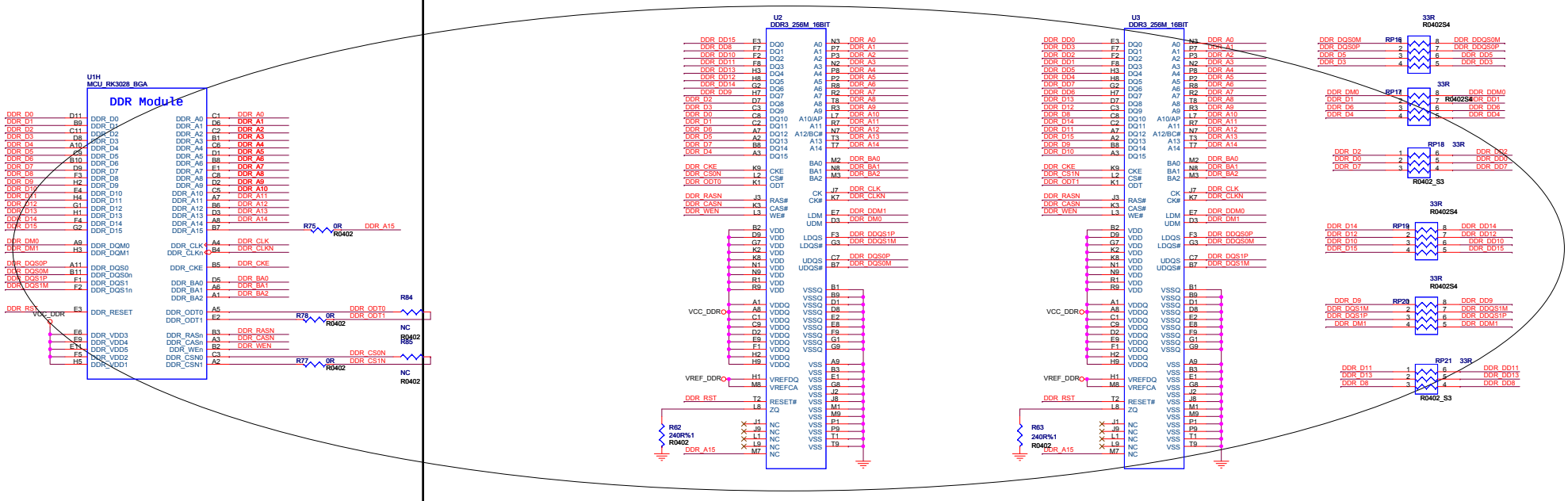




VCC_5V POWER

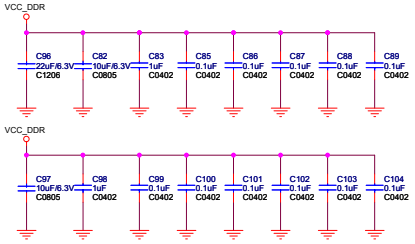


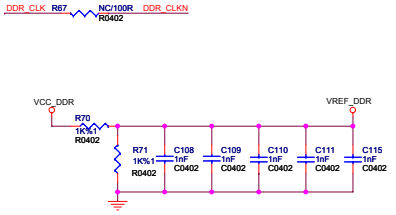
RK2928-C



RK2928-H

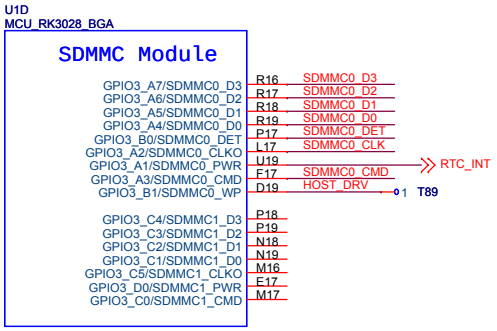
DDR3

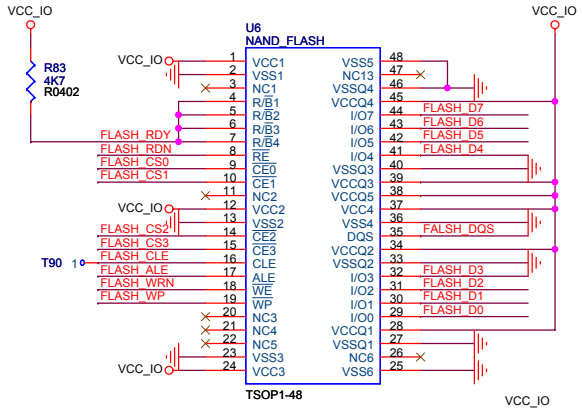


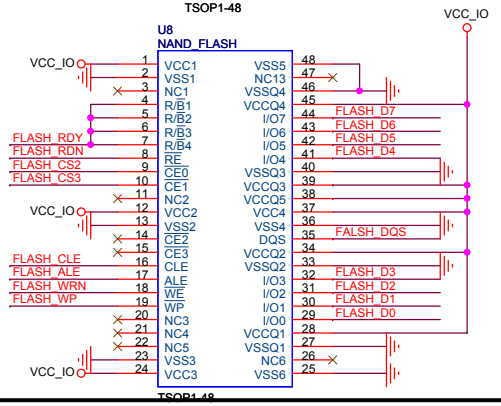


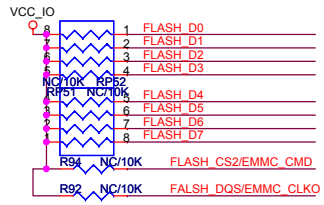
DDR FILTER

NAND FLASH

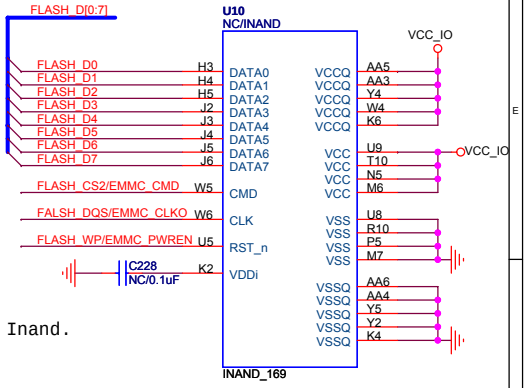


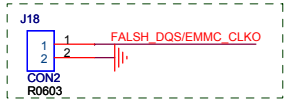




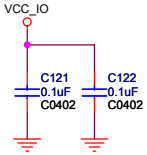


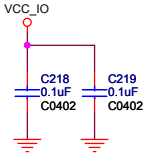
Note:
Place these resisters only used Inand.





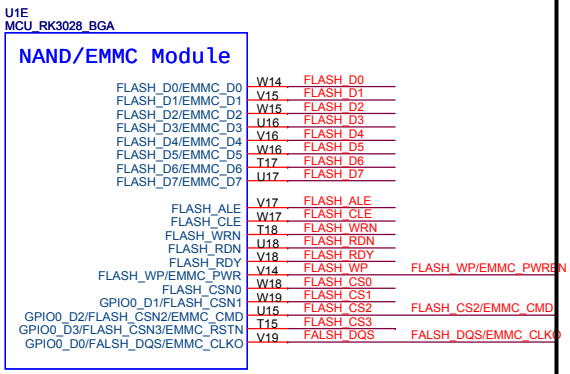
Note:
Reserve a PAD.

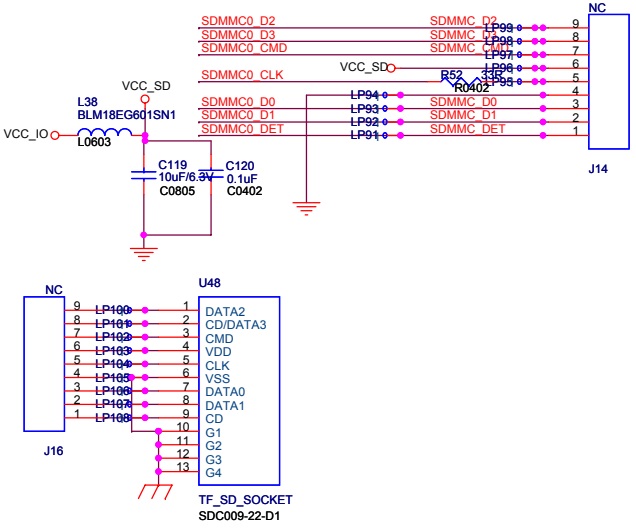




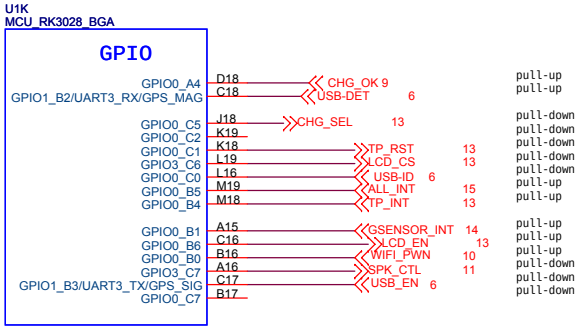
RK2928-H

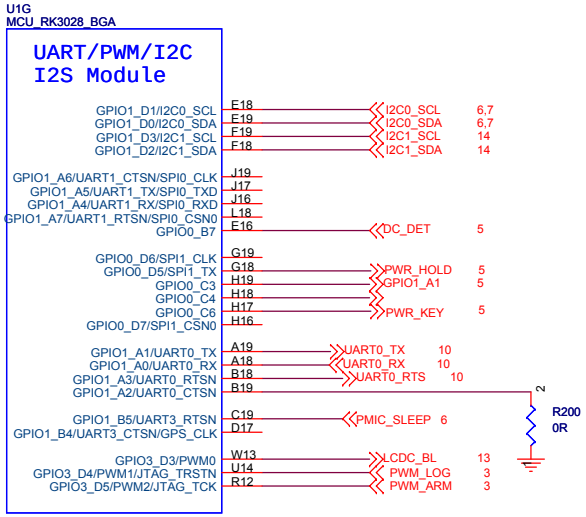
TF CARD

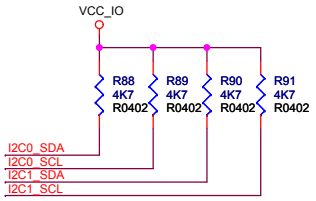




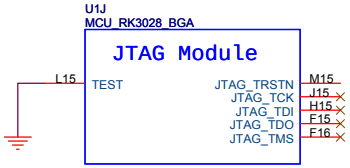
RK2928-E

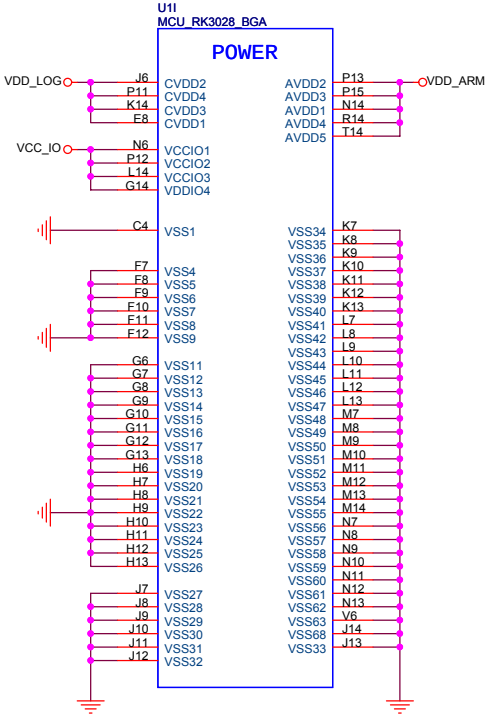






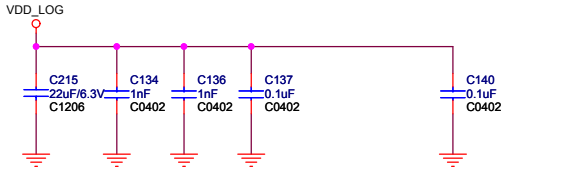
RK2928-G

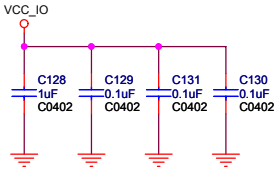


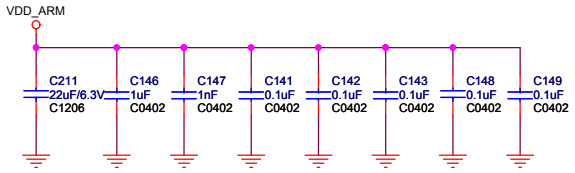


Note:
Place these filter capacitors under CPU.

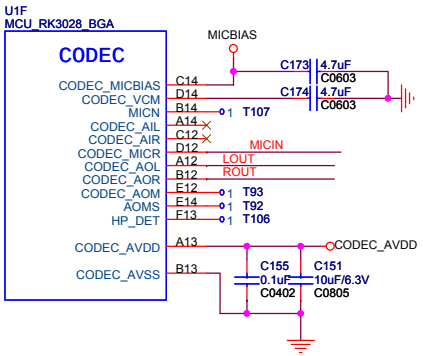
RK2928-I

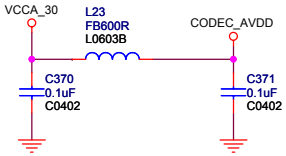




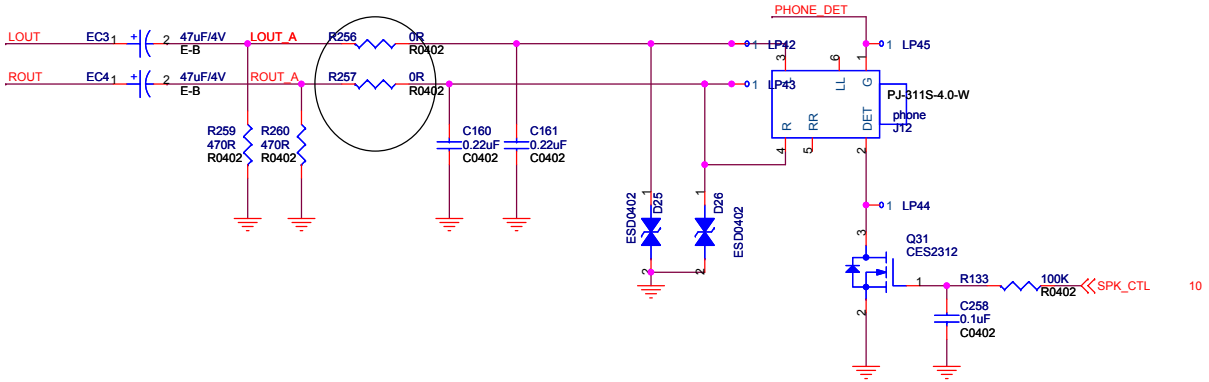


RK2928 POWER FILTER



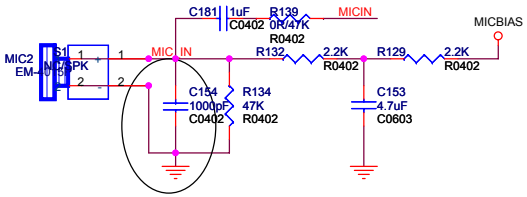


RK2928-F

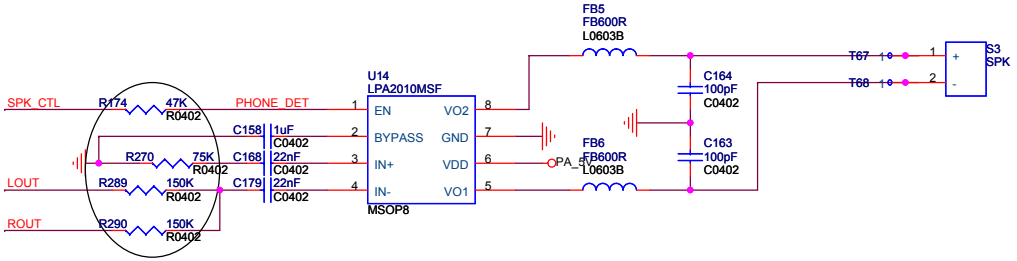


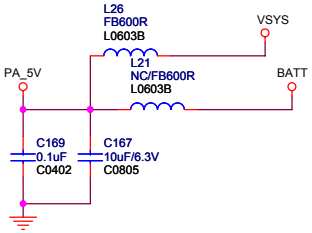
HEADPHONE

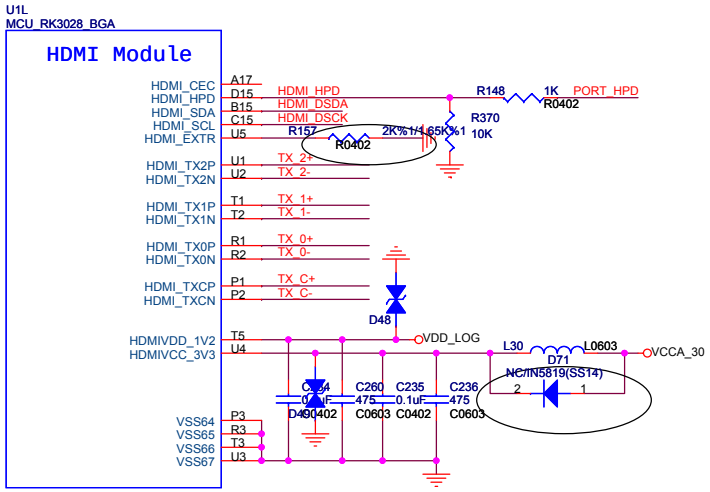
MIC

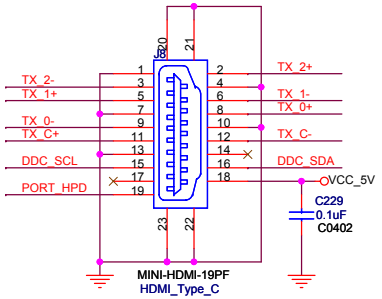


SPEAKER DRIVER

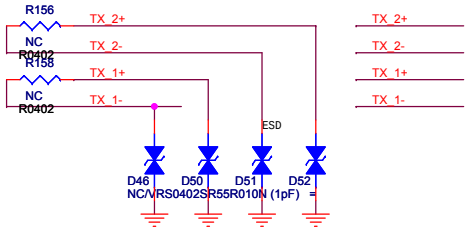


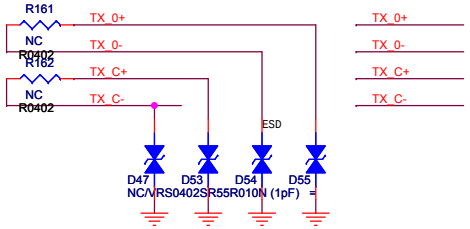




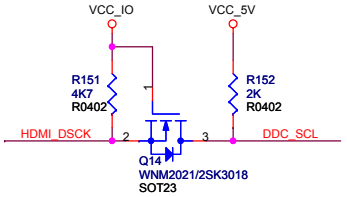


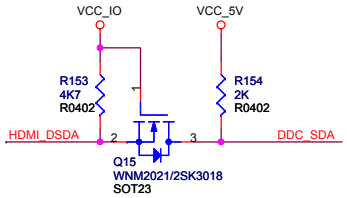
RK2928-L

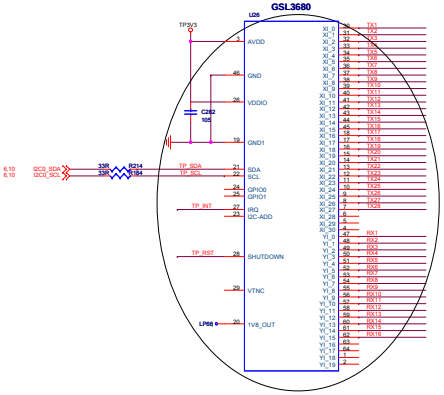


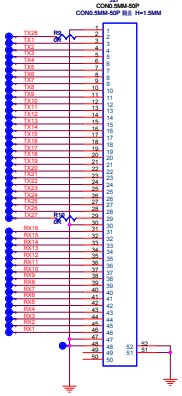


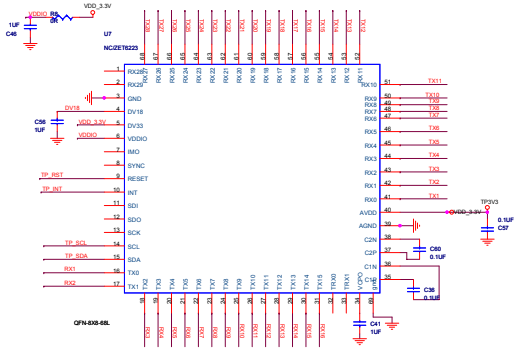
OPTION

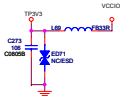


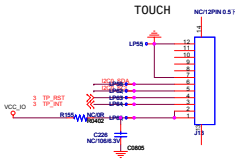


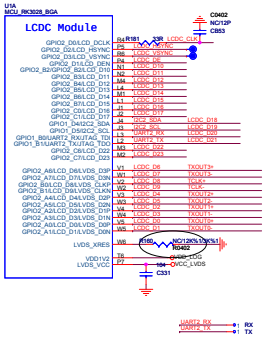








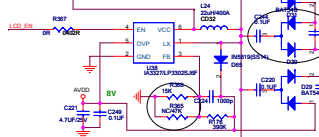


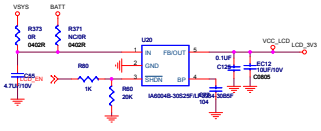


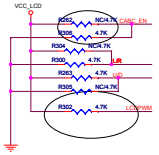
For debug

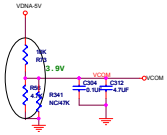
RK2928-A

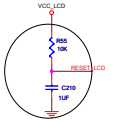
Correspondence between LCDC DATA and RGB			
LCDC_D0	B2	LCDC_D9	G5
LCDC_D1	B3	LCDC_D10	G6
LCDC_D2	B4	LCDC_D11	G7
LCDC_D3	B5	LCDC_D12	R2
LCDC_D4	B6	LCDC_D13	R3
LCDC_D5	B7	LCDC_D14	R4
LCDC_D6	G2	LCDC_D15	R5
LCDC_D7	G3	LCDC_D16	R6
LCDC_D8	G4	LCDC_D17	R7

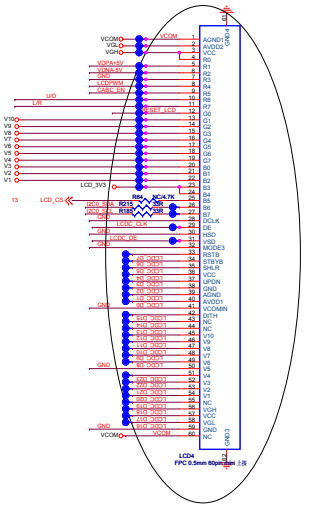


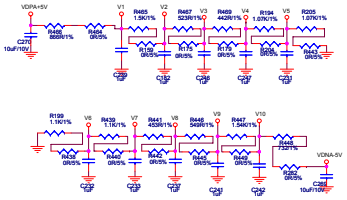


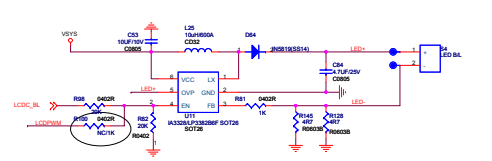


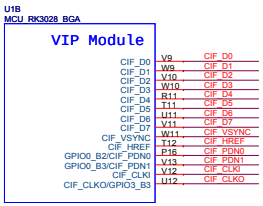


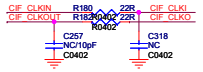






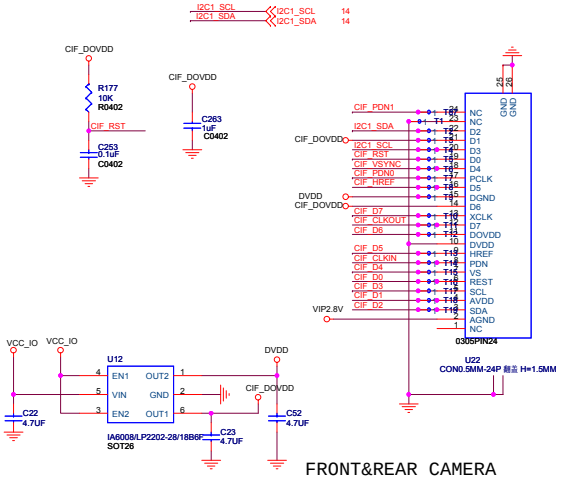




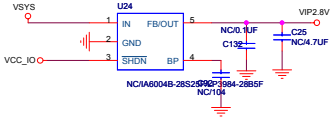


RK2928-B

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

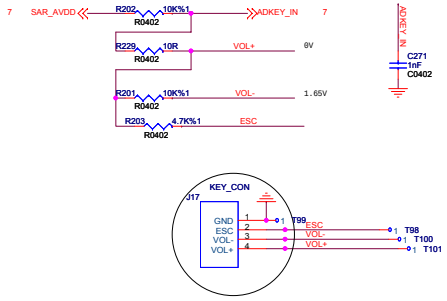


FRONT&REAR CAMERA

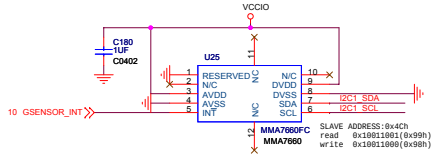


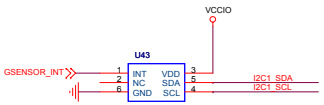
When the system power on, the Adkey_in level is 0V, RK2928 enter into loader mode.

KEY BAORD

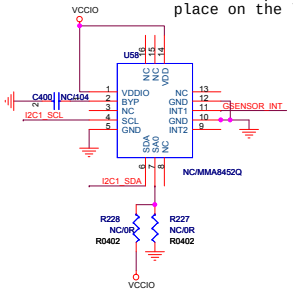


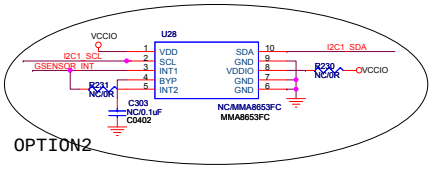
3D G-Sensor



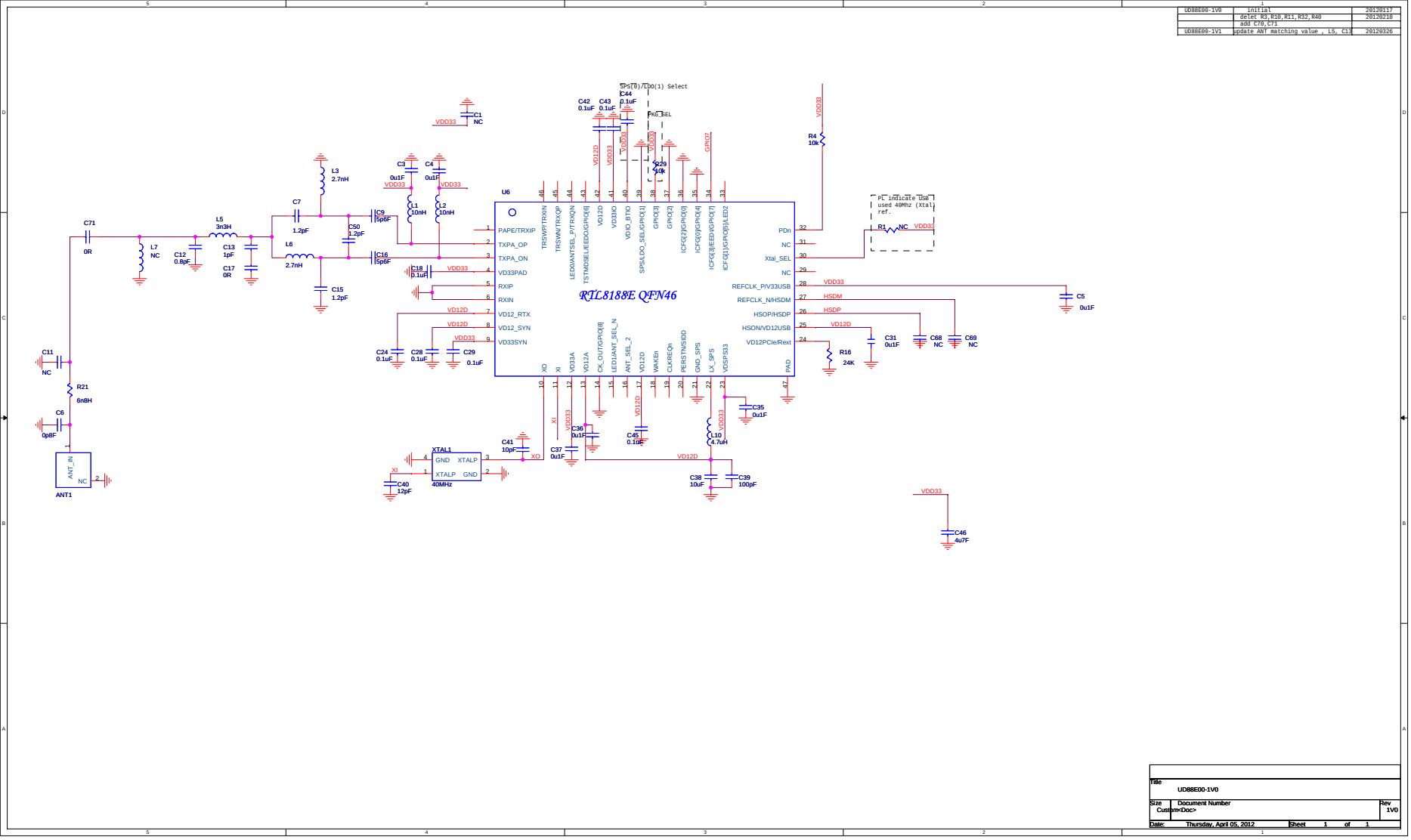


Note:
The first pin of G-sensor must be place on the lower left corner of PCB.





OPTION2



UD88E00-1V0	initial	20120117
	delet R3,R10,R11,R32,R40	20120210
	add C70,C71	
UD88E00-1V1	update ANT matching value , L5, C13	20120326

Title	UD88E00-1V0		
Size	Document Number		Rev
Custom	<Doc>		1V0
Date:	Thursday, April 05, 2012	Sheet 1 of 1	