INGENIC

M200_S2134E-16A

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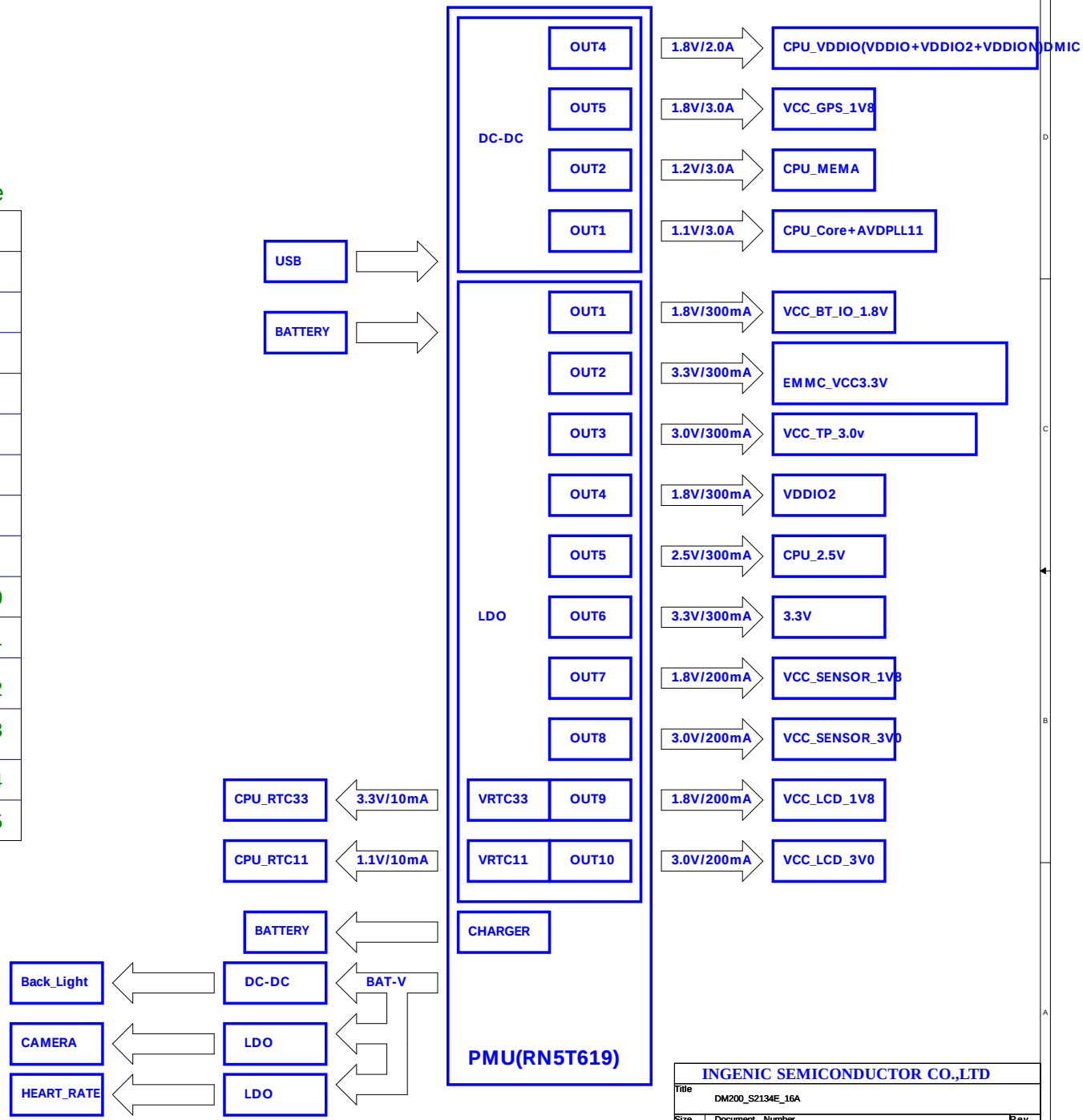

INGENIC SEMICONDUCTOR CO.,LTD		
Title: DM200_S2134E_16A		
Size: A3	Document Number: COVER SHEET/POWER ARCHITECTURE	Rev: V2.2
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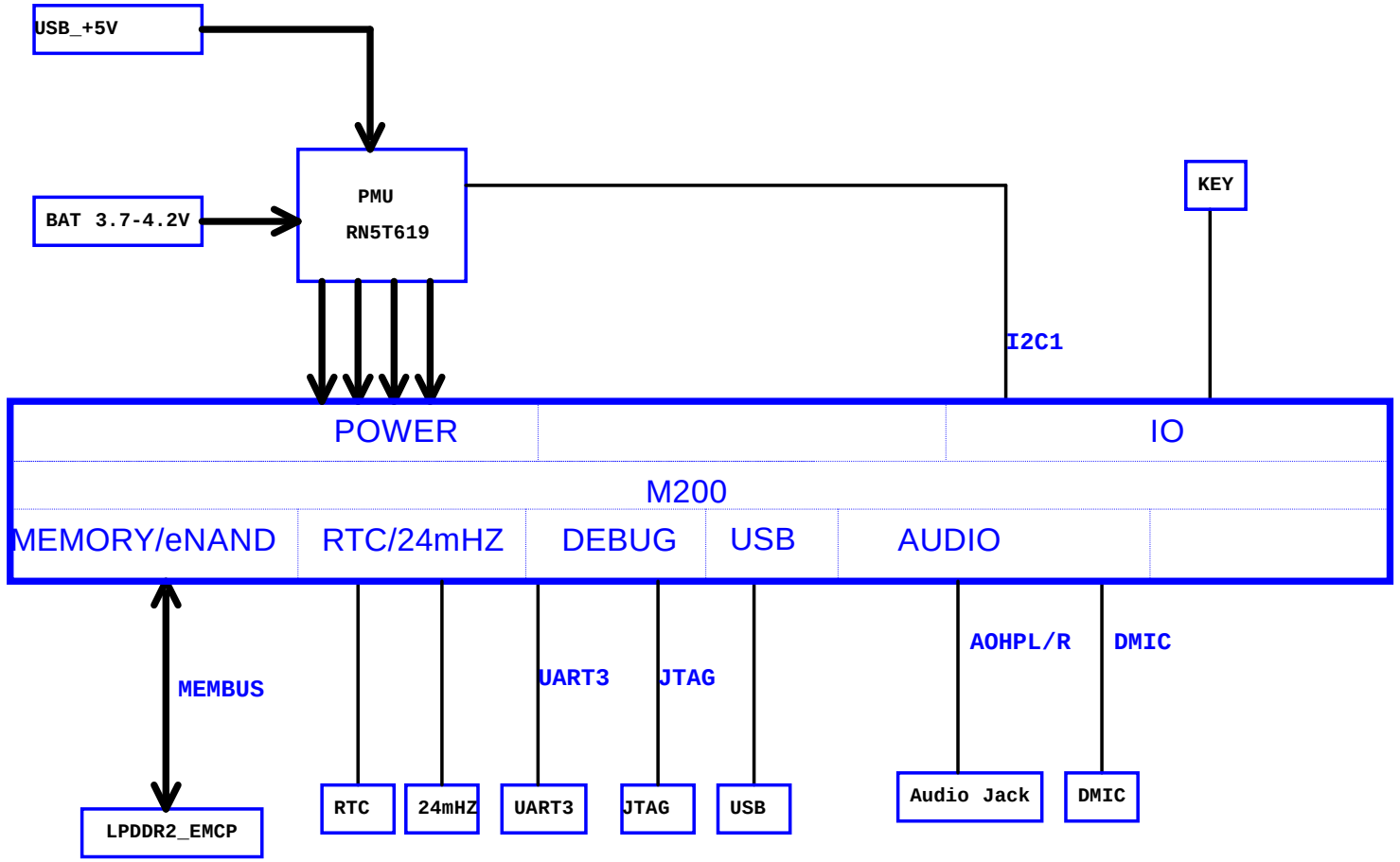

INGENIC SEMICONDUCTOR CO.,LTD		
Title: DM200_S2134E_16A		
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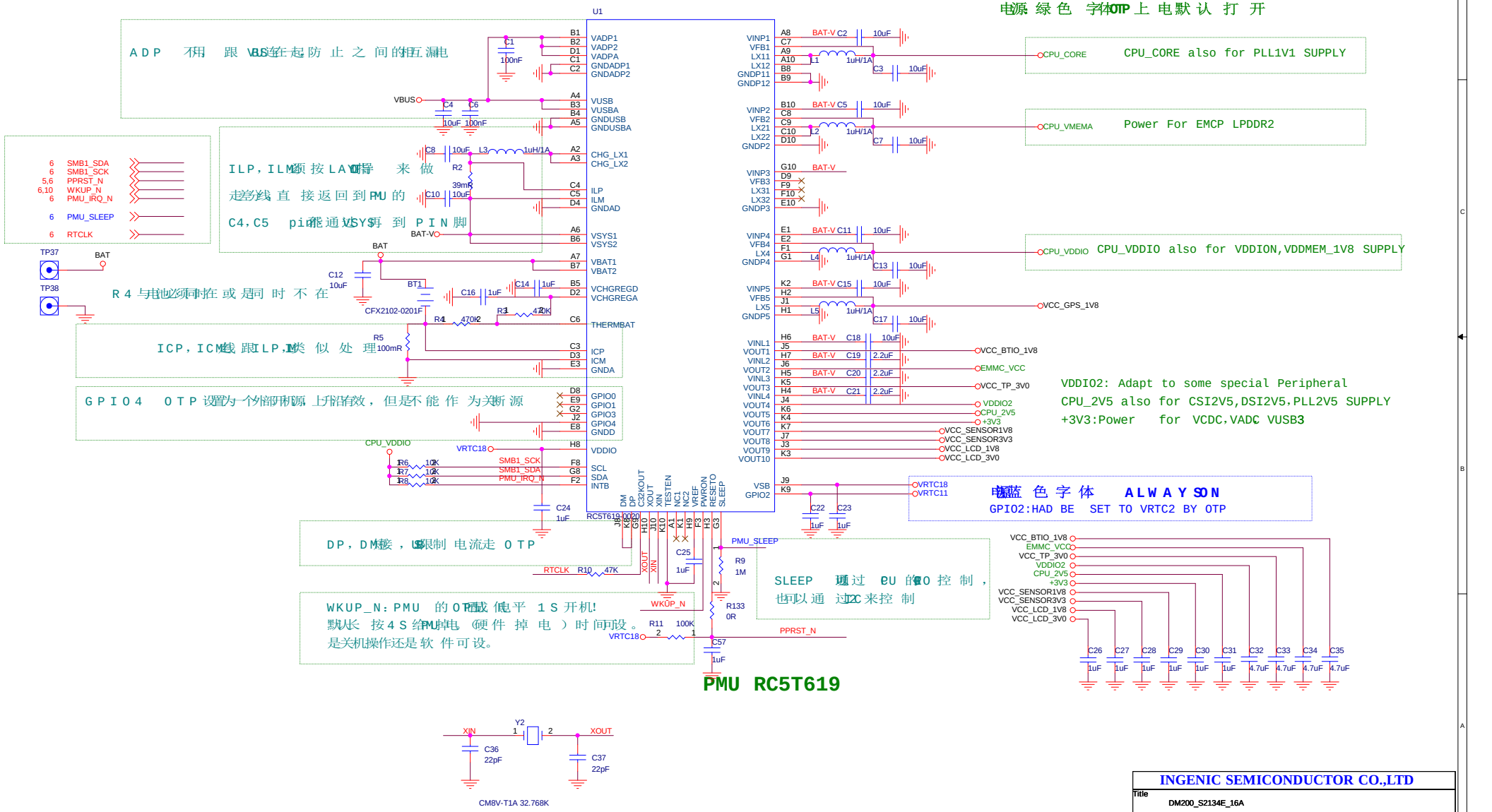
电源：绿色字体OTP上电默认打开
ADP不用跟VBUS连在一起防止之间的相互漏电
ILP，ILM须按LAYOUT要求来做走线直接返回到PMU的C4，C5 pin能通过SYS再到PIN脚
R4与其他必须同时在或是同时不在
ICP，ICM线跟ILP，ILM类似处理
GPIO4 OTP设置为一个外部供电源，上拉有效，但是不能作为关断源
DP，DM接，USB限制电流走OTP
SLEEP通过PMU的GPIO控制，也可以通过I2C来控制
WKUP_N：PMU的OTP配置低电平1S开机！默认长按4S给PMU掉电（硬件掉电）时间可设。是关机操作还是软件可设。
CPU_CORE CPU_CORE also for PLL1V1 SUPPLY
CPU_VMEMA Power For EMCP LPDDR2
CPU_VDDIO CPU_VDDIO also for VDDION,VDDMEM_1V8 SUPPLY
VCC_GPS_1V8
VCC_BTIO_1V8
EMMC_VCC
VCC_TP_3V0
VDDIO2
CPU_2V5
+3V3
VCC_SENSOR1V8
VCC_SENSOR3V3
VCC_LCD_1V8
VCC_LCD_3V0
VDDIO2: Adapt to some special Peripheral
CPU_2V5 also for CSI2V5,DSI2V5,PLL2V5 SUPPLY
+3V3:Power for VCDC,VADC VUSB3
电源：蓝色字体ALWAYSON
GPIO2:HAD BE SET TO VRTC2 BY OTP
PMU RC5T619
CM8V-T1A 32.768K
INGENIC SEMICONDUCTOR CO.,LTD
Title DM200_S2134E_16A
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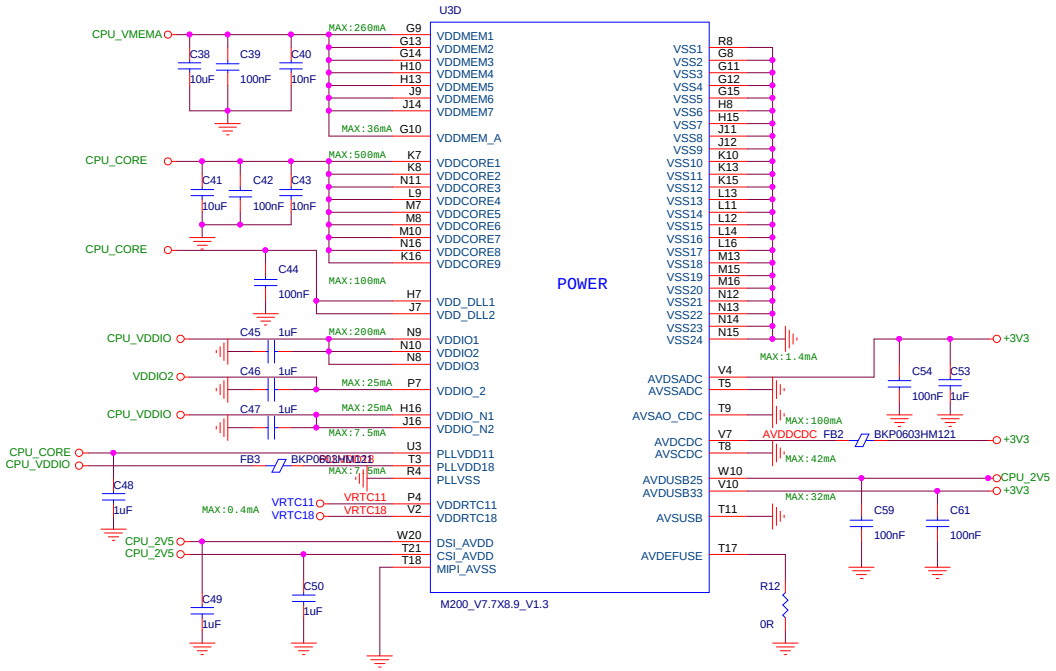

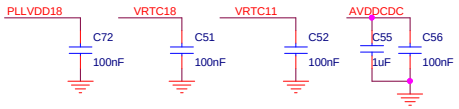

INGENIC SEMICONDUCTOR CO.,LTD		
Title: DM200_S2134E_16A		
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MSC0_D[7:0] 6
MSC0_CLK 6
MSC0_CMD 6

PPRST_N 3,6
BOOT_SEL1 6,10
BOOT_KEY 10

U3A
DDR
M200_V7.7X8.9_V1.3

22R R35
C85 NC(5pF)
22R R36

VBUS NC BOOT_SEL L MSC BOOT
VBUS 5V BOOT_SEL L MSC BOOT
VBUS 0V BOOT_SEL H USB BOOT

CPU_VDDIO
R30 10K
D2 1N4148WT
VBUS
Q10 WPM2031-3/TR
R17 0R
BOOT_KEY
BOOT_SEL1
ESD3 ESD5311Z-2/TR
ESD4 ESD5311Z-2/TR
C73 100nF
R19 10K
至于按键连接器处

MSC0 boot(101), USB boot(111)

BOOT KEY

CPU_VDDIO
R20 MSC0_D0
R21 MSC0_D1
R22 MSC0_D2
R23 MSC0_D3
R24 MSC0_D4
R25 MSC0_D5
R26 MSC0_D6
R27 MSC0_D7
R28
R29 MSC0_CMD

CPU_VMEMA
R33
C80 330K/1% 100nF
C83 1uF
R34 C84 330K/1%
DDR_VREF

The trance DDR_VREF is 20 mils wide at least.

EMMC_VCC
C63 4.7uF
C64 100nF
C65 10nF
CPU_VDDIO
C66 4.7uF
C70 100nF
C67 10nF
VDDNAND_VDDI
C71 100nF
C68 100nF
CPU_VMEMA
C74 4.7uF
C75 100nF
C86 100nF
C76 10nF

Chip Power Decoupling Capacitors Place near The Power Pins as Close as Possible

U4
e-NAND Flash
LPDDR2
H9TP32A4GDCCPR-KDM

DDR_VREF
C81 100nF
C82 100nF

e-MCP

R15 0R MSC0_CLK
R18 0R PPRST_N
R13 0R DCS1_N
R39 47K
R31 240R/1%
R32 240R/1%

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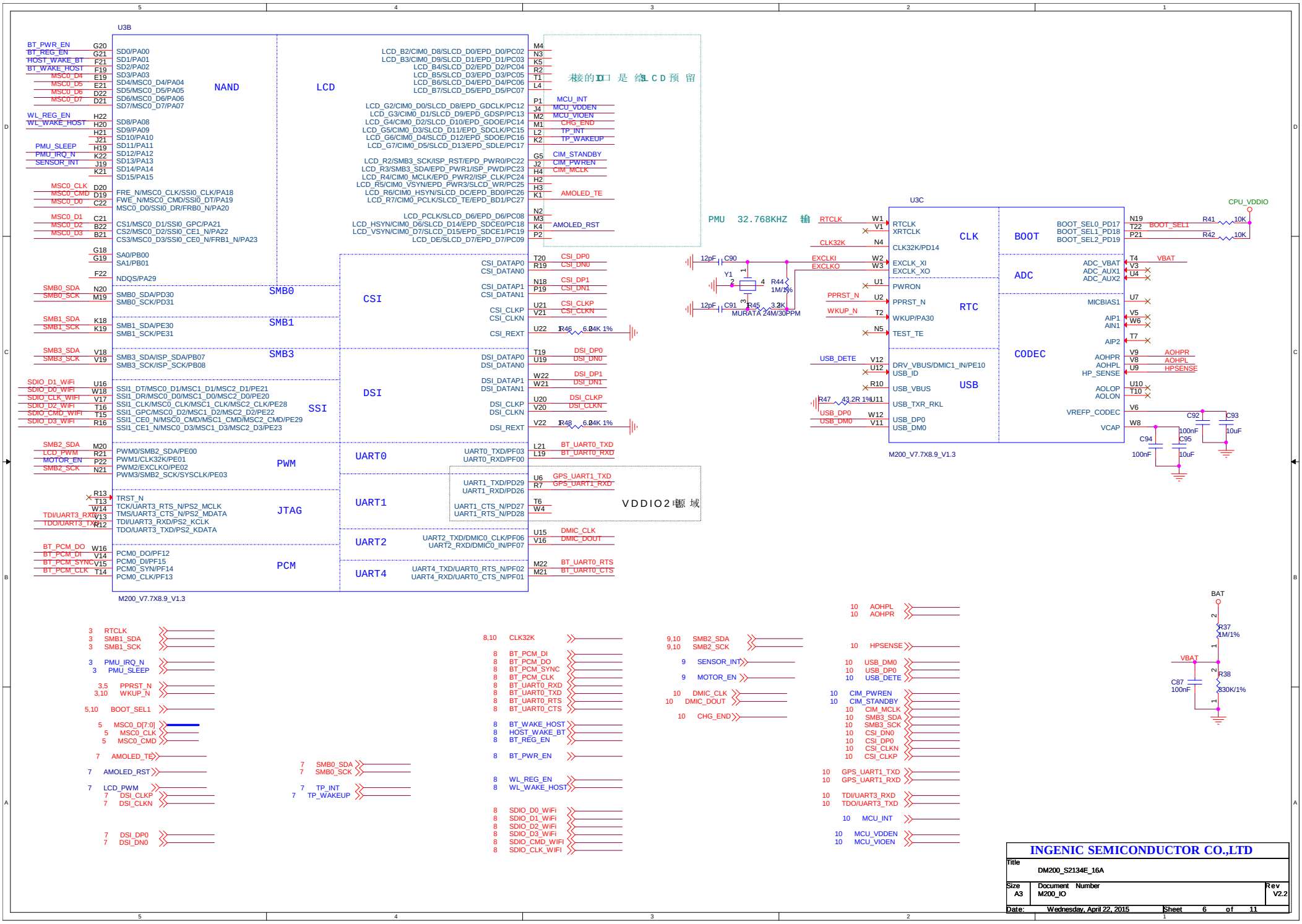
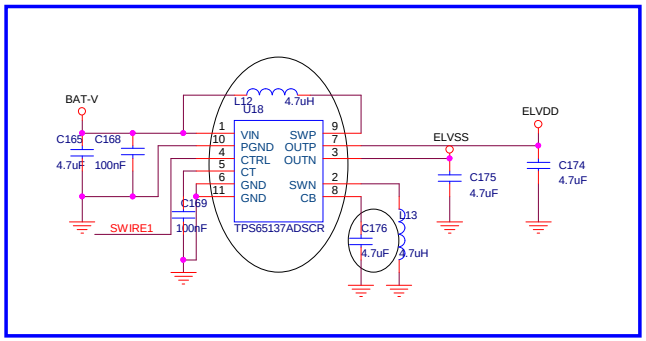
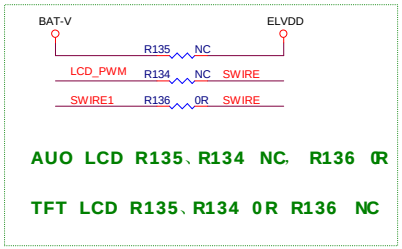

U3B
NAND
LCD
SMB0
SMB1
SMB3
CSI
DSI
SSI
PWM
JTAG
UART0
UART1
UART2
UART4
PCM
M200_V7.7X8.9_V1.3
U3C
CLK
BOOT
ADC
RTC
CODEC
USB
M200_V7.7X8.9_V1.3
CPU_VDDIO
BAT
VDDIO2电源域
INGENIC SEMICONDUCTOR CO.,LTD
DM200_S2134E_16A
Wednesday, April 22, 2015

6 TP_INT
6 TP_WAKEUP
6 AMOLED_RST
6 DSI_CLKP
6 DSI_CLKN
6 DSI_DP0
6 DSI_DN0
6 SMB0_SDA
6 SMB0_SCK
6 AMOLED_TE
7 LCD_PWM

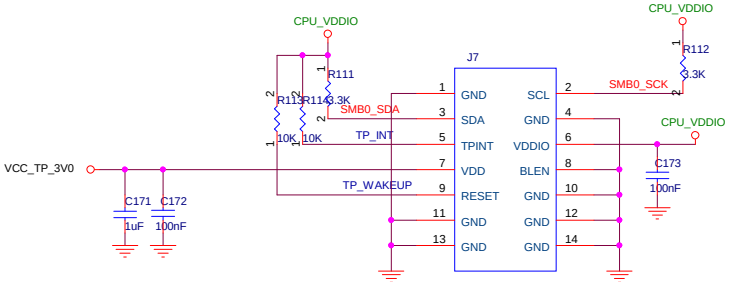


AUO LCD POWER DRIVE

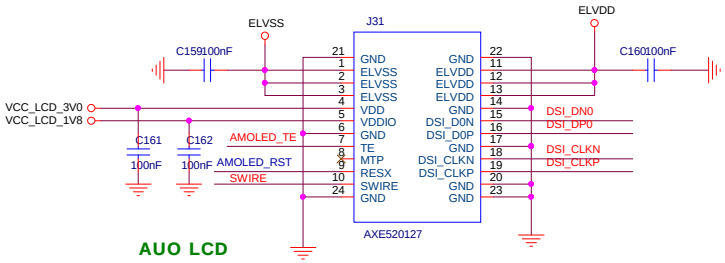


AUO LCD R135、R134 NC, R136 0R

TFT LCD R135、R134 0R R136 NC



TP



AUO LCD

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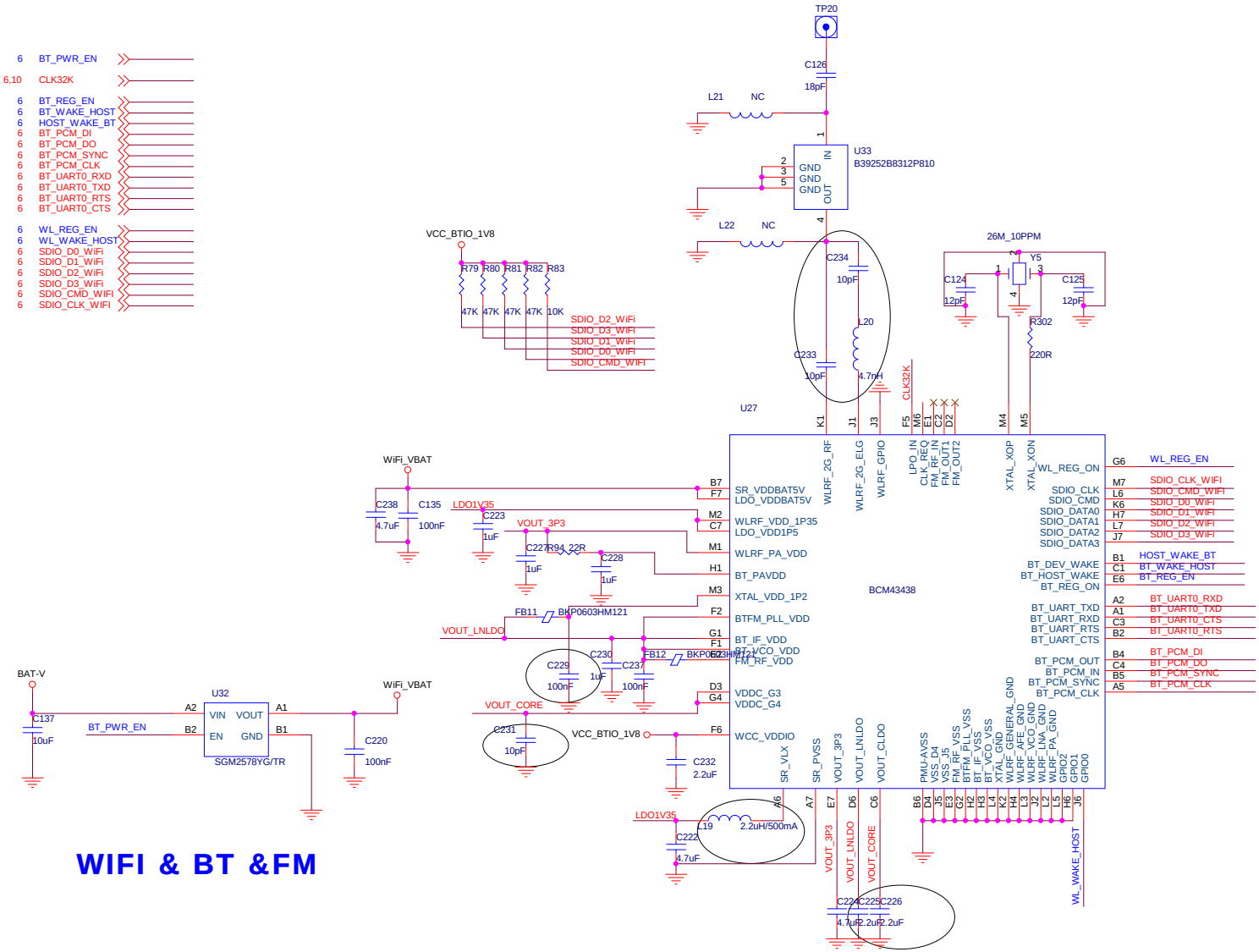

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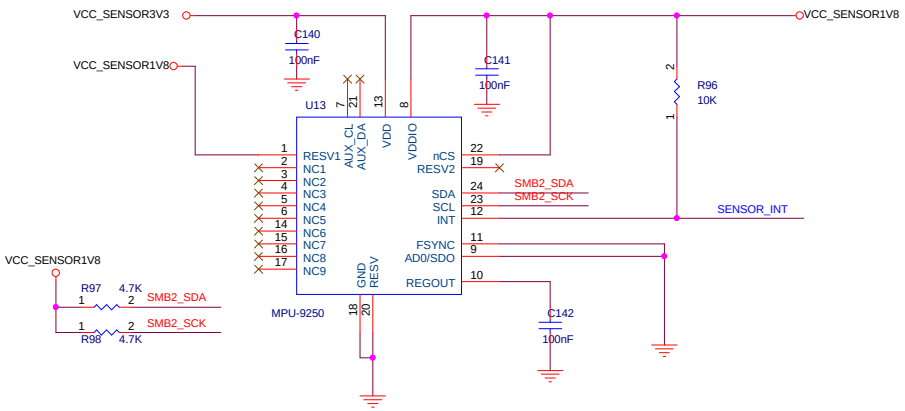
6 SENSOR_INT

6,10 SMB2_SDA
6,10 SMB2_SCK

6 MOTOR_EN

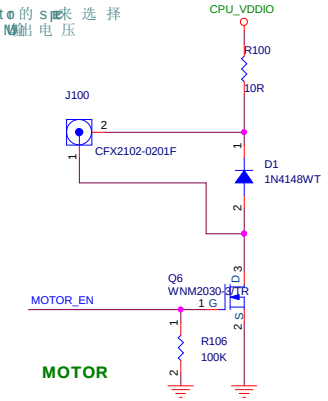
Gyroscope : 3.2mA / 8uA
Accelerometer: 450uA / 8uA
Magnetometer : 280uA / NO Parameter



GYROSCOPE+GSENSOR+COMPASS

addr：1101000

根据motor的spec来选择合适PWM输出电压



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Title: DM200_S2134E_16A		
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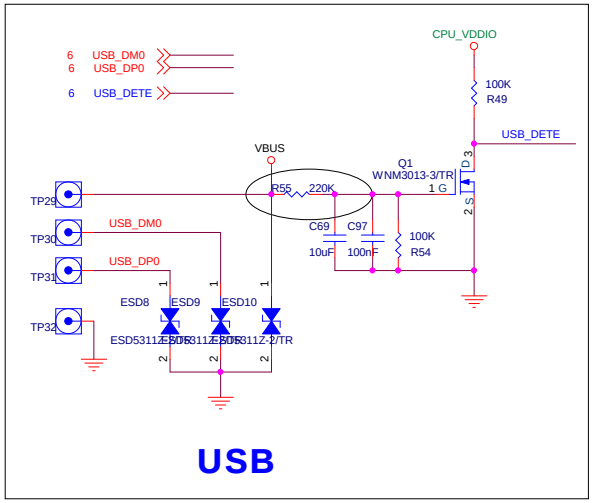

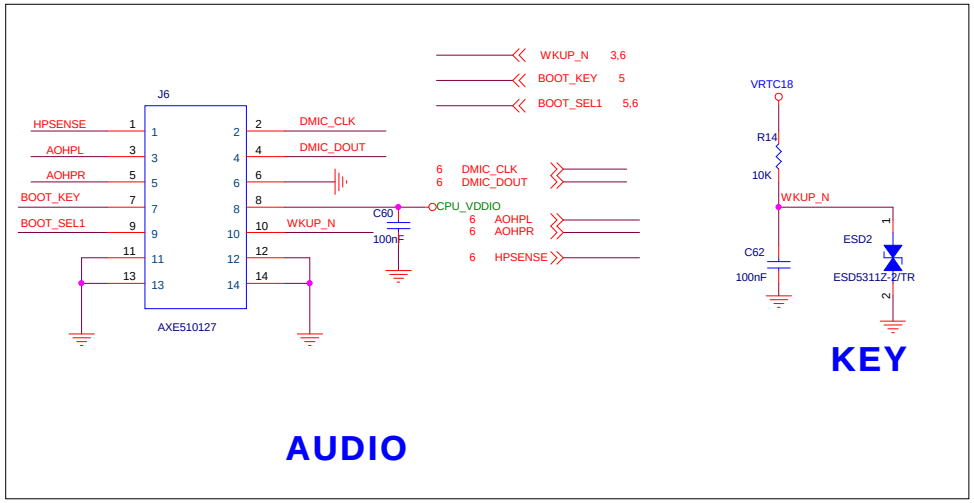

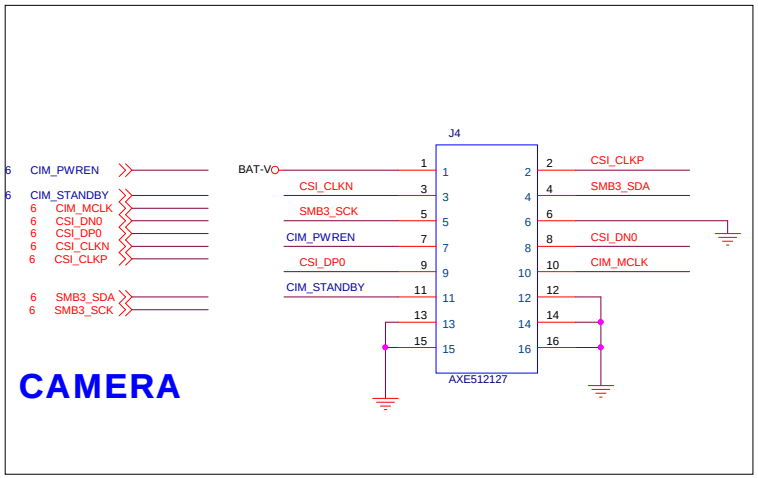

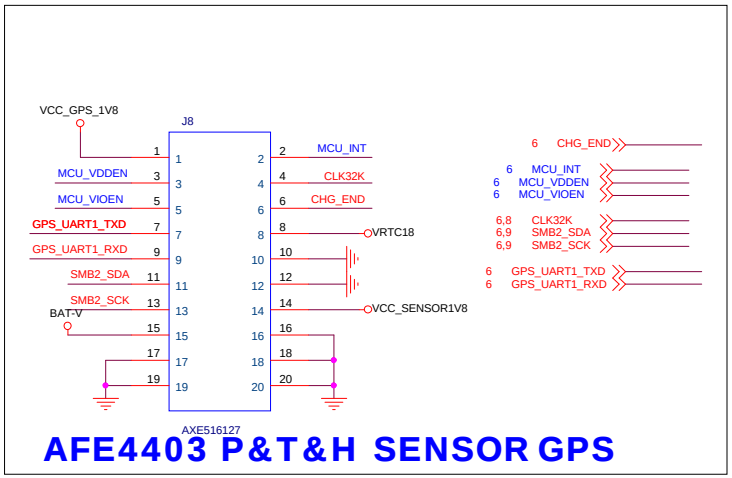

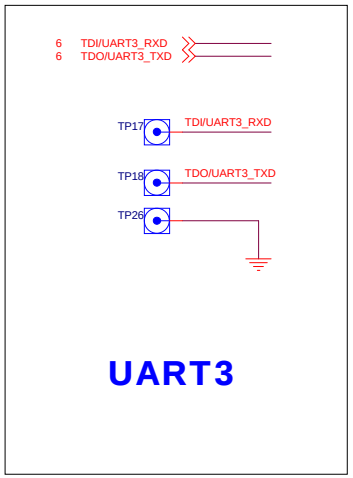

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Data	Revision	Change
JULY 22 2014	Rev1.0	1. First Revision
NOV 7 2014	Rev2.0	1.PAGE03 增加 C51，R9改为 1MR10改为47K，R2改为39mR，将SVADP连在起 2.PAGE06、PAGE10 增加 CHG_EN网络 3.PAGE08 Y5改为 2016封装，R都改为 0201封装 4.PAGE03 去掉 R1 5.PAGE07 增加 R124，R125，R36，增加 LDRV网络来兼容 TF和TC 6.PAGE06 C90，C91改为12pF
	Rev2.1	1.PAGE09 Q6改为 WNM2080 2.PAGE08 C126,C233,C234 改为 0R电阻；C236、C235 NC L20改为3.3uH C124，C125改为 12pF，W匹配。
JAN 20 2015	Rev2.2	1.PAGE07 改ps65631dpd为 TPS65137ADSG增加 C6 2.PAGE10 去掉 J9将键部分合到 J6上 3.PAGE5增加 R30，D2，Q10，用于 BOOT启动
JAN 22 2015	Rev2.2	1.PAGE10增加 R55，与R54分压确保 5V导通 1.8V不通 2.PAGE8去掉 TP19 3.PAGE10 J8改为10pin 4.PAGE3去掉 C9 5.PAGE8去掉 C235，C235，C229改为100nF，C231改为0FC225,C226改为2.2uF 6.PAGE8增加 U33，L9改为0603封装，L20改为 4.7nH,C233，C234改为10pF
APR 22 2015	Rev2.2.1	1.PAGE03 去掉 R3，R4改为 47K减小功耗。

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