

I2C MAP

Port	Pin name	Domain	Bus name	Pull-up voltage	Slave Device	Slave Addr (MS 7Bits)	Note	Slave Bus Capability
I2C0	GPIO1_D1/UART1_TX/I2C0_SCL/SPI2_CSNO GPIO1_D0/UART1_RX/I2C0_SDA/SPI2_CLK	VCCI01	I2C0_SCL I2C0_SDA	VCC_IO	Reserve			
I2C1	GPIO0_B4/I2C1_SCL GPIO0_B3/I2C1_SDA	VCCI00	I2C1_SCL I2C1_SDA	VCC_IO	SN3236	0x3C/0x3F	MIC Array Connector-Analog(Optional)	
					VL6180	0X29(7bit)	ST Proximity sensing module	
					HYM8563	Read A3H Write A2H	RTC	
					CW2015/CW2013	Read 0XC5 Write 0XC4	Fuel Gauge(Optional)	
I2C2	GPIO2_A3/UART0_RTSN/SPI0_CSNO/I2C2_SCL GPIO2_A2/UART0_CTSN/SPI0_CLK/I2C2_SDA	VCCI02	I2C2_SCL I2C2_SDA	API02_VDD	MPU6500	AD0=0 0x68 AD0=1 0x69		



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Project:

RK3308B_SweeperRobot

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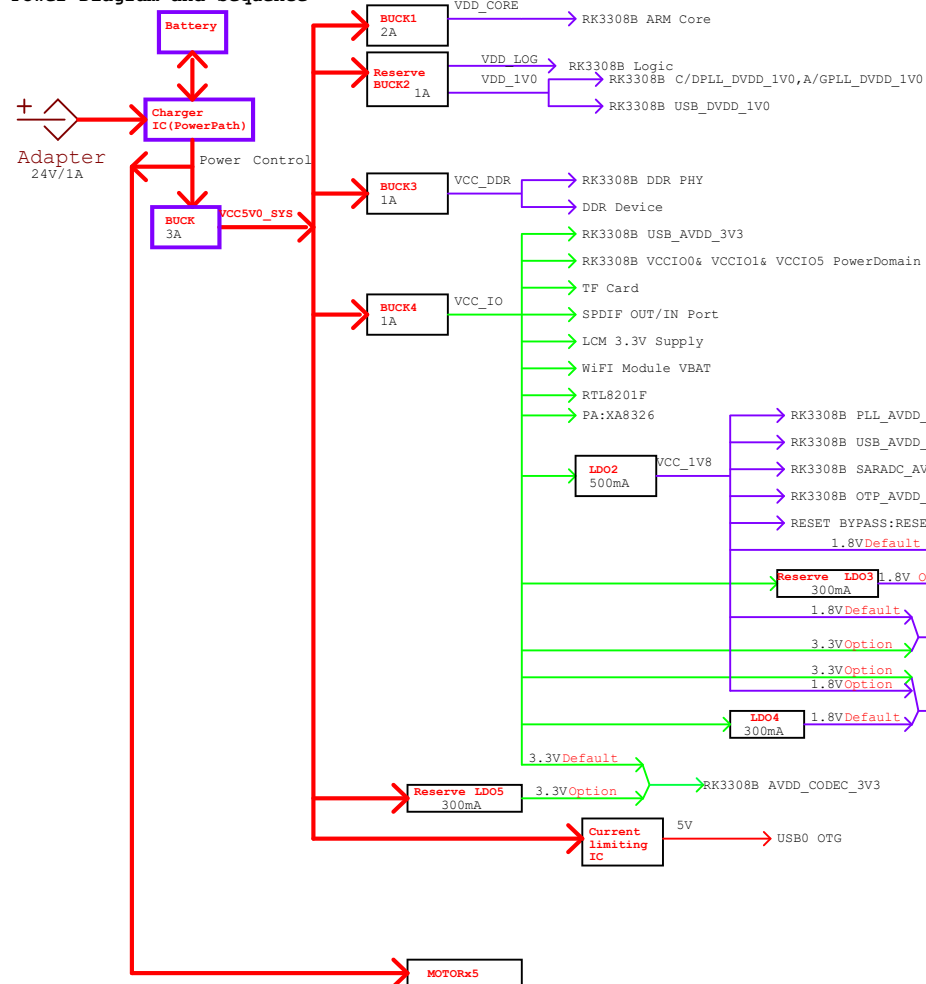
Designed by:

lis

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Power Diagram and Sequence



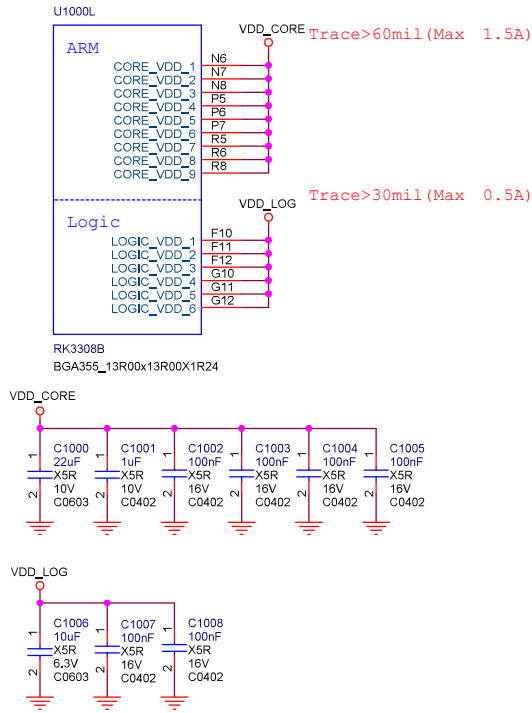
Power up Timing

[illegible]

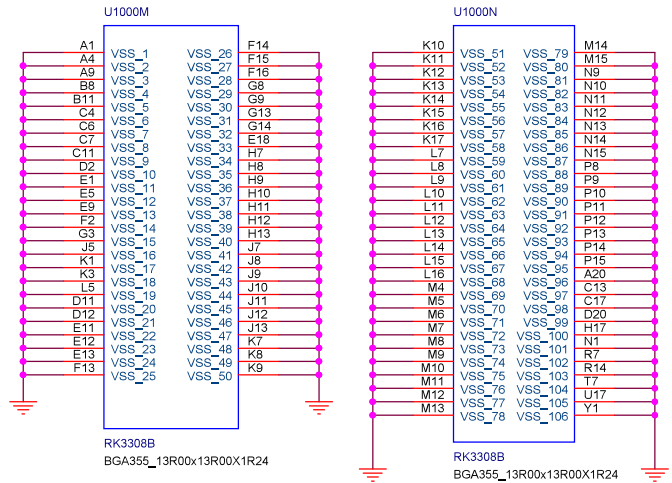
IO PowerDomain	Voltage=0.3V	Voltage=1.8V
VCCI0	3.3V(Default) PMUIO	Support
VCCI1	3.3V(Default) LCDC	Support
VCCI2	Support	1.8V(Default) I280
VCCI3	Support	1.8V(Default) eMMC
VCCI4	Support	1.8V(Default) WiFi(SDIO)
VCCI5	3.3V(Default) SDMMC	Support

RK3308B Part-L

RK3308B Part-N RK3308B Part-M



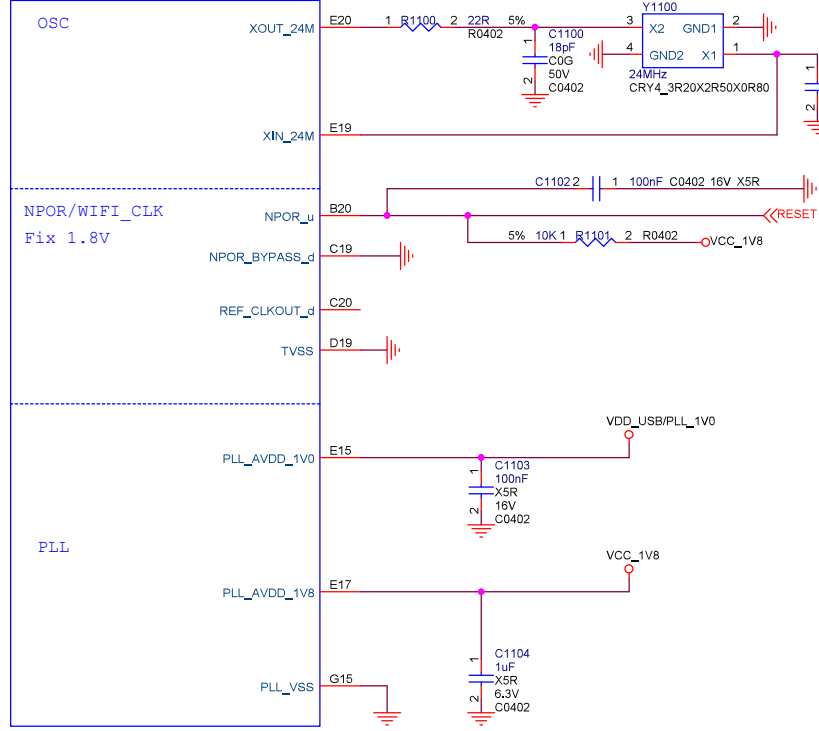
Note: All the Power filter capacitors should be placed close to the power pins of RK3308B



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RK3308B Part-A

U1000A

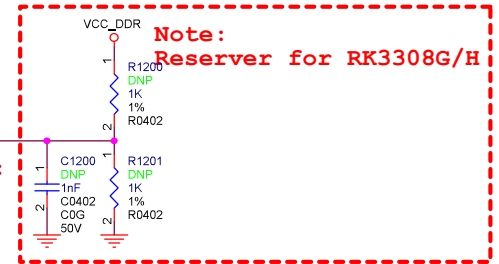
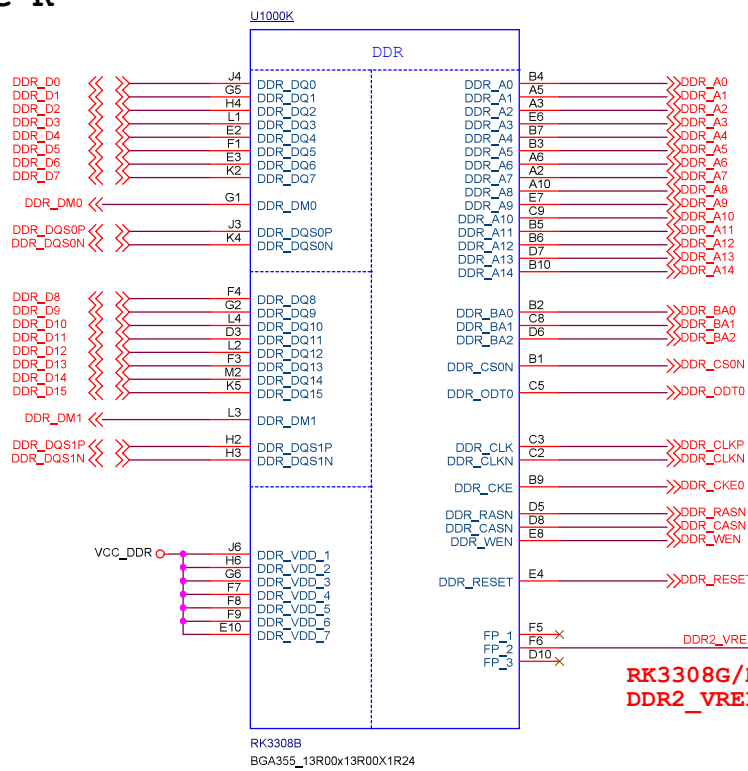


If share clk source with WiFi,
Accuracy <= 10ppm.
Otherwise <=20ppm for
Independent crystal design

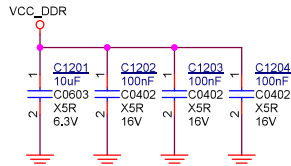
RK3308B
BGA355_13R00x13R00X1R24

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RK3308B Part-K



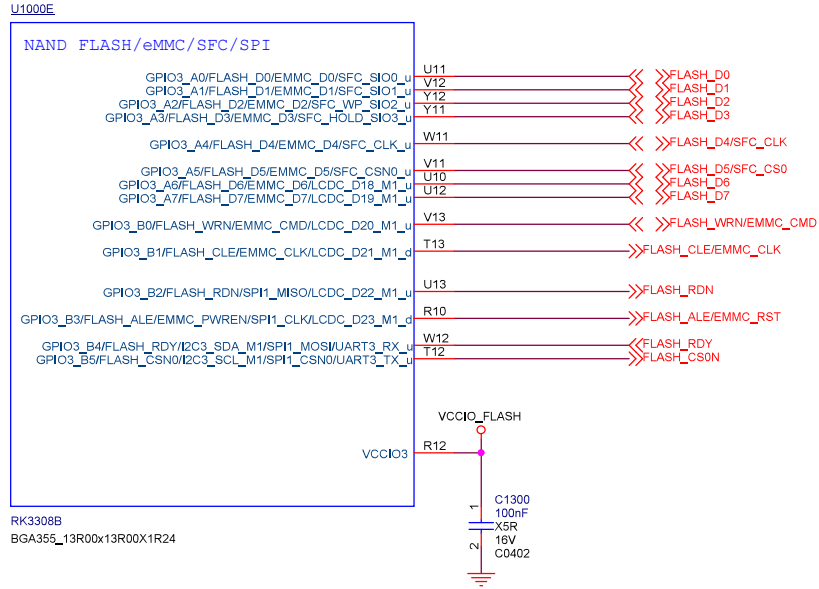
Power Filter



Note: All the Power filter capacitors should be placed close to the power pins of RK3308B

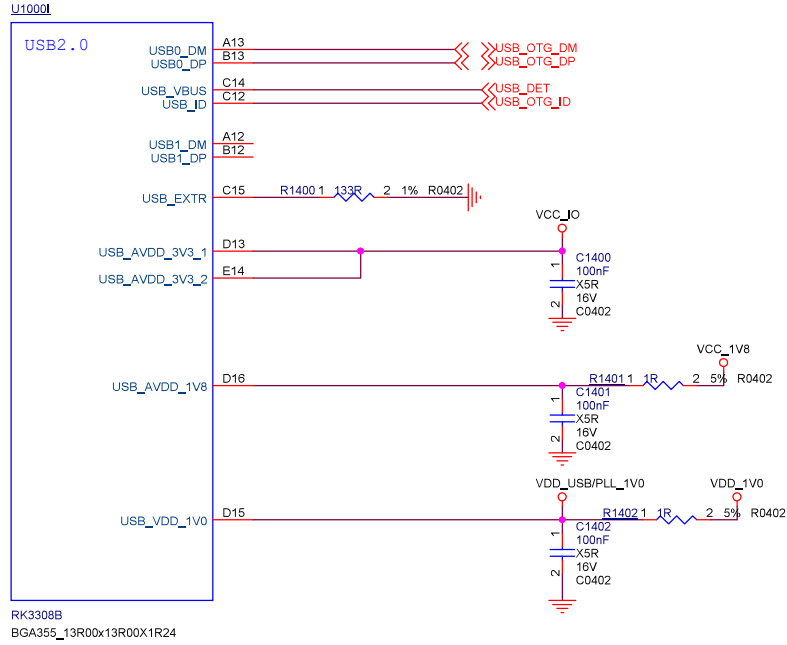
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RK3308B Part-E



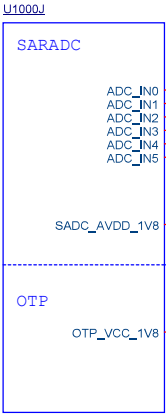
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RK3308B Part-I



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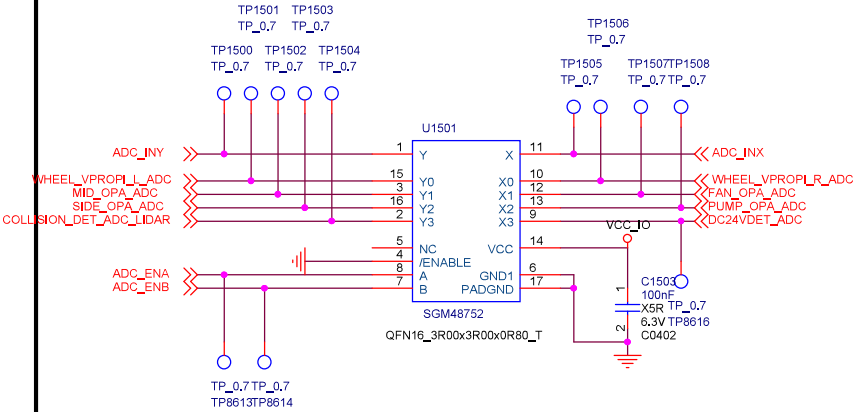
RK3308B Part-J



RK3308B

BGA355_13R00x13R00X1R24

SWITCH



B	A	X	Y
L	L	X=X0	Y=Y0
L	H	X=X1	Y=Y1
H	L	X=X2	Y=Y2
H	H	X=X3	Y=Y3

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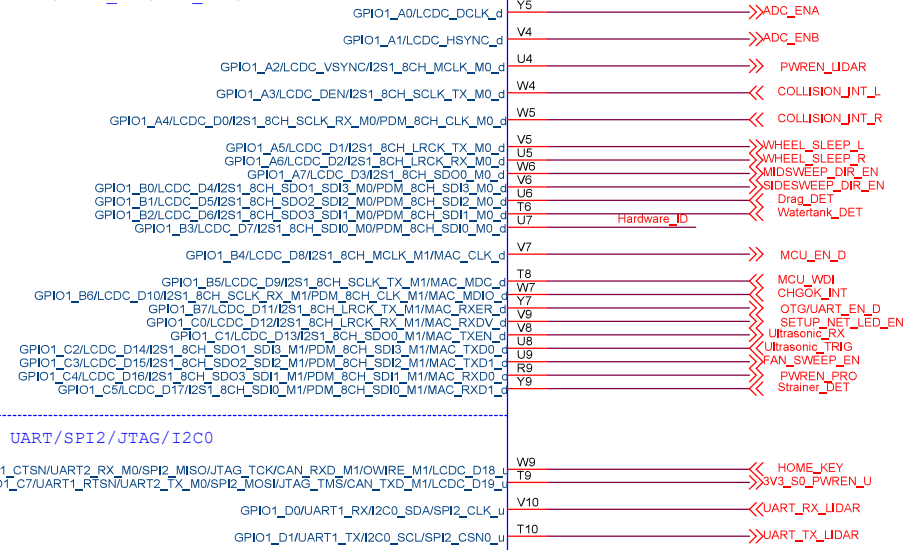
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RK3308B Part-C

U1000C

LCDC/I2S1_8CH/PDM_8CH/MAC

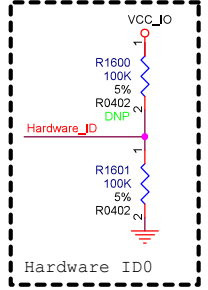
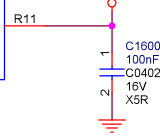


RK3308B

BGA355_13R00x13R00X1R24

VCCIO1

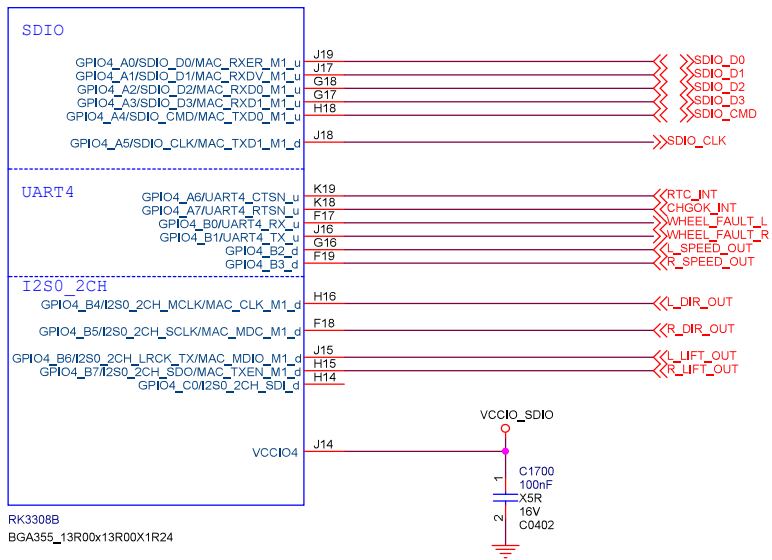
VCCIO



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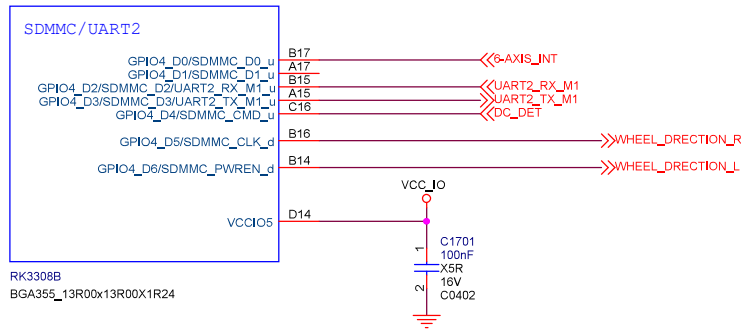
RK3308B Part-F

U1000E



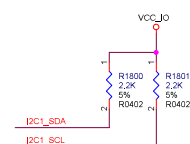
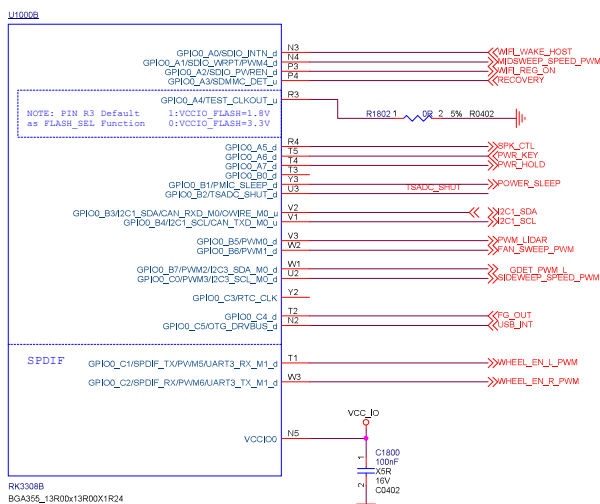
RK3308B Part-G

U1000G

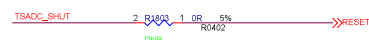


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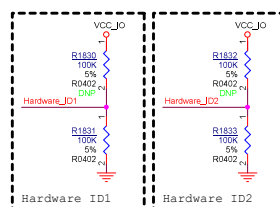
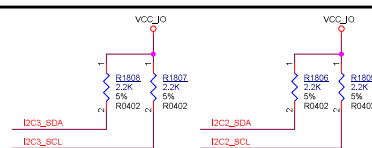
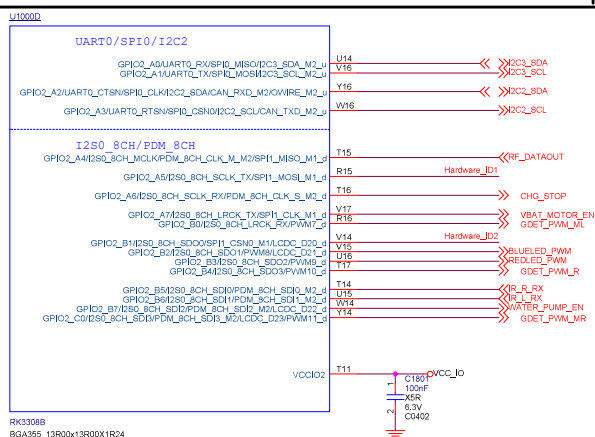
RK3308B Part-B



TSADC
Over temperature protection

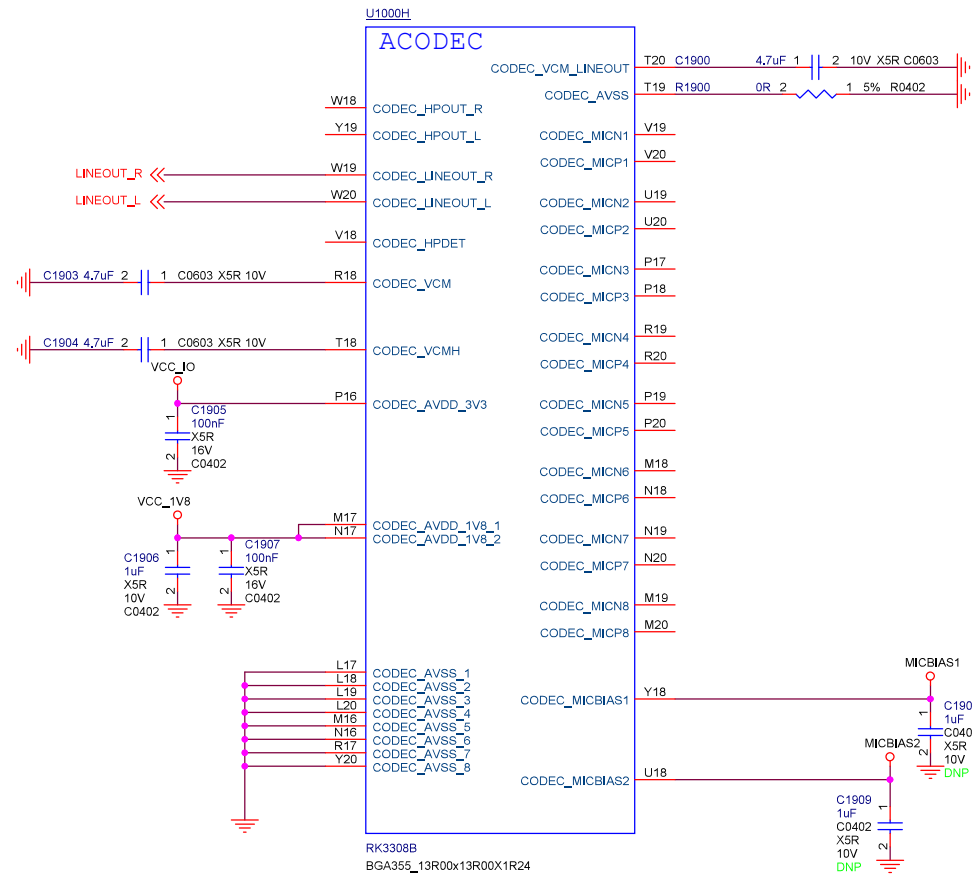


RK3308B Part-D



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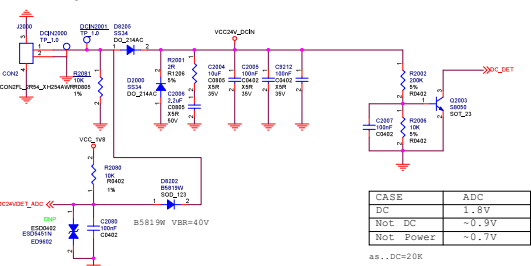
RK3308B Part-H



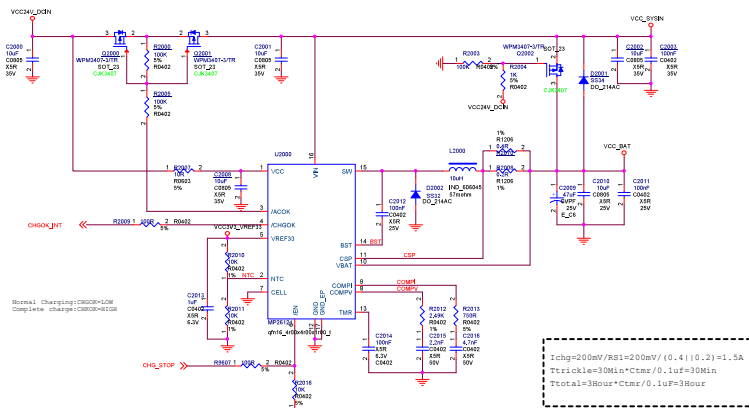
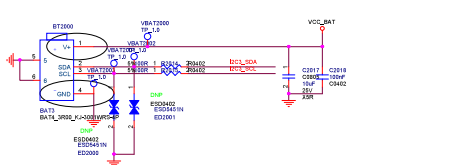
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Charger IC

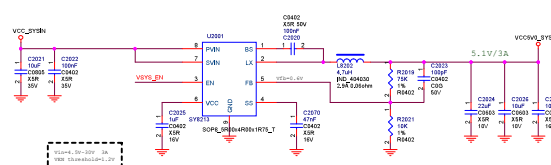
24V DC IN



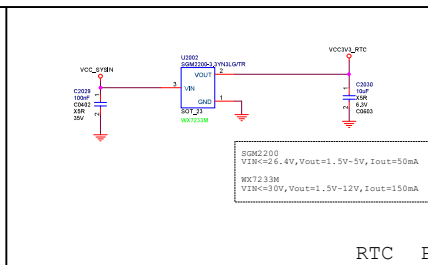
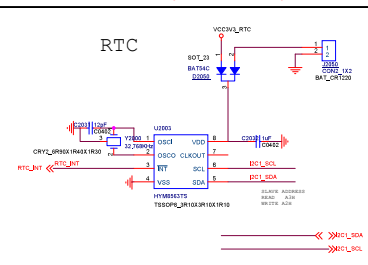
Battery 4cell



5V BUCK

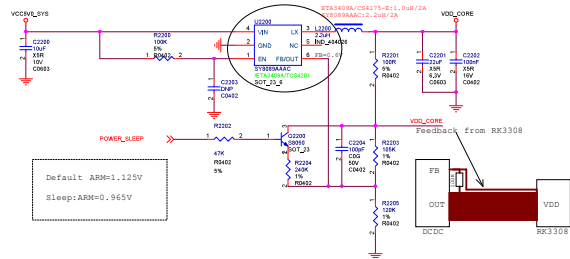


POWER Control

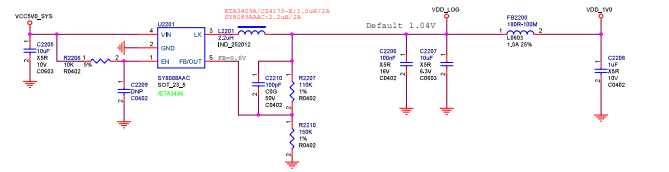


RTC POWER

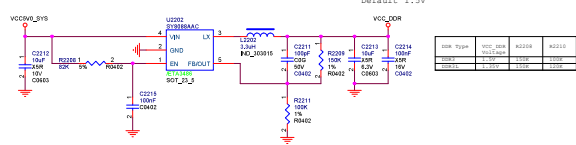
ETB36093/CS6175-E-1-00H/2



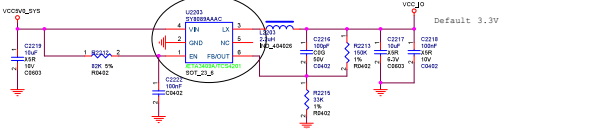
VDD_1V0



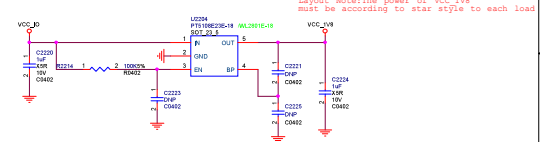
Default 1.5



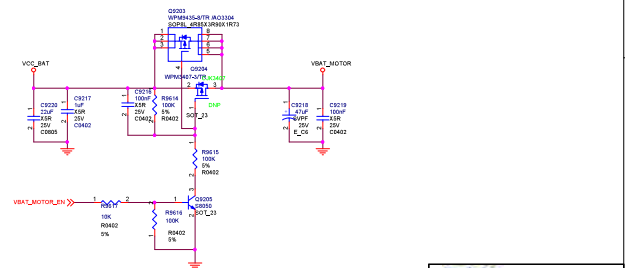
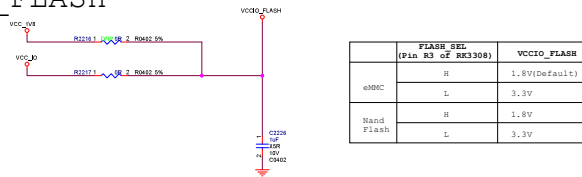
Default 3.3V



Layout Note: The power of VCC I_{V8} must be according to star style to each load



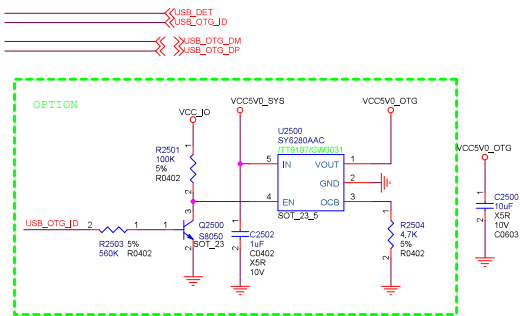
VCC10_FLASH



VCCJ0 VCC3V3_S1

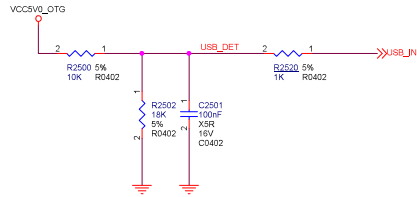


OTG POWER

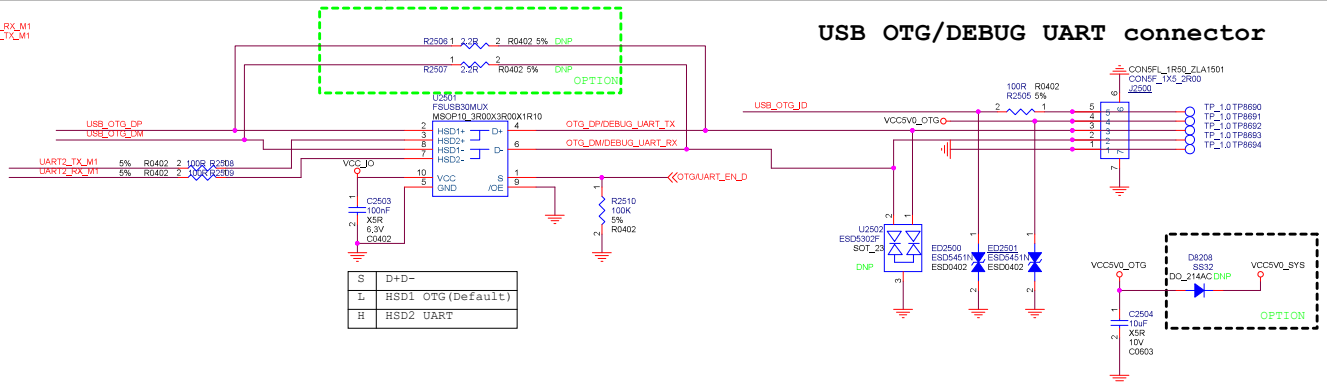


OTG HOST use for U-Disk download firmware .if no use,remove all.

USB OTG DET

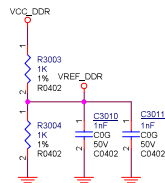
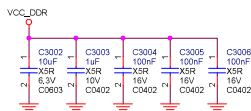
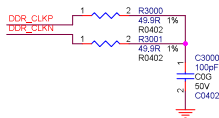


USB OTG/DEBUG UART connector



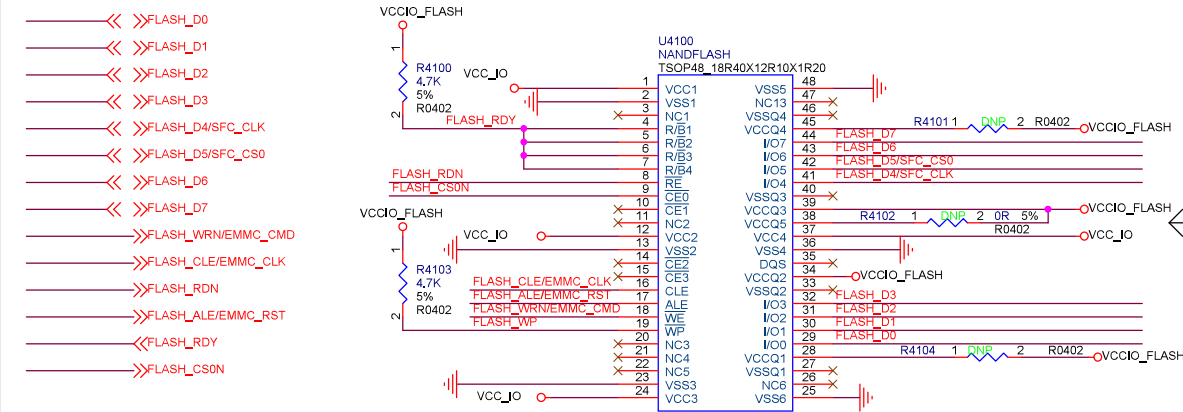
S	D+D-
L	HSD1 OTG (Default)
H	HSD2 UART

Remind: Refer to the latest AVL for parts selection.



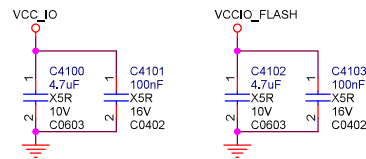
Nand Flash

Remind: Refer to the latest AVL for parts selection.



Note:if use toshiba and sandisk DDR mode,
VCCQ1 and VCCQ4 must be connected to VCCIO_FLASH.

Remind:Short two TP points to Enter MaskRom.



TP4100 TP_0.7 FLASH_D0

TP4101 TP_0.7

Layout Note:As soon as possible
reduce the branch of FLASH_D0

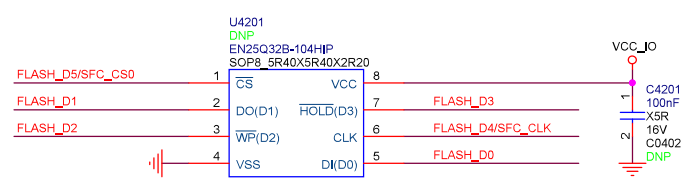
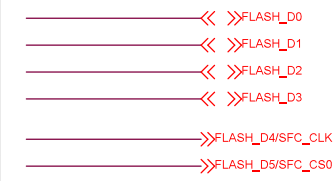


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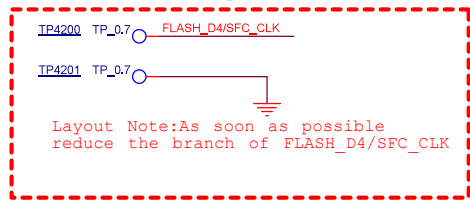
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SPI Nor Flash

Remind: Refer to the latest AVL for parts selection.

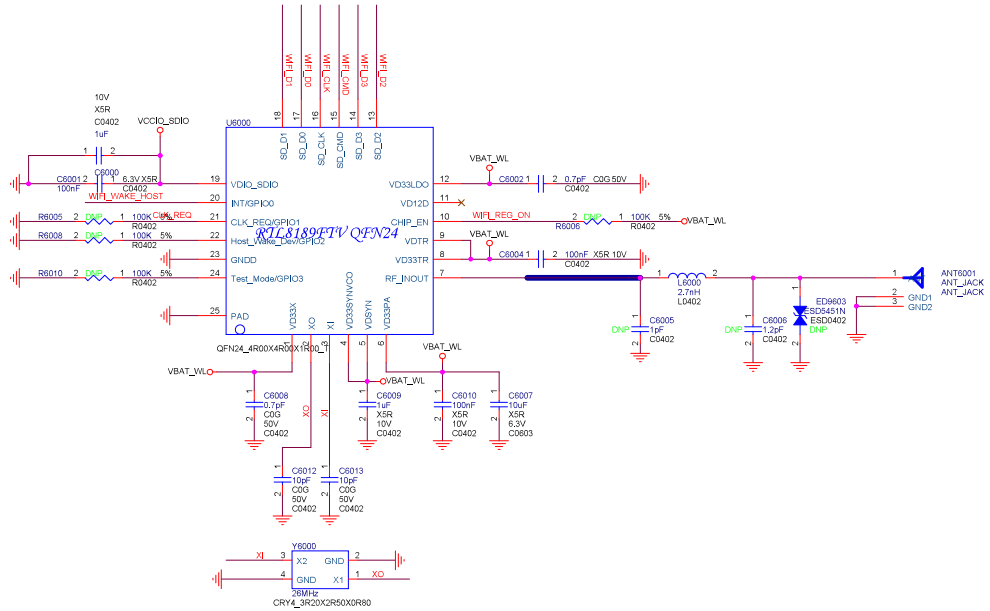


Remind:Short two TP points to Enter MaskRom.



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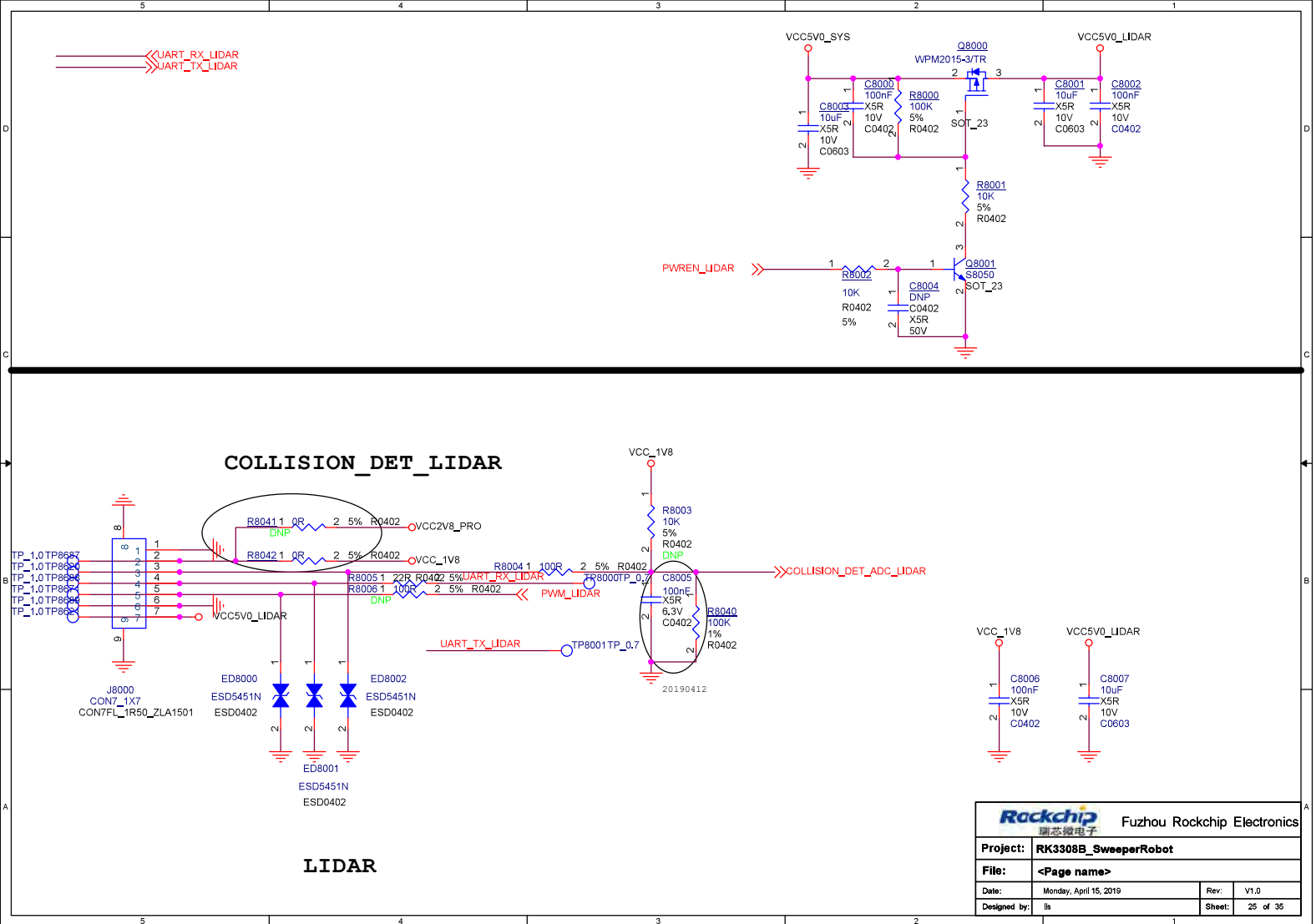
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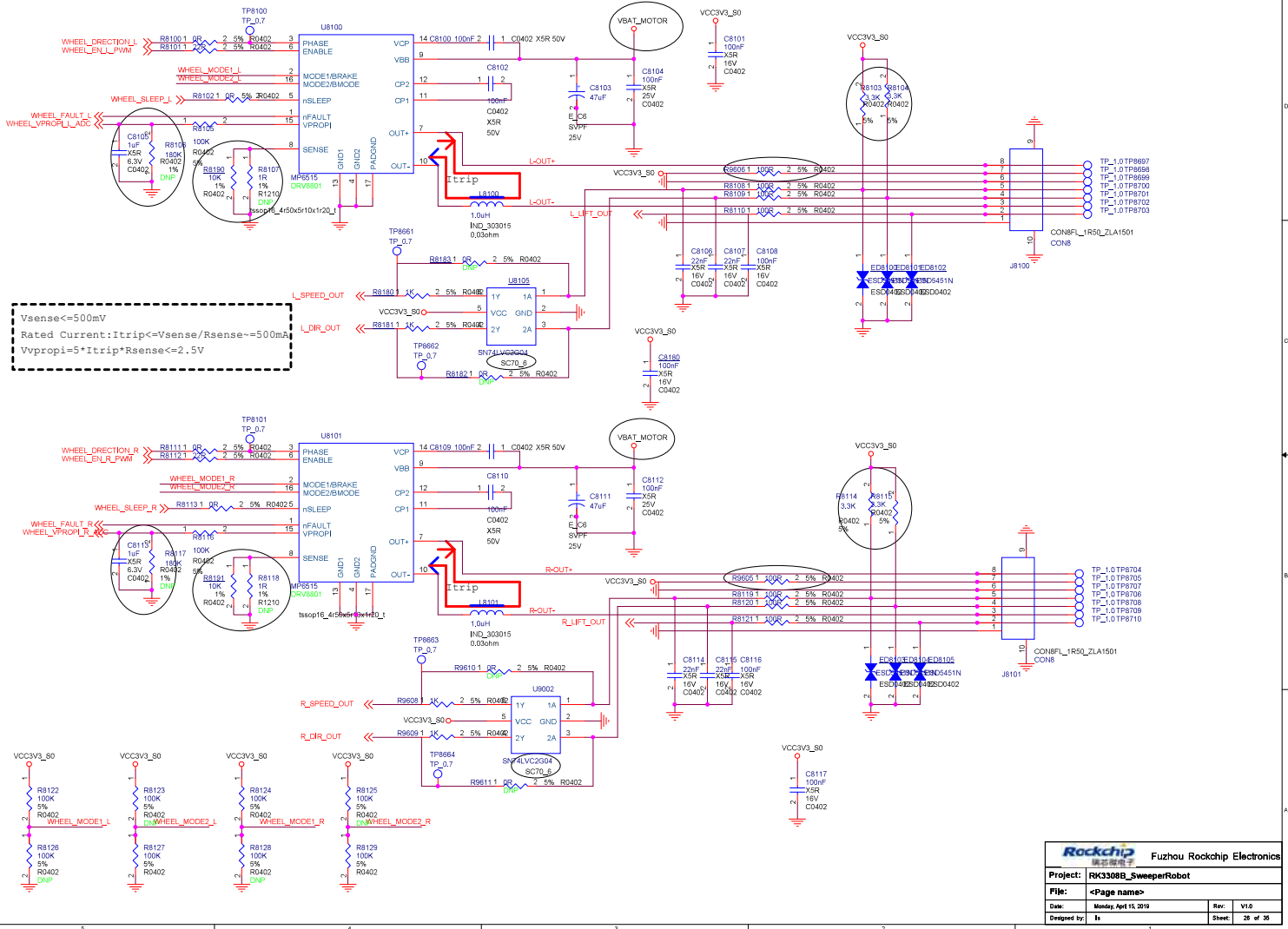


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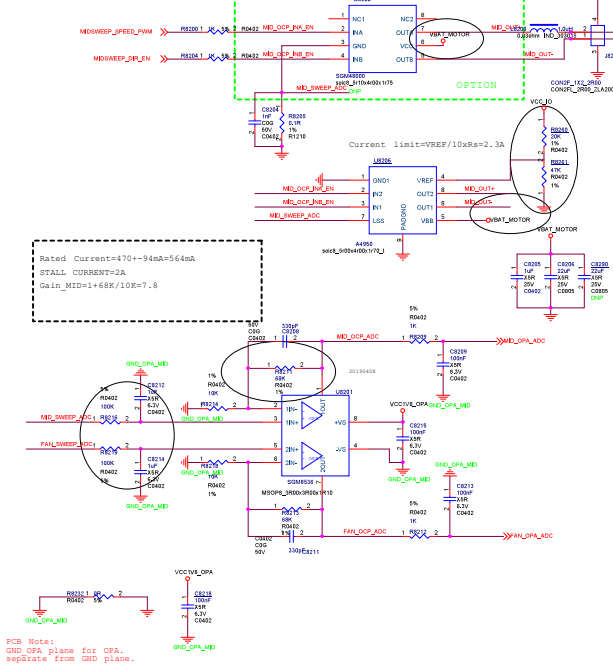


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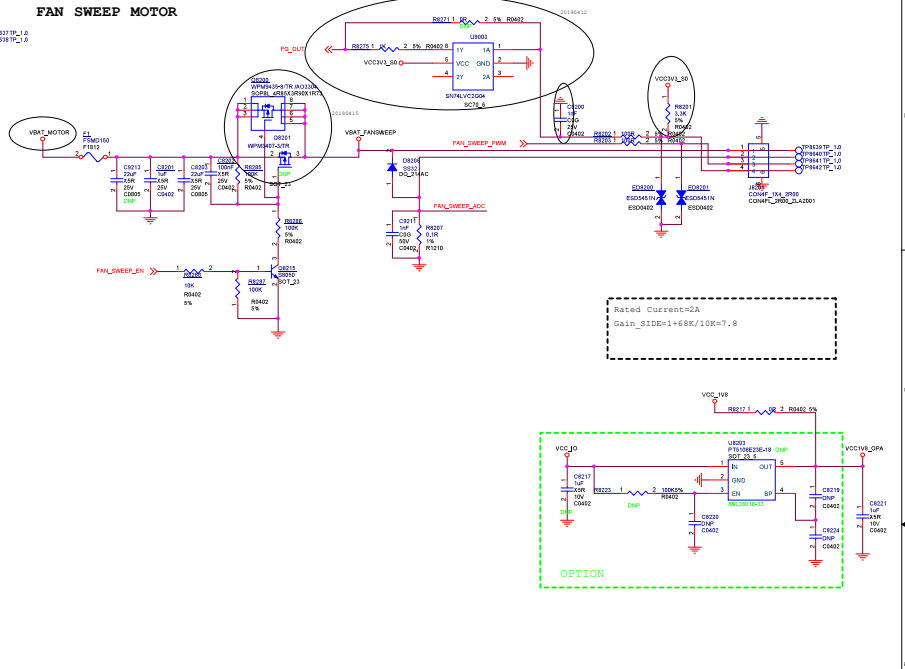




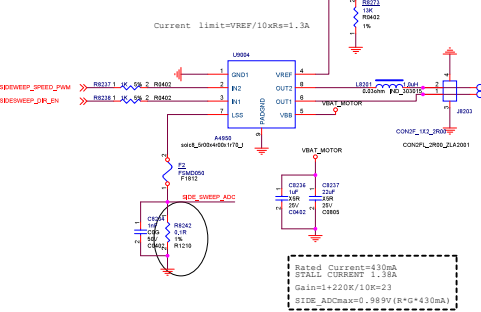
MID SWEEP MOTOR



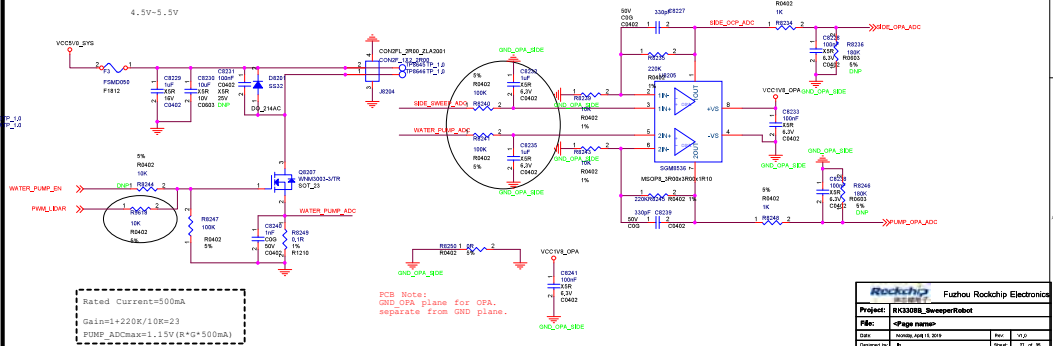
FAN SWEEP MOTOR

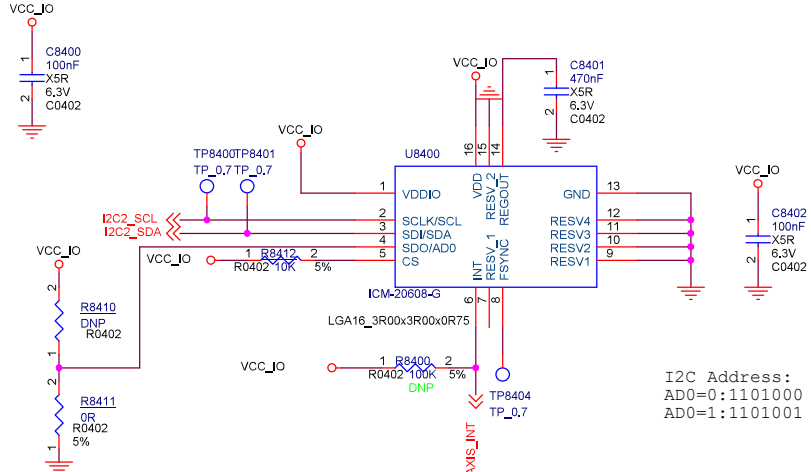


SIDE SWEEP MOTOR

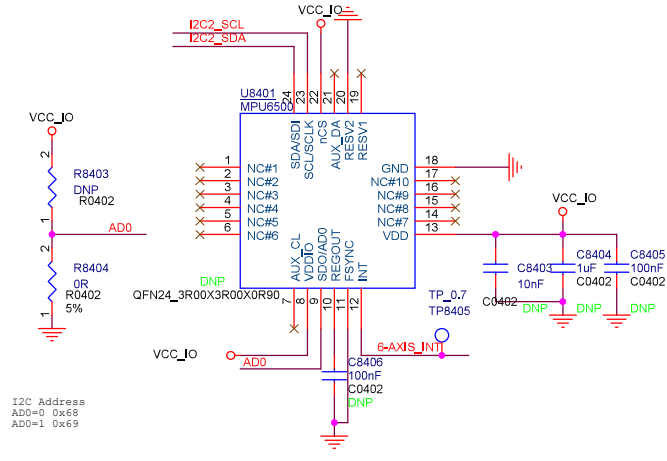


Water Pump MOTOR



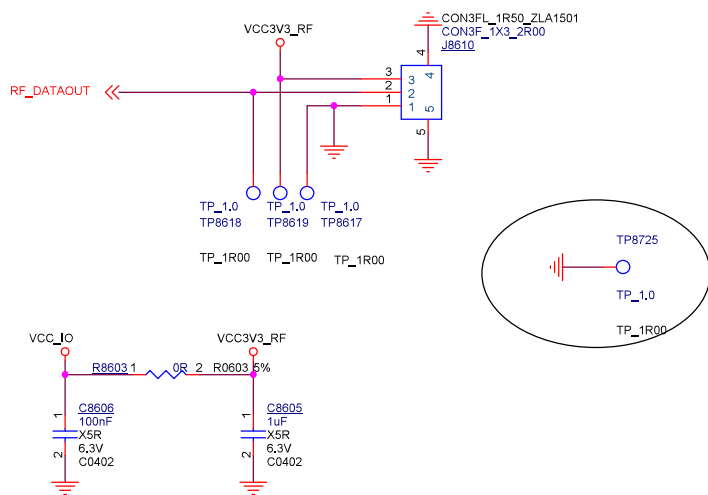


Option1



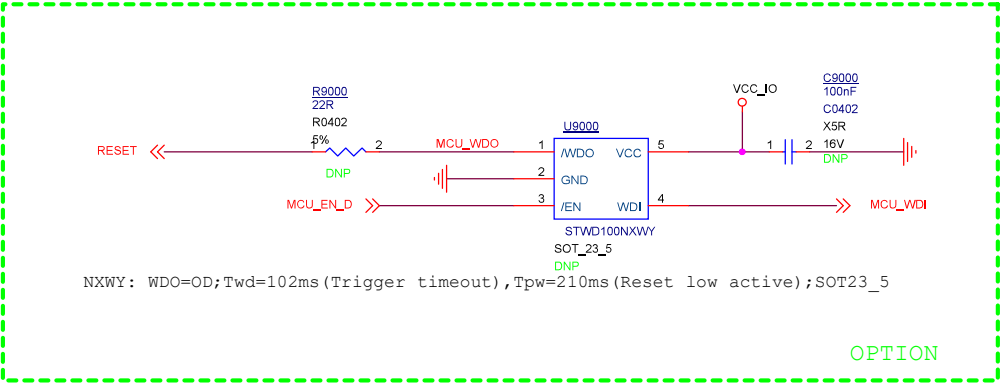
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433 Receiver



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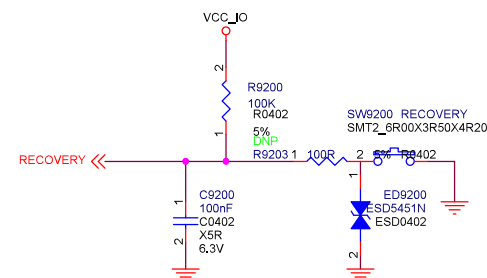
WatchDog MCU



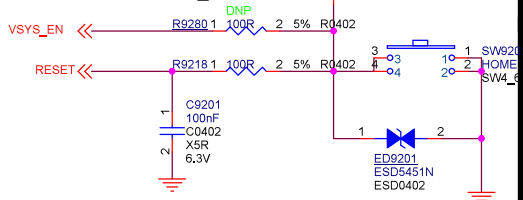
NXWY: WDO=OD;Twd=102ms(Trigger timeout),Tpw=210ms(Reset low active);SOT23_5

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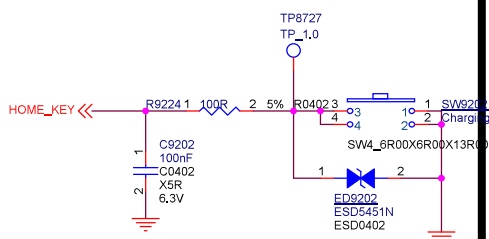
RECOVERY Key (Debug)



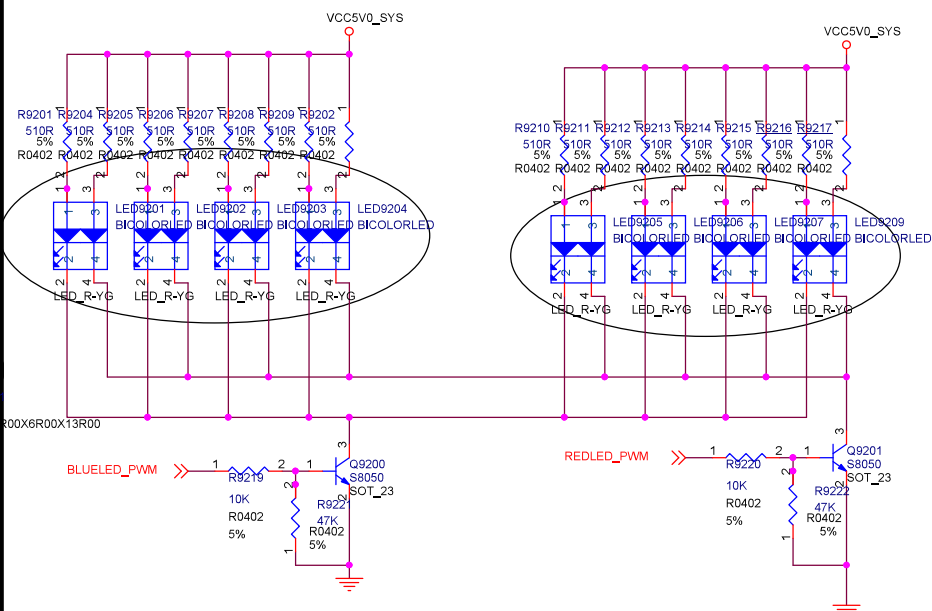
RESET Key



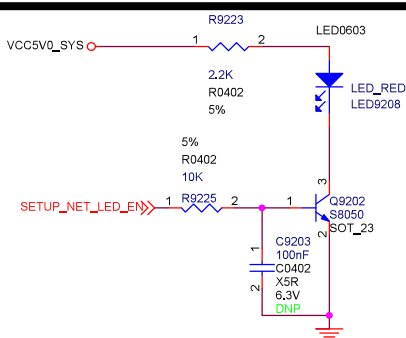
Charging Key



LED



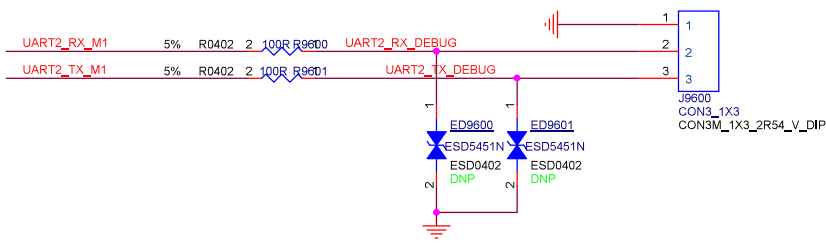
WIFI SET-UP NET LED



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UART2_RX_M1
UART2_TX_M1

Debug UART2_M1 (Default)



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