

TP19
Test Point

Button

TESTPOINT2

J1

Button
Button
GND
GND

50340-08-0400

D2 ESD_04002

GND

GND

VINZC68C27RA

TP18
Test Point

DCIN-5V

D1

R1

TP18
TESTPOINT2

GND

1	VCC
2	VCC
3	VCC
4	VCC
5	VCC
6	GND
7	GND
8	GND
9	GND
10	GND

50340-08-1000

2 USB0-DM <<>
2 USB0-DP <<>
2 USB0-IDET <<> USB0-IDET

VCC-3V3
R99
10K
R_0402

小 于 等 于 104 欧 (包括了误差)。

D^+ / D^- 上的ES器件电容小于等于4 pF(包括了误差)。

DISPLAY

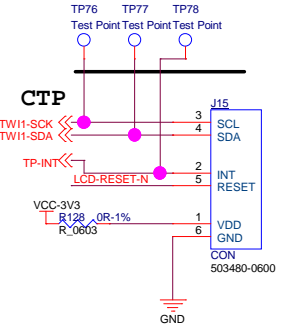
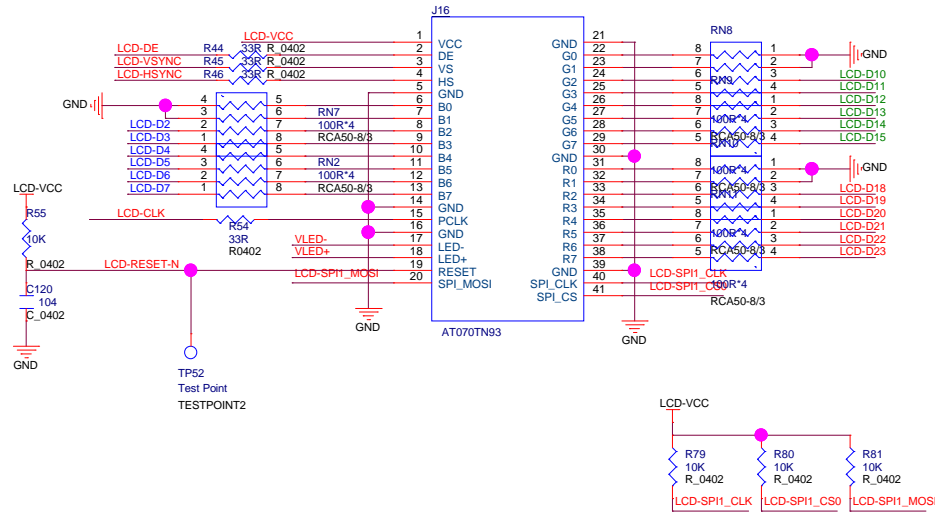
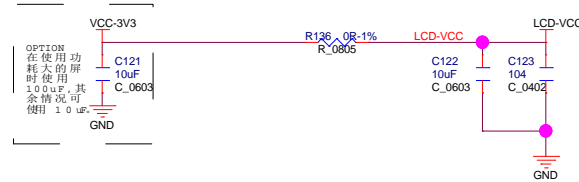
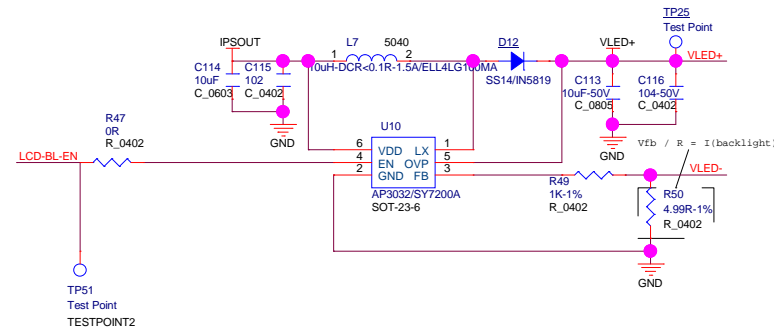
LCD

2 LCD-CLK
2 LCD-DE
2 LCD-VSYNC
2 LCD-HSYNC
2 LCD-D7
2 LCD-D6
2 LCD-D5
2 LCD-D4
2 LCD-D3
2 LCD-D2
2 LCD-D15
2 LCD-D14
2 LCD-D13
2 LCD-D12
2 LCD-D11
2 LCD-D10
2 LCD-D23
2 LCD-D22
2 LCD-D21
2 LCD-D20
2 LCD-D19
2 LCD-D18
2 LCD-BL-EN

2 LCD-RESET-N

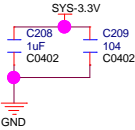
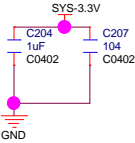
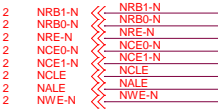
2 LCD-SPH1_CS
2 LCD-SPH1_CLK
2 LCD-SPH1_MOSI

TP53 Test Point TESTPOINT2
TP54 Test Point TESTPOINT2
TP55 Test Point TESTPOINT2

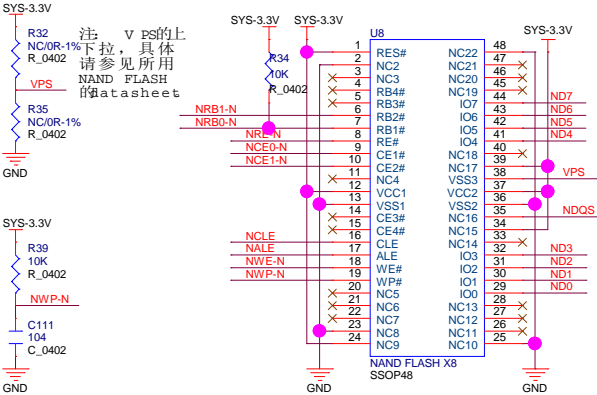


电容屏信号连接示意图

FLASH/CARD

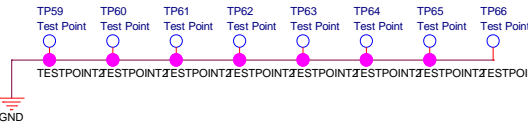
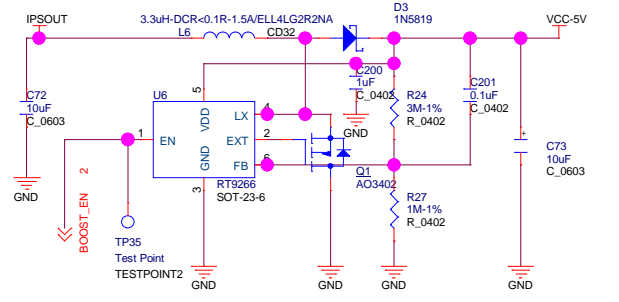
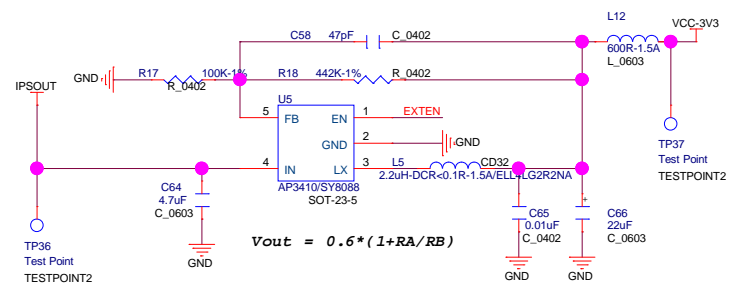
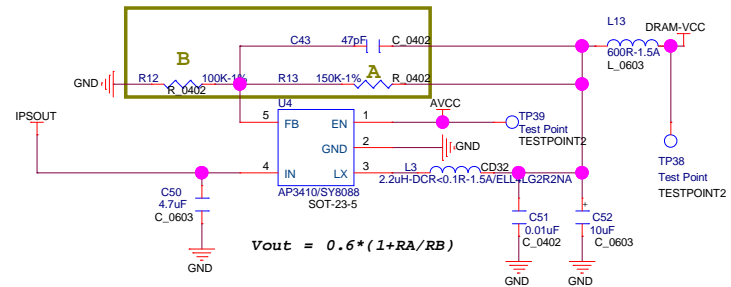
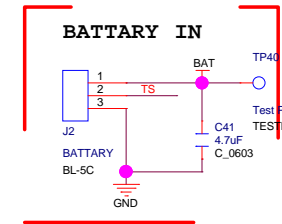
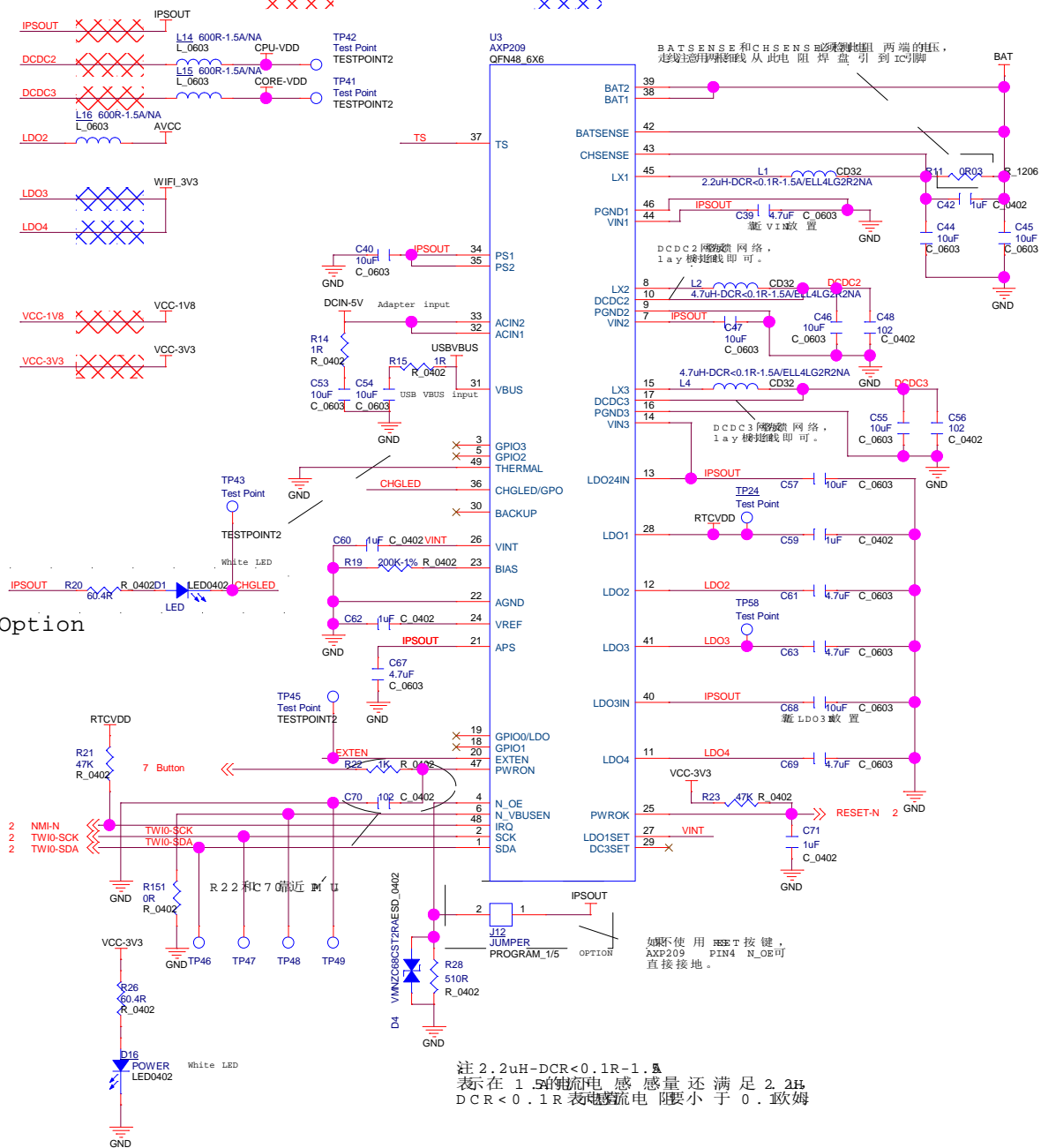


NAND FLASH

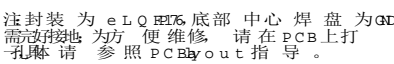


POWER

POWER LINE:Width>=80mil POWER LINE:Width>=50mil



注 2.2uH-DCR<0.1R-1.5A
表示在1.5A的电流感感量还满足2.2H
DCR<0.1R表示感电流要小于0.1欧姆



COVER

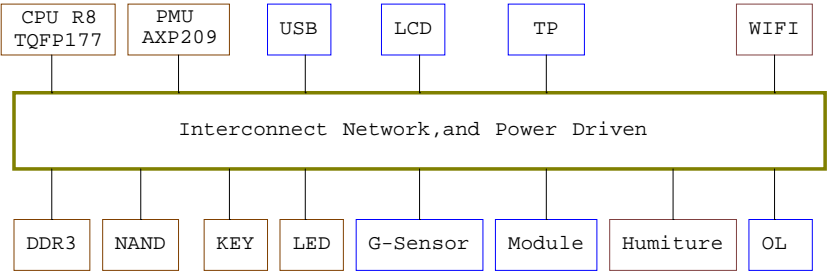
Schematics Index

Bran-Design

- 01 COVER
- 02 CPU
- 03 POWER
- 04 DDR3 16x1
- 05 FLASH
- 06 DISPLAY
- 07 PERIPHERS
- 08 SENSOR
- 09 WI-FI
- Option:
- 10 BLE

特别提醒：
1:PG0 / PG1 / PG这个IN脚
具有INPUT功能。
2:PM的GPIO0/1/2这四个IN脚
做GPIO-OUTPUT功能
3:PG10 / PG11 / PG1这个IN脚
的能可改变。
4:CSI-PCLK / CSI-MCLK这个IN脚
具有INPUT功能。
5:CSI-HSYNC具有INPUT功能，
不能用途。

BLOCK

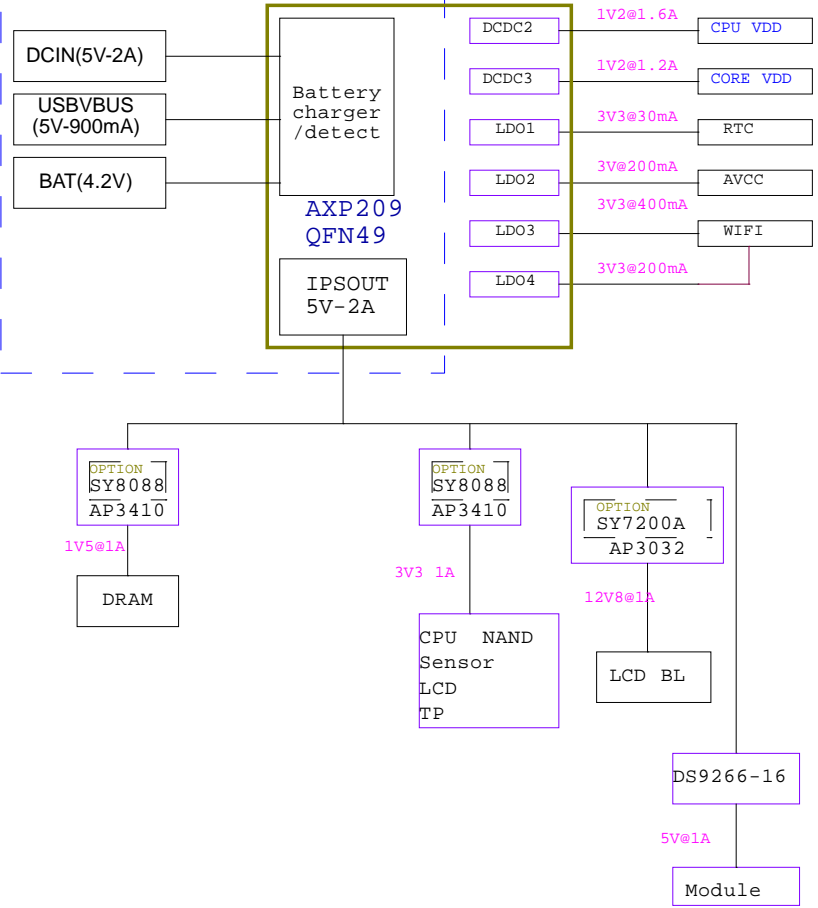


REVISION HISTORY

Revision	Description	Date	Drawn	Checked	Approved
Ver 1.0	Bran Main PCB ASSY	2016/6/19	Violet/Jemmey	Jemmey	
Ver 1.5	Bran Main PCB ASSY	2016/7/31	Jemmey	Jemmey/Violet	

POWER TREE

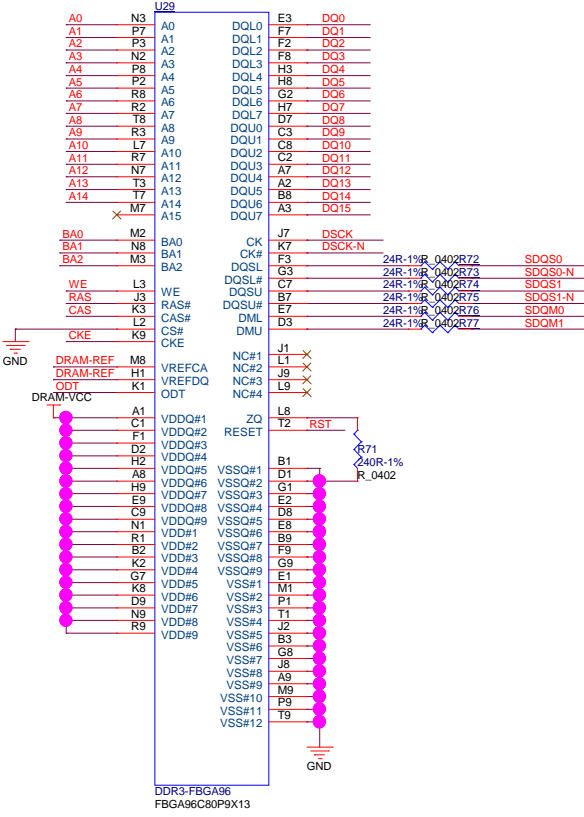
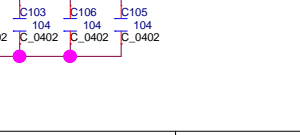
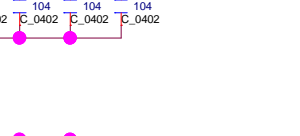
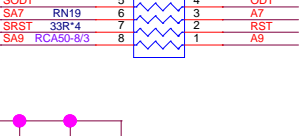
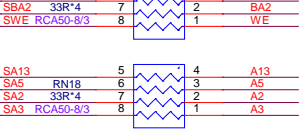
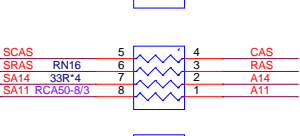
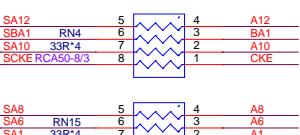
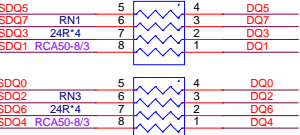
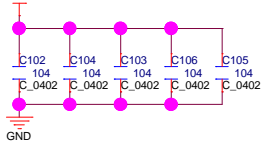
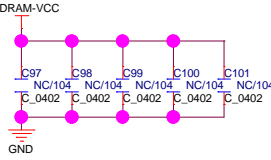
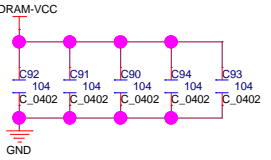
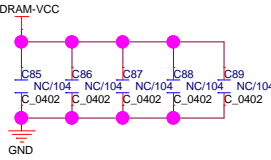
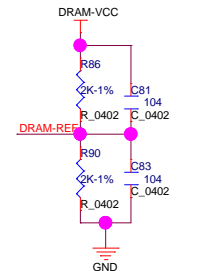
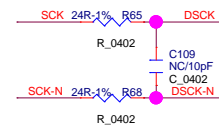
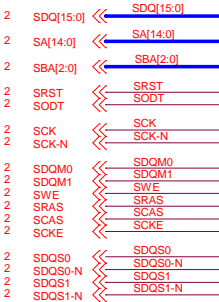
LAYOUT: DCIN, BAT, IPSOUT 输入或
输出线，从PMU管脚处就要保证尽量粗。

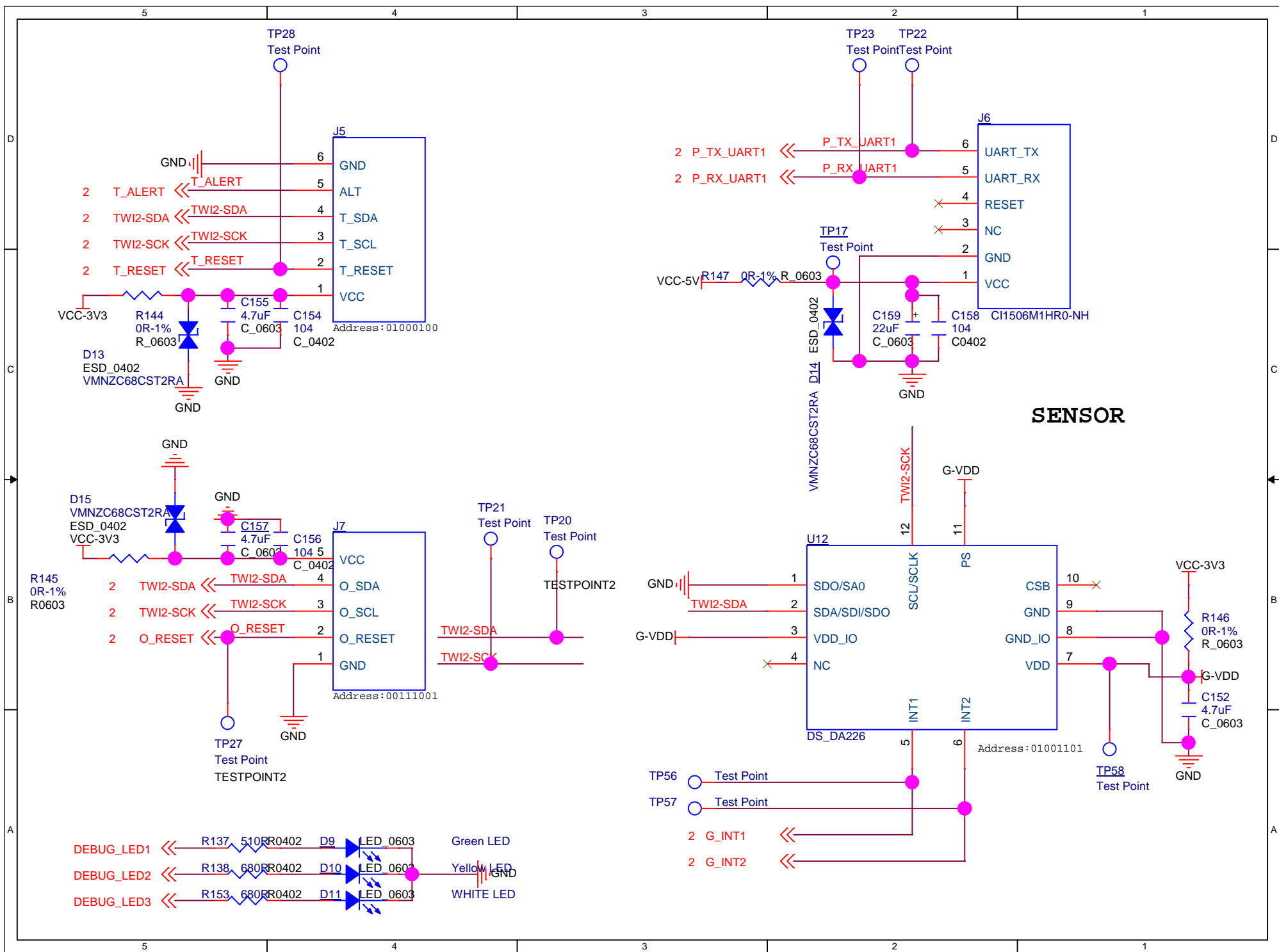


DDR3 16x1

DDR3

本页的元件标号 请 不要 修改
layout 时 直接 在 原理 图 中 提供
的 参考 PCB





Wi-Fi

PI Matching Circuit for ANT
这部分电路根据天线的实际情况进行调整。

U30: ESP8089 QFN32

Pin 1: VDDA
Pin 2: LINA
Pin 3: VDD3P3
Pin 4: VDD3P3
Pin 5: VDD_RTC
Pin 6: TOUT
Pin 7: CHIP_EN
Pin 8: XPD_DCDC
Pin 9: MTMS
Pin 10: MTDI
Pin 11: VDDP-ST
Pin 12: MTCK
Pin 13: MTDO
Pin 14: GPIO0
Pin 15: GPIO1
Pin 16: VDD
Pin 17: VDDPST
Pin 18: SD_DATA_2
Pin 19: SD_CMD
Pin 20: SD_CLK
Pin 21: SD_DATA_0
Pin 22: SD_DATA_1
Pin 23: SD_D0_1
Pin 24: SD_D1_1
Pin 25: U0_TXD
Pin 26: XTAL_OUT
Pin 27: XTAL_IN
Pin 28: VDD
Pin 29: VDDA
Pin 30: RES12K
Pin 31: EXT_RSTB
Pin 32: GND
Pin 33: GND

Components:

- R160: 0R-1% R_0402
- A1: ASC_RFANT3216120A5T_V07 3216
- A2: 7341201110 IPEX
- C213: 10pF C0402
- C214: NC C_0402
- C215: NC C_0402
- C174: 10uF C_0603
- C175: 1uF C_0402
- C176: 0.1uF C_0402
- R155: 12K-1% R_0402
- R156: 0R-1% R_0402
- R171: 200R-1% R_0402
- R172: 200R-1% R_0402
- R173: 200R-1% R_0402
- R168: 200R-1% R_0402
- R169: 200R-1% R_0402
- L17: 600R-1.5A/NA L_0603
- C220: 9pF C_0402
- C221: 9pF C_0402
- J13: DEBUG

Test Points:

- TP68: Test Point TESTPOINT2 WL_WAKE_UP
- TP69: Test Point TESTPOINT2 WL_RESTN
- TP70: WL_SDIO_D3
- TP72: WL_SDIO_D2
- TP71: WL_SDIO_D1
- TP75: WL_SDIO_D0
- TP73: WL_SDIO_CMD
- TP74: WL_SDIO_CLK
- TP1: Wi-Fi_EN

Power and Signal Connections:

- VCC-WIFI-3V3
- WIFI_3V3
- WL_WAKE_UP
- XTAL_IN
- XTAL_OUT
- U0_TXD
- U0_RXD
- Wi-Fi_EN
- WL_SDIO_D1
- WL_SDIO_D0
- WL_SDIO_CMD
- WL_SDIO_CLK

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