

| PCI_I2C     | PART NUMBER  | VENOR     | ADDRESS   |
|-------------|--------------|-----------|-----------|
| SM Camera   | DV5648       | APTINA    | 0X6C/0X6D |
| VCN driver  | DW9714A      |           | 0X18/0X19 |
| SENSORS_I2C |              |           |           |
| TW          | S3202        | Synaptics | 0X40/0X41 |
| 2M Camera   | P2N01D       | sony      | 0X6C/0X6D |
| G-SENSOR    | LIS3DHTR     | ST        | 0X32/0X33 |
|             | MMA8452Qp1   | FREESCALE | 0X3A/0X3B |
|             | KXCJK - 1013 | Kionix    | 0X2E/0X2F |
| ALS+PS      | IMD2713P     | TAOS      | 0X72/0X73 |
|             | LTR-558ALS   | Liteon    | 0X46/0X47 |

Backup for debug

| Configuration GPIO Table |                |
|--------------------------|----------------|
| GPIO_49/GRFC6            | WDG_DISABLE    |
| GPIO_50/GRFC7            | BOOT_CONFIG_1  |
| GPIO_51/GRFC8            | BOOT_CONFIG_2  |
| GPIO_52/GRFC9            | BOOT_CONFIG_3  |
| GPIO_53/GRFC10           | BOOT_CONFIG_4  |
| GPIO_55/GRFC12           | BOOT_CONFIG_5  |
| GPIO_56/GRFC13           | BOOT_CONFIG_6  |
| GPIO_57/GRFC14           | BOOT_CONFIG_7  |
| GPIO_58/GRFC15           | BOOT_CONFIG_8  |
| GPIO_61/GRFC18           | BOOT_CONFIG_9  |
| GPIO_62/GRFC19           | BOOT_CONFIG_10 |
| GPIO_90                  | BOOT_CONFIG_11 |
| GPIO_92                  | BOOT_CONFIG_12 |
| GPIO_98                  | BOOT_CONFIG_13 |
| GPIO_99                  | BOOT_CONFIG_14 |
| GPIO_85                  | BOOT_CONFIG_15 |
| GPIO_100                 | FORCE_USB_BOOT |

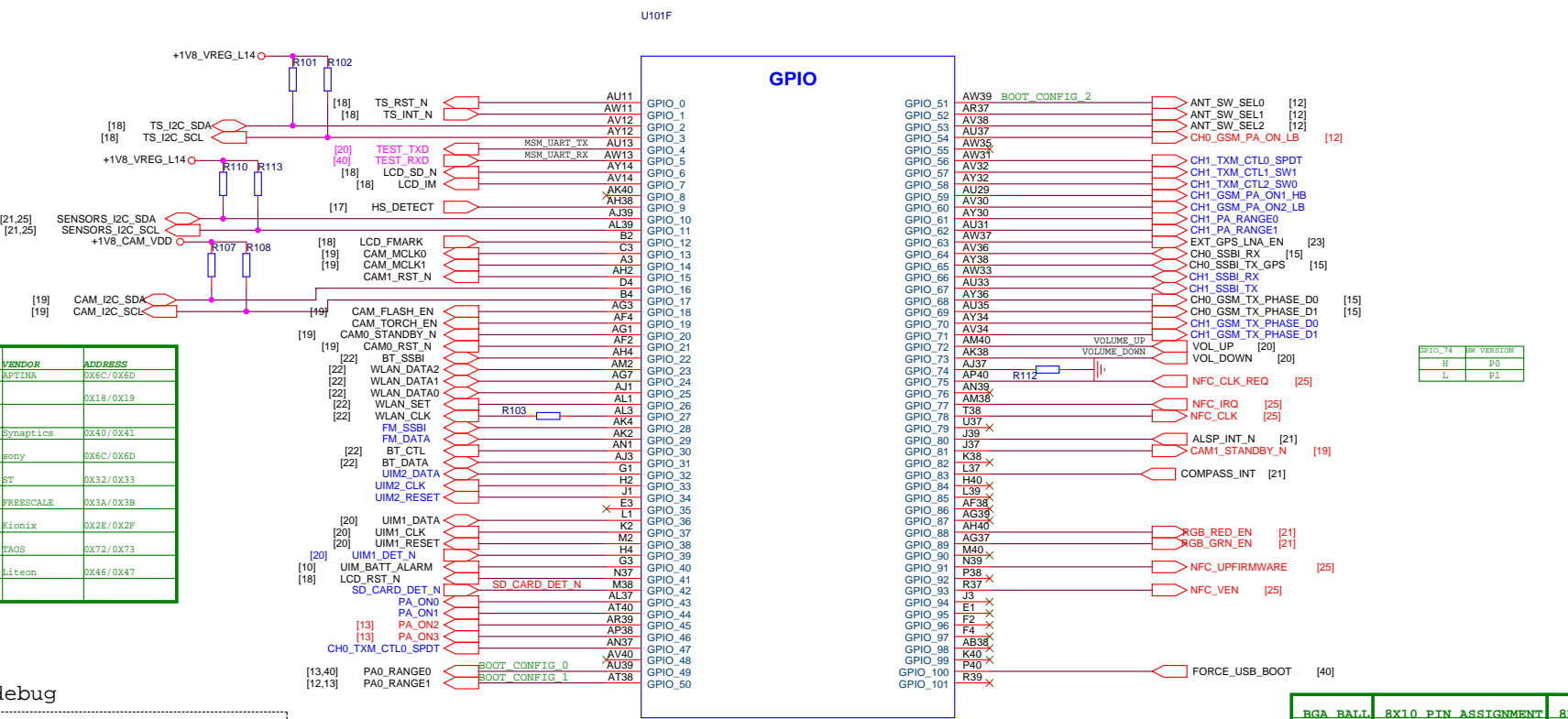
| MSM8X10/8X12 WAKEUP GPIO |         |         |         |          |          |         |         |
|--------------------------|---------|---------|---------|----------|----------|---------|---------|
| GPIO_1                   | GPIO_5  | GPIO_9  | GPIO_14 | GPIO_15  | GPIO_32  | GPIO_33 | GPIO_34 |
| GPIO_35                  | GPIO_41 | GPIO_42 | GPIO_72 | GPIO_73  | GPIO_74  | GPIO_75 | GPIO_76 |
| GPIO_77                  | GPIO_78 | GPIO_79 | GPIO_80 | GPIO_81  | GPIO_82  | GPIO_83 | GPIO_84 |
| GPIO_85                  | GPIO_87 | GPIO_90 | GPIO_91 | GPIO_92  | GPIO_93  | GPIO_94 | GPIO_95 |
| GPIO_96                  | GPIO_97 | GPIO_98 | GPIO_99 | GPIO_100 | GPIO_101 |         |         |

| 8X10/8X12 GRFC   |  |
|------------------|--|
| GPIO43~63,GPIO67 |  |

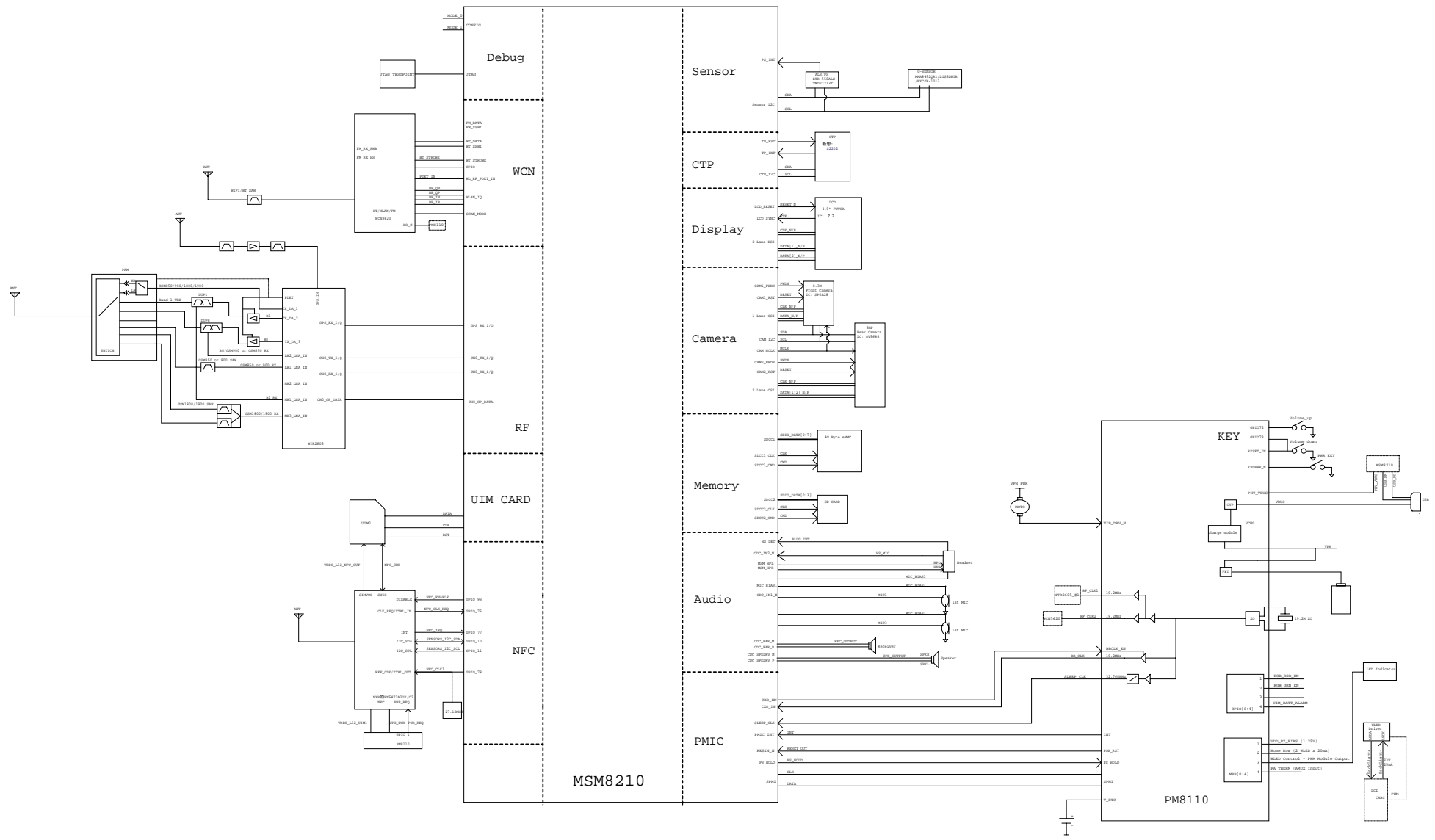
| BOOT_OPTION_TYPE      | FAST BOOT     | DESCRIPTION                      |
|-----------------------|---------------|----------------------------------|
| BOOT_DEFAULT_OPTION   | GPIO53:GPIO50 |                                  |
| BOOT_SDC_PORT2_THEN   | 0b0000        | eMMC@SDC1 -> SD@SDC2 -> HSUSB2.0 |
| _SDC_PORT1_OPTION     | 0b0001        | SD@SDC2 -> eMMC@SDC1             |
| BOOT_SDC_PORT1_OPTION | 0b0010        | eMMC@SDC1                        |
| BOOT_USB_OPTION       | 0b0011        | HSUSB2.0                         |

| BGA BALL | RX10 PIN ASSIGNMENT                  | RX12 PIN ASSIGNMENT  |
|----------|--------------------------------------|----------------------|
| AW31     | GPIO56                               | GPIO56(GRFC13)       |
| AV32     | GPIO57                               | GPIO57(GRFC14)       |
| AY32     | GPIO58                               | GPIO58(GRFC15)       |
| AU29     | GPIO59                               | GPIO59(GRFC16)       |
| AV30     | GPIO60                               | GPIO60(GRFC17)       |
| AY30     | GPIO61                               | GPIO61(GRFC18)       |
| AU31     | GPIO62                               | GPIO62(GRFC19)       |
| AW33     | GPIO66                               | SSBI_WTR1_RX         |
| AU33     | GPIO67                               | SSBI_WTR1_TX(GRFC21) |
| AY34     | GPIO70                               | GSM_TX_PHASE_D1_0    |
| AV29     | GPIO71                               | GSM_TX_PHASE_D1_1    |
| AY28     | GND                                  | TX_DAC1_QP           |
|          | GND                                  | TX_DAC1_QM           |
| AL27     | VREG_L10_1P8(OR NC FOR REV2 SILICON) | TX_DAC1_IREF         |
| AU23     | GND                                  | BBRX_CH1_QM          |
| AV22     | GND                                  | BBRX_CH1_QP          |
| AY24     | GND                                  | BBRX_CH1_IM          |
| AW23     | GND                                  | BBRX_CH1_IP          |

|   |                           |                 |                    |
|---|---------------------------|-----------------|--------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |                    |
| Title   | CP7576U_MAINBOARD         | Ver             | V1.0               |
| Functionality   | GPIOs                     | Document Number | Keep Secret 15year |
| Date:   | Wednesday, March 12, 2014 | Sheet           | 1 of 40            |
| Designer:   |                           | Checker:        |                    |

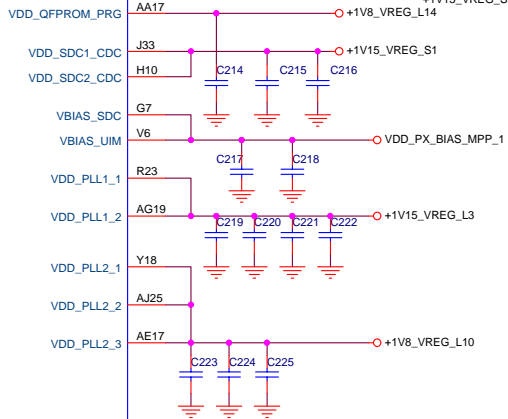
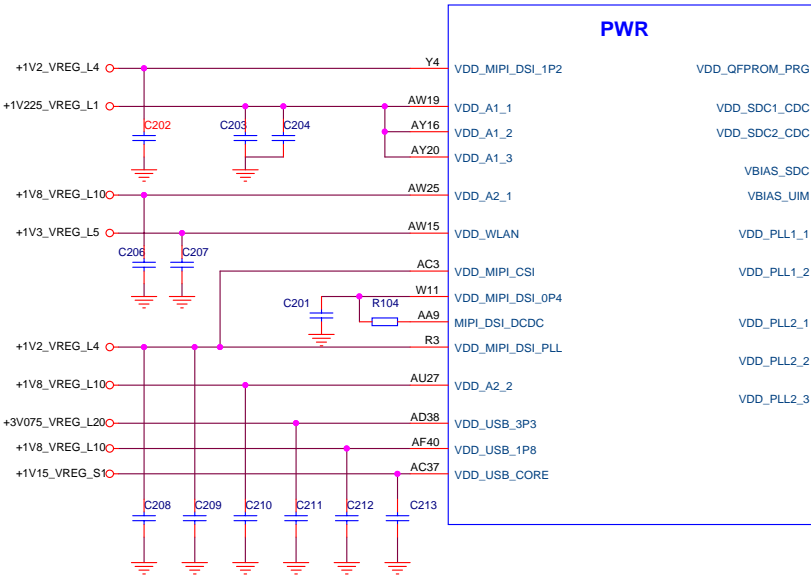


| GPIO_Y4 | SW VERSION |
|---------|------------|
| H       | P0         |
| L       | P1         |

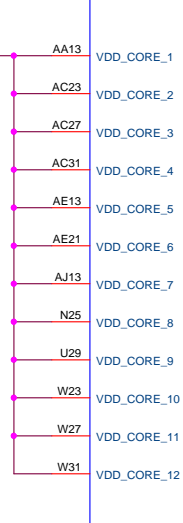


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| Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd |  |                 |        |
| PC   | CP2021 MAINBOARD   | PC              | V1.0   |
| Assembly   |  | Assembly Number |        |
| Doc  | Yulong Computer Telecommunication Scientific (Shenzhen) Co., Ltd | Date            | 1 1 18 |
| Designer:  |  | Checker:        |        |

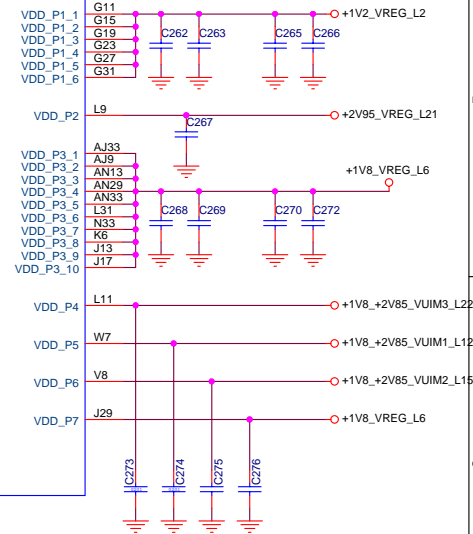
U101G



U101I

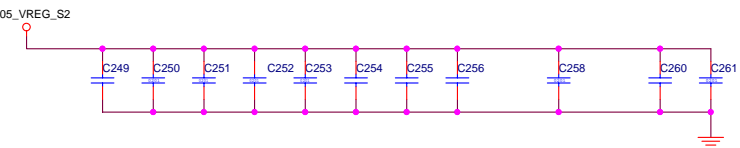
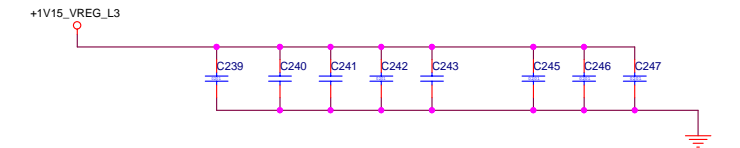
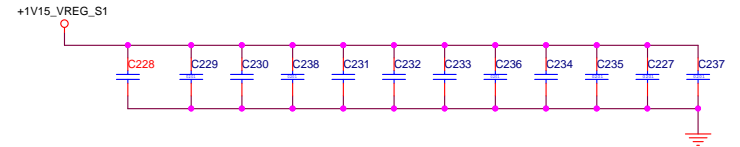
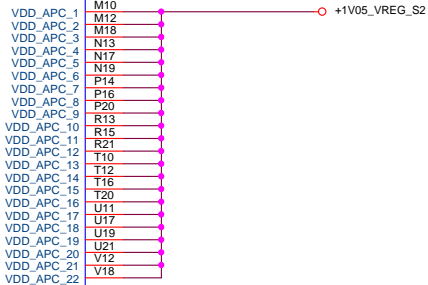
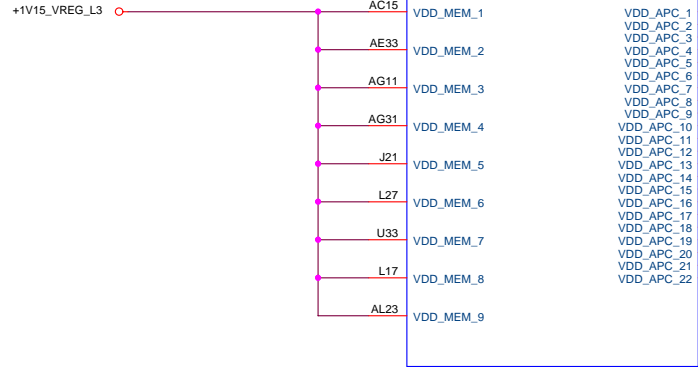


PWR3

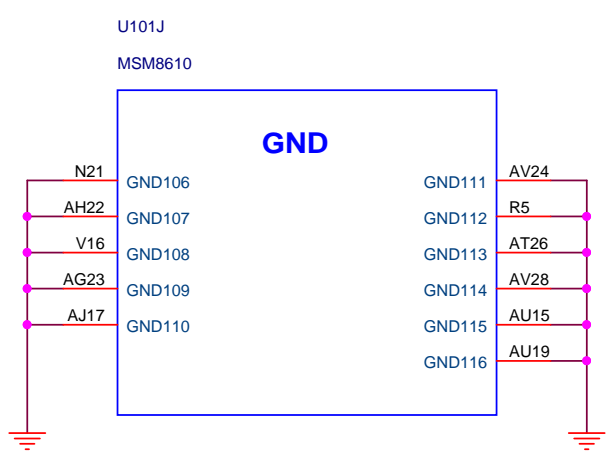
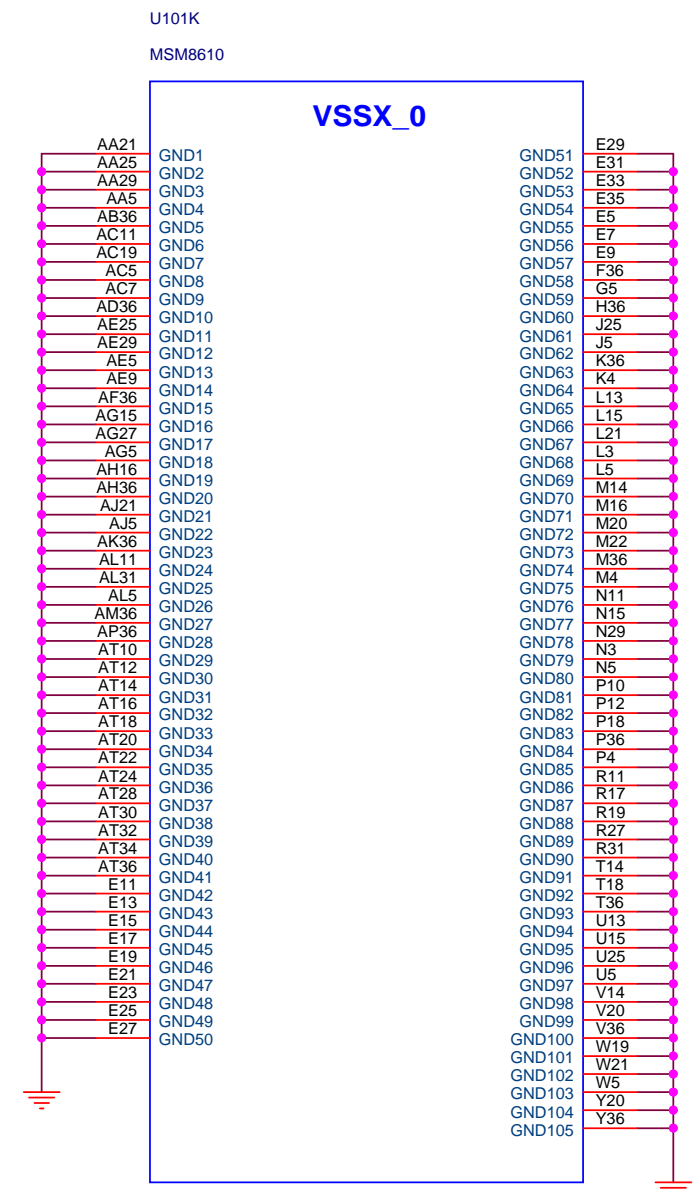


U101H

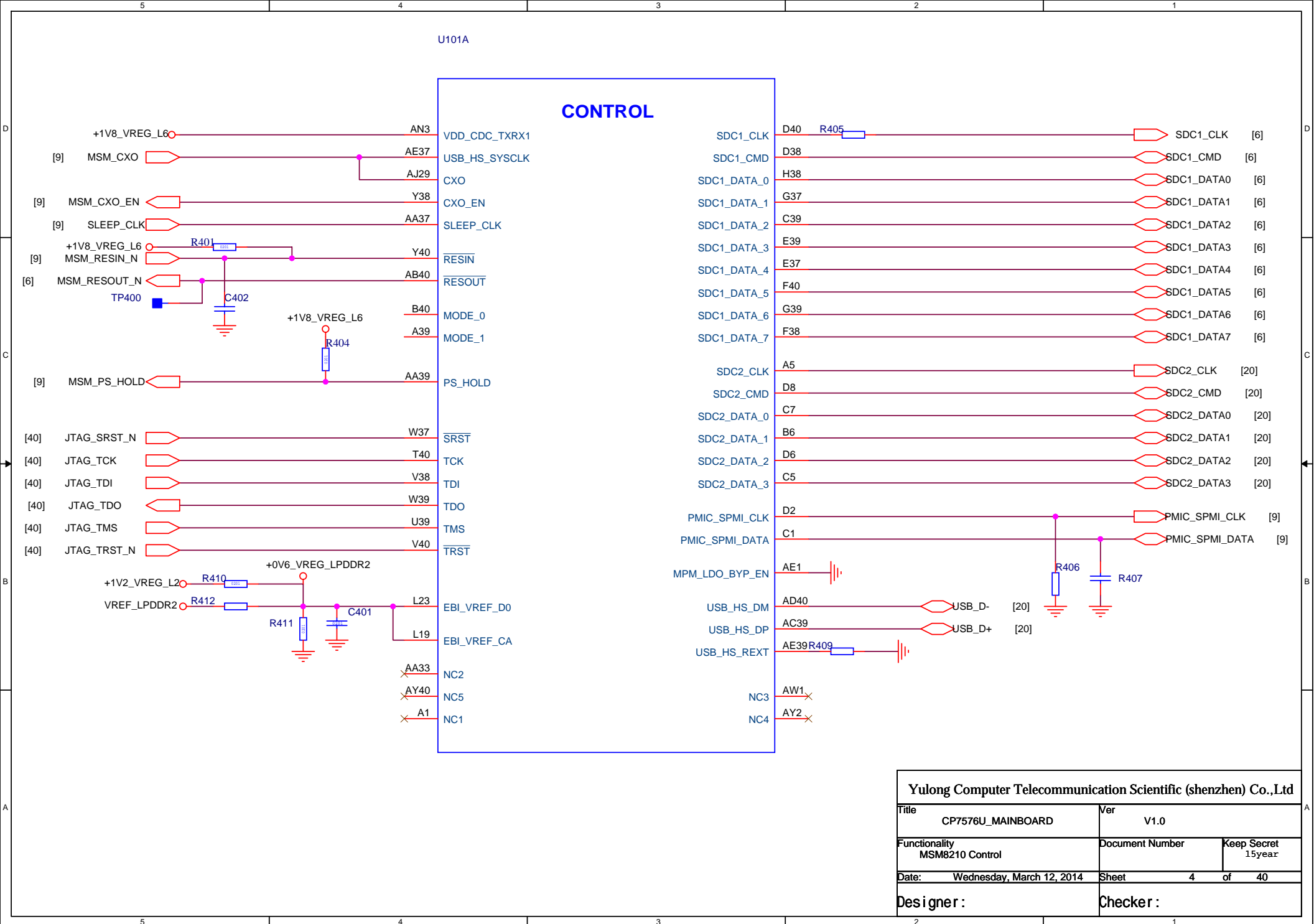
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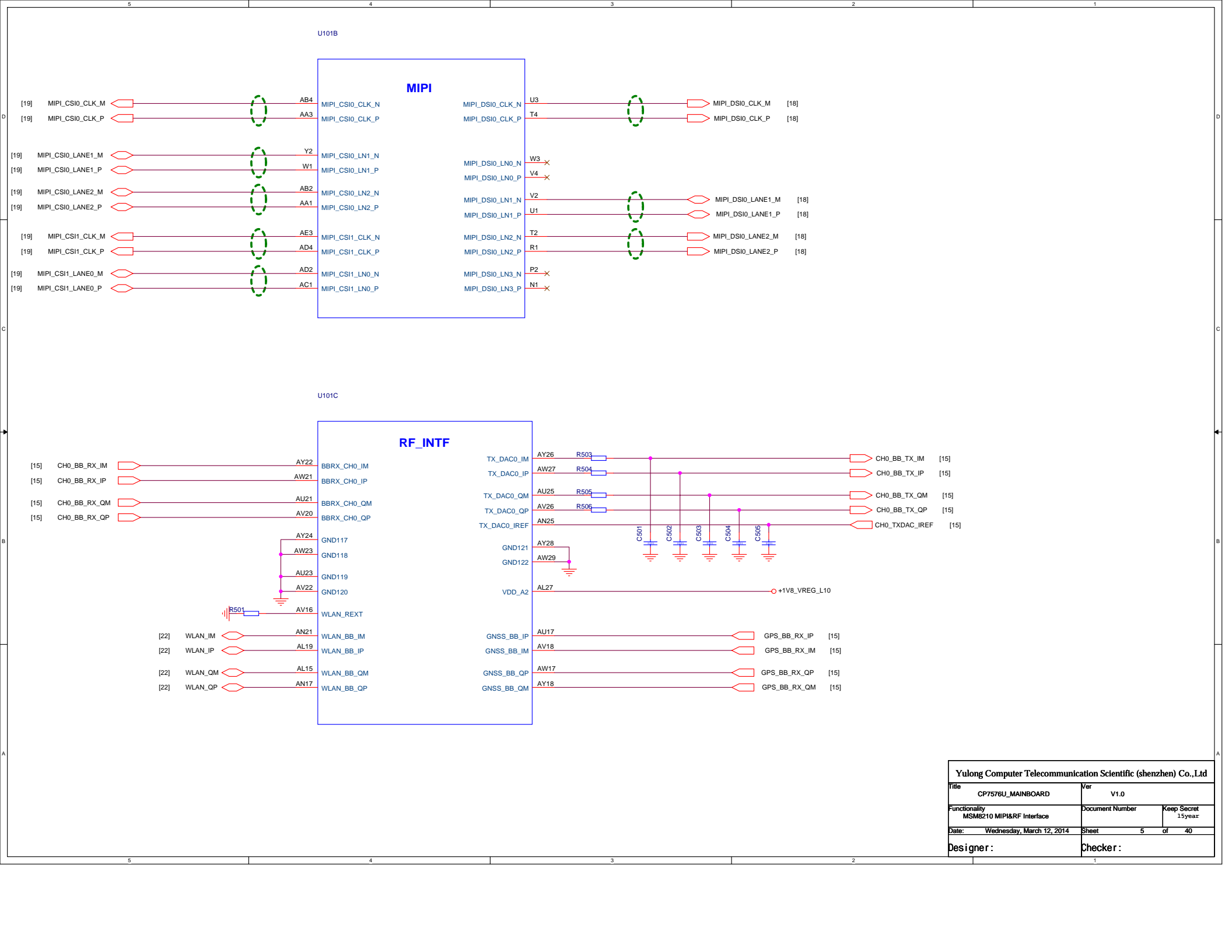
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| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |
| Title   | CP7576U_MAINBOARD         | Ver V1.0        |
| Functionality   | MSM8210 Power             | Document Number |
| Date:   | Wednesday, March 12, 2014 | Sheet 2 of 40   |
| Designer:   | Checker:                  |                 |



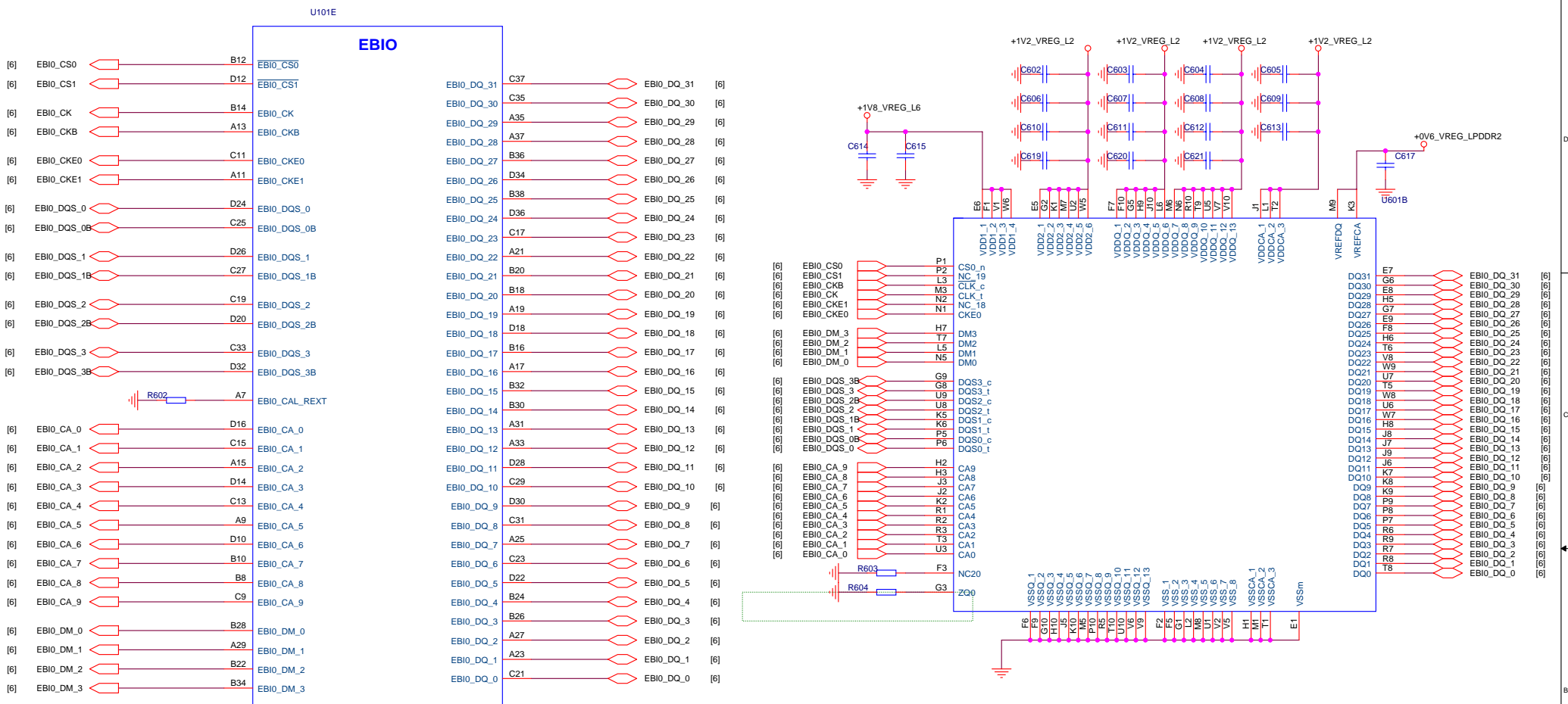
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| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |  |
| Title   | CP7576U_MAINBOARD         | Ver V1.0                                 |
| Functionality   | MSM8210 GND               | Document Number<br>Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet 3 of 40                            |
| Designer :  | Checker :                 |  |



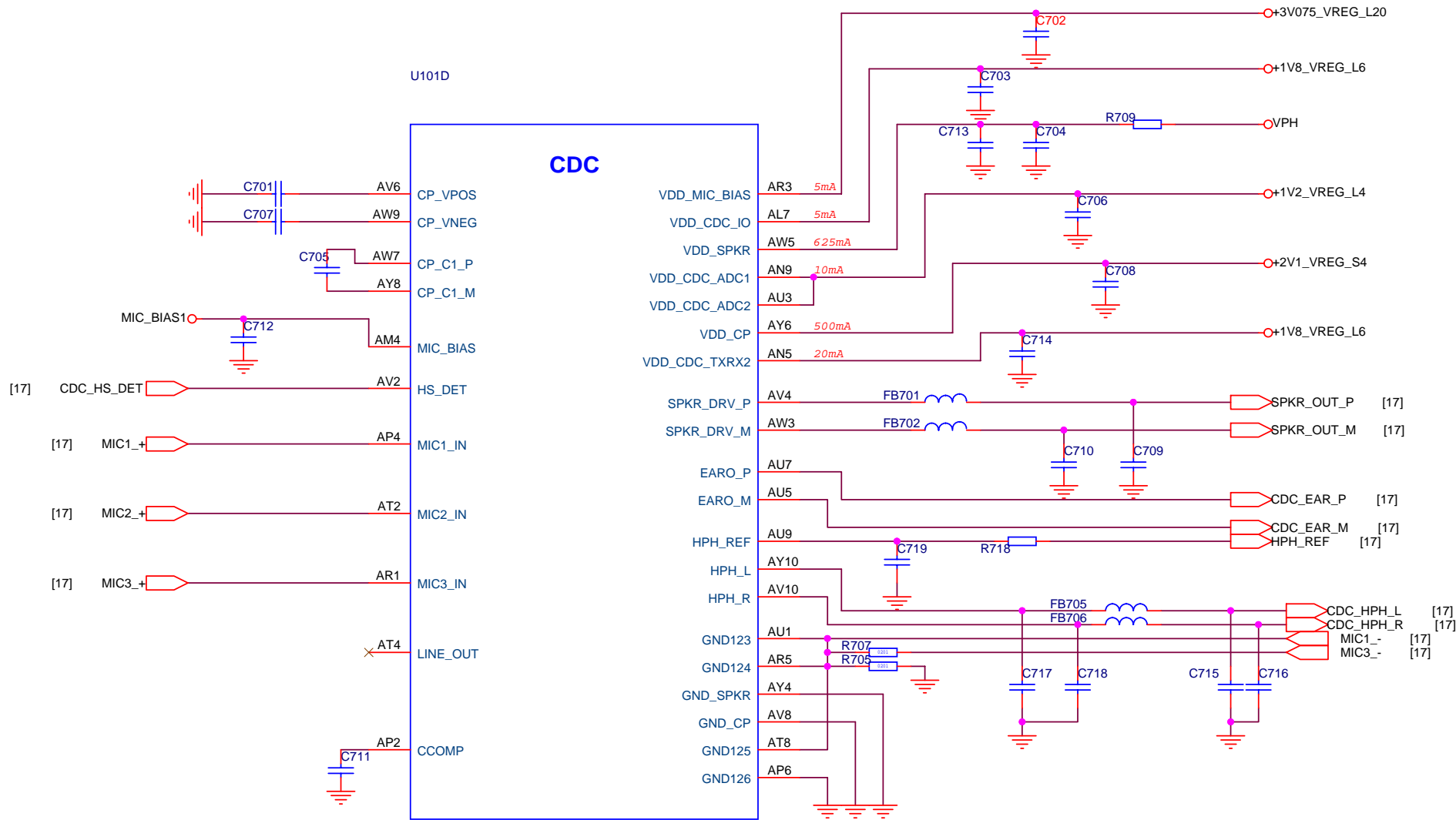
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| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |            |  |
| Title<br>CP7576U_MAINBOARD   |            | Ver<br>V1.0                              |
| Functionality<br>MSM8210 Control                                       |            | Document Number<br>Keep Secret<br>15year |
| Date:<br>Wednesday, March 12, 2014                                     | Sheet<br>4 | of<br>40                                 |
| Designer :   |            | Checker :                                |



|   |                           |                 |                       |
|---|---------------------------|-----------------|-----------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |                       |
| Title   | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality   | MSM8210 MIPI&RF Interface | Document Number | Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet           | 5 of 40               |
| Designer:   |                           | Checker:        |                       |

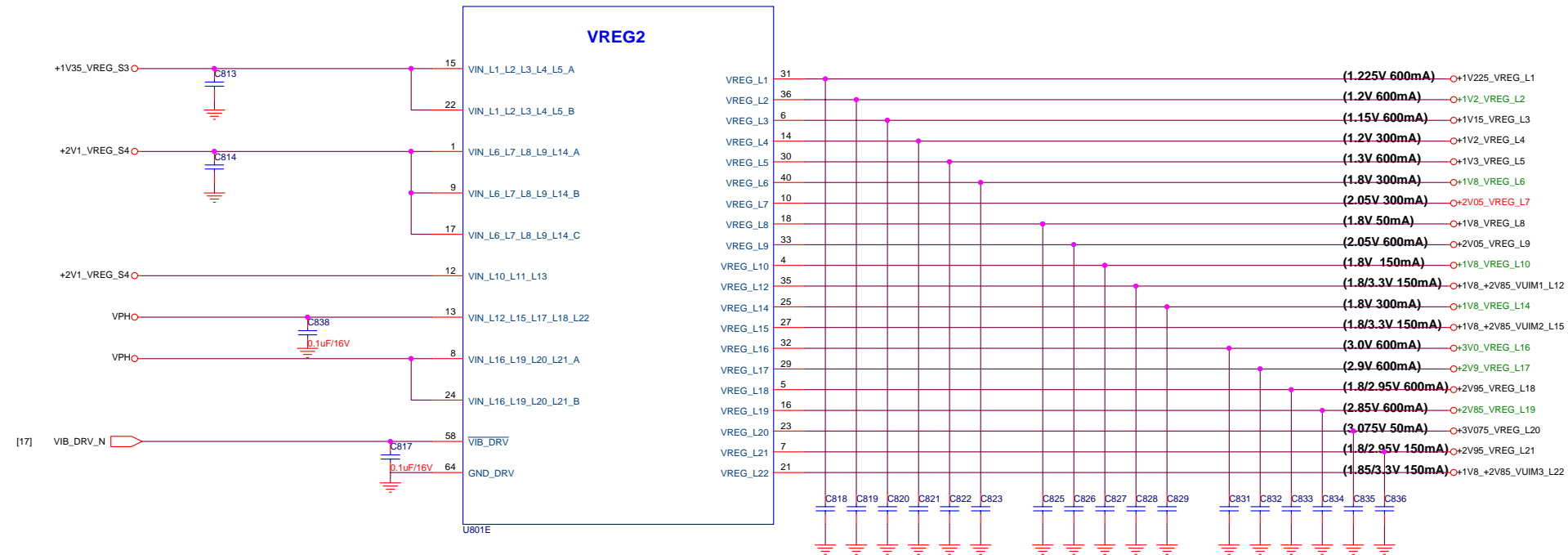
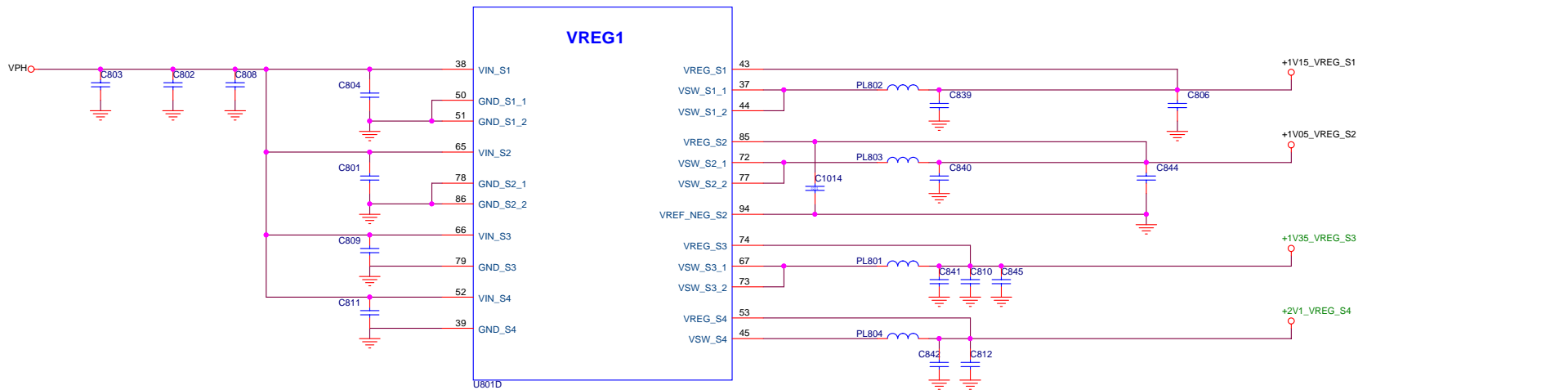


|  |                           |                 |                       |
|--|---------------------------|-----------------|-----------------------|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |                           |                 |                       |
| Title  | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality  | MCP-DDR2+EMMC             | Document Number | Keep Secret<br>15year |
| Date:  | Wednesday, March 12, 2014 | Sheet           | 6 of 40               |
| Designer:  | Checker:                  |                 |                       |

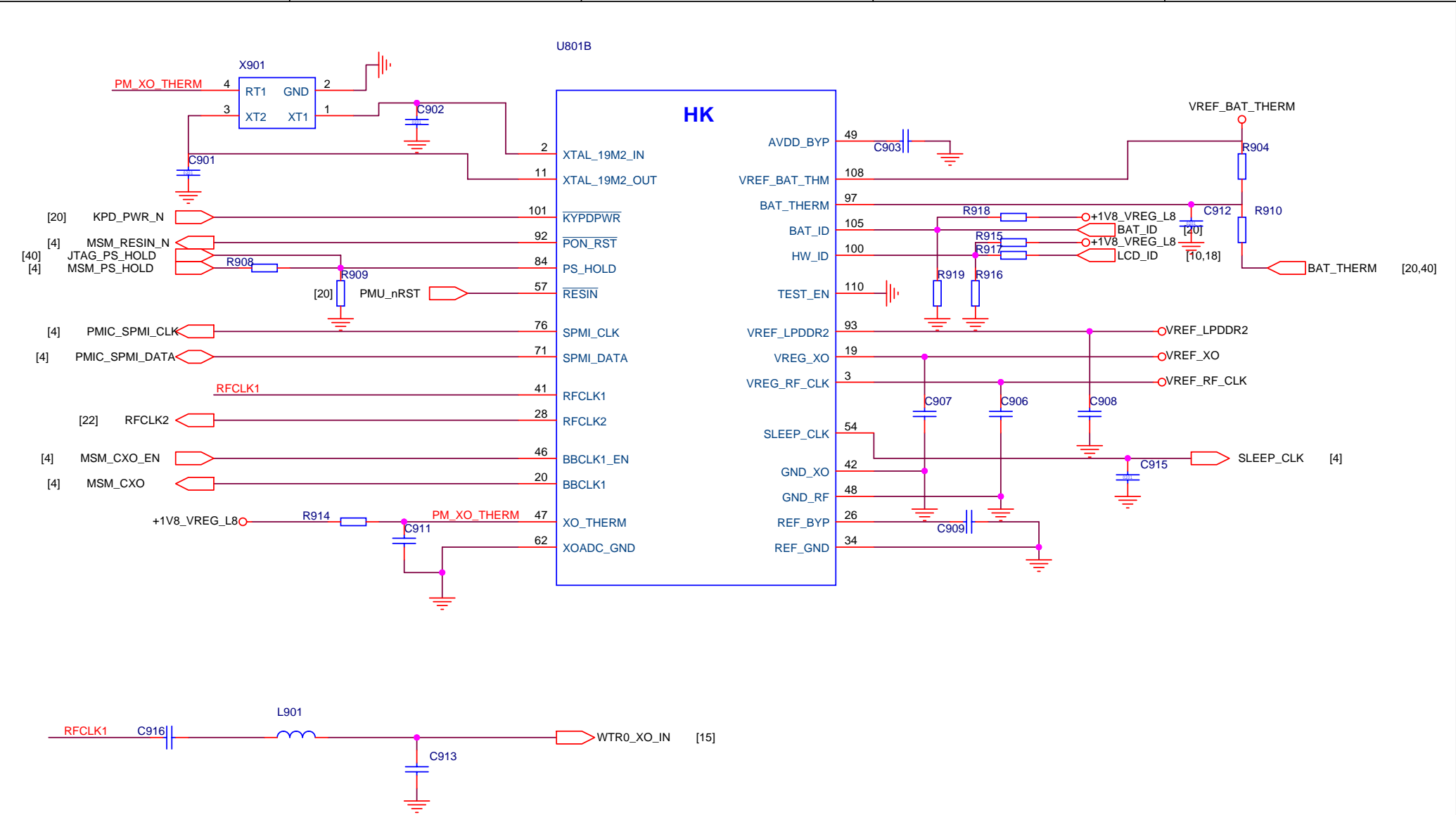


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|--|---------------------------|-----------------|-----------------------|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |                           |                 |                       |
| Title  | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality  | AUDIO CODEC               | Document Number | Keep Secret<br>15year |
| Date:  | Wednesday, March 12, 2014 | Sheet           | 7 of 40               |
| Designer :   | Checker :                 |                 |                       |





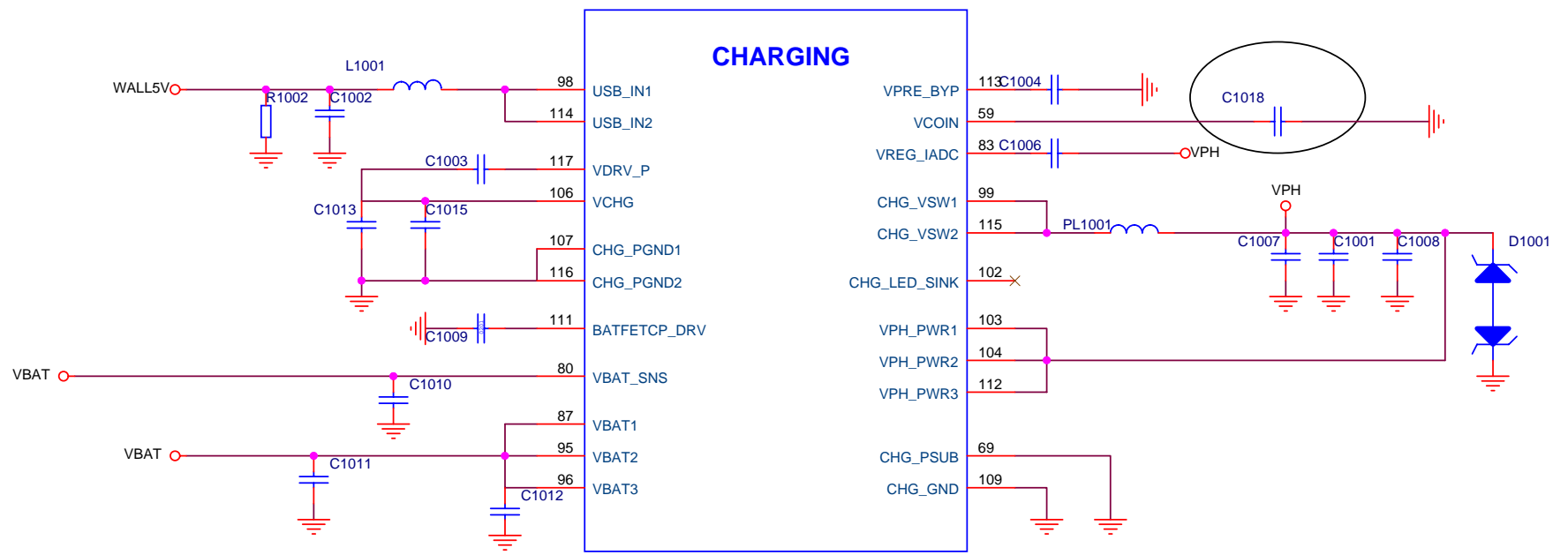
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| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |                       |
| Title   | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality   | PM8110 LDO&DCDC           | Document Number | Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet           | 8 of 40               |
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|  |            |  |
|--|------------|--|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |            |  |
| Title<br>CP7576U_MAINBOARD   |            | Ver<br>V1.0                              |
| Functionality<br>PM8110 Control  |            | Document Number<br>Keep Secret<br>15year |
| Date:<br>Wednesday, March 12, 2014                                     | Sheet<br>9 | of<br>40                                 |
| Designer :   |            | Checker :                                |

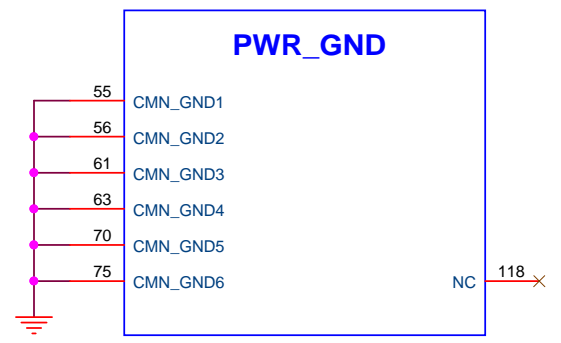
U801A

### CHARGING



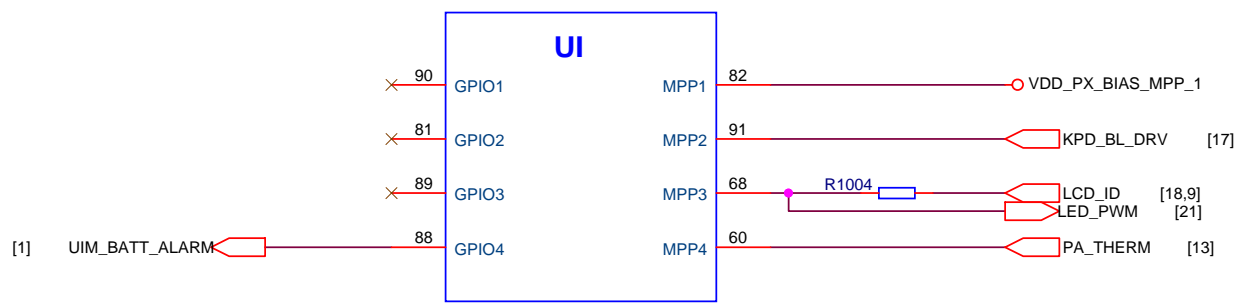
U801F

### PWR\_GND



U801C

### UI



|  |                 |                       |
|--|-----------------|-----------------------|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |                 |                       |
| Title<br>CP7576U_MAINBOARD   |                 | Ver<br>V1.0           |
| Functionality<br>MSM8210 Charging&MPP&GPIO                             | Document Number | Keep Secret<br>15year |
| Date: Wednesday, March 12, 2014  | Sheet           | 10 of 40              |
| Designer :   | Checker :       |                       |

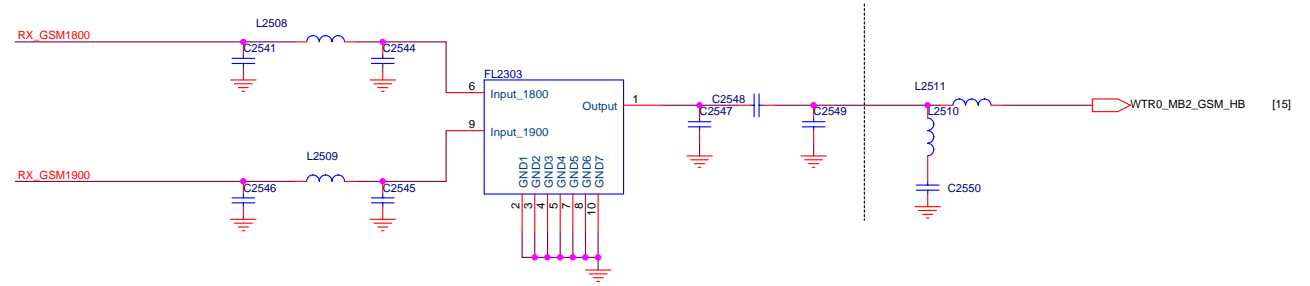
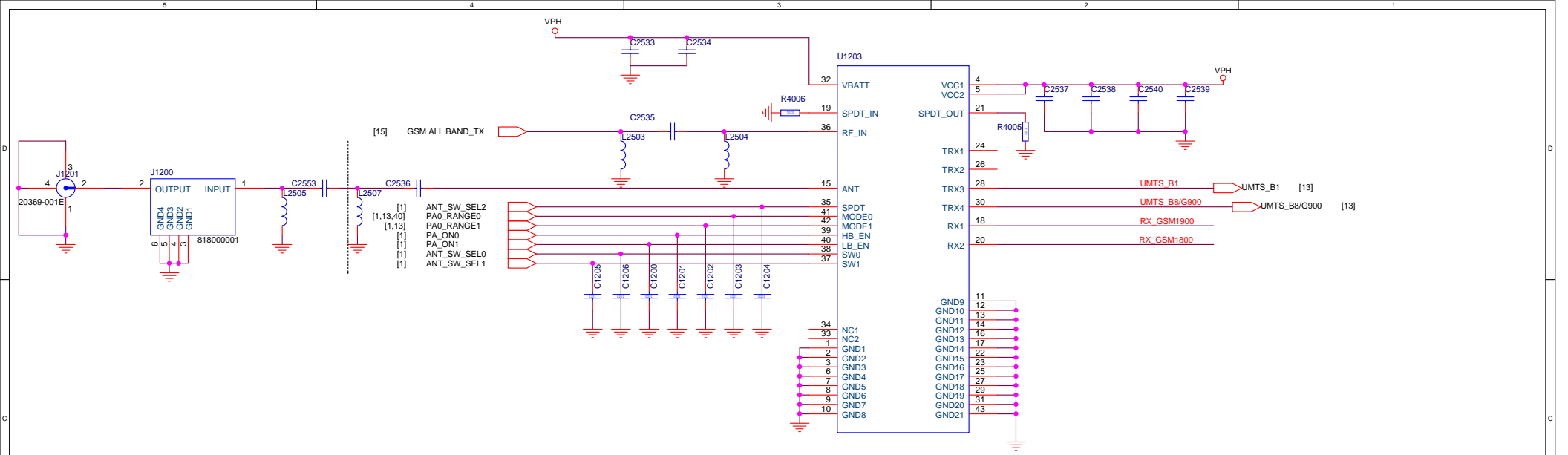
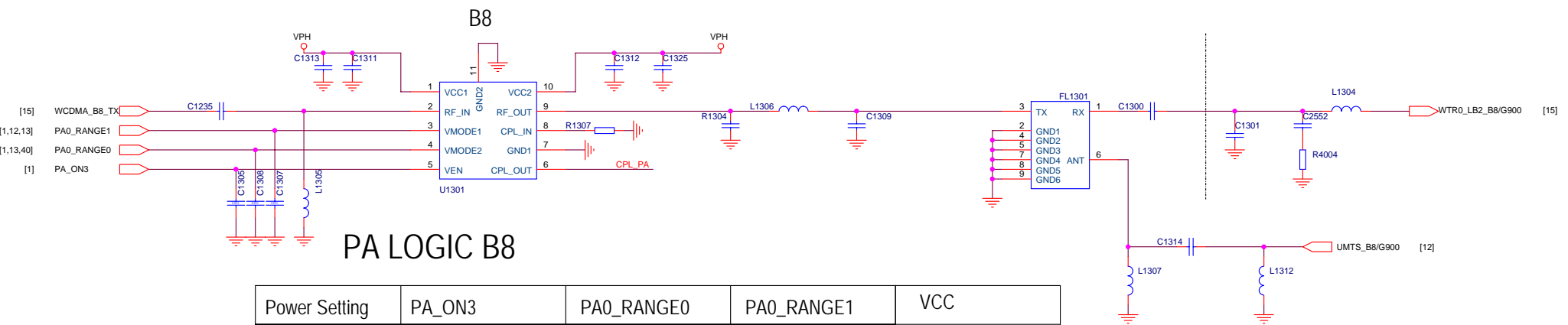


Table 3. SKY77573-12 Switch Logic PA Logic Table

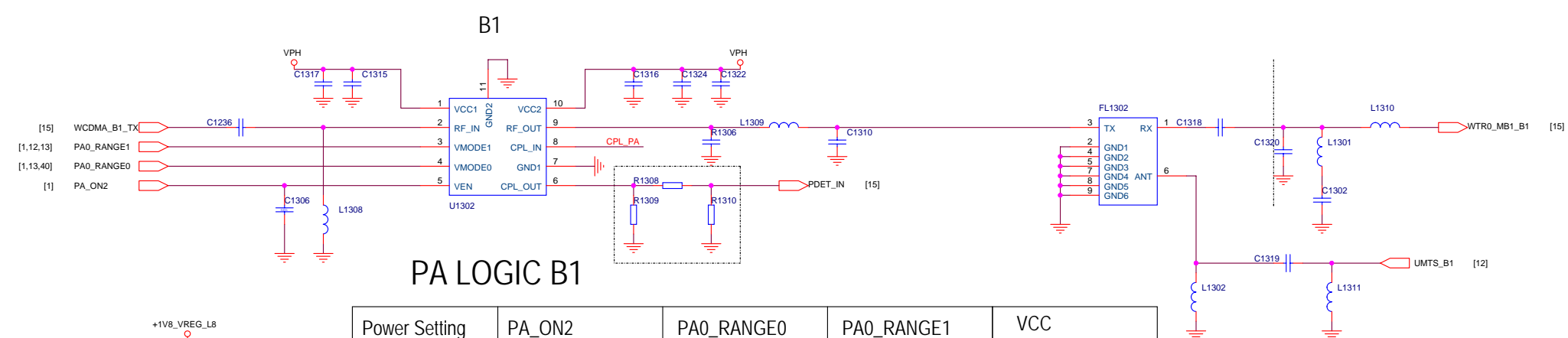
| SKY77573        | SPDT | SW1 | SW0 | HB_EN | LB_EN | Mode0 | Mode1 | SKY77573        | SPDT | SW1 | SW0 | HB_EN | LB_EN | Mode0 | Mode1 |
|-----------------|------|-----|-----|-------|-------|-------|-------|-----------------|------|-----|-----|-------|-------|-------|-------|
| Standby         | 0    | 0   | 0   | 0     | 0     | X     | X     | HB_SPOT_10_LPM  | 0    | 1   | 0   | 0     | 1     | 1     | 0     |
| holden          | 0    | 0   | 0   | 0     | 1     | X     | X     | HB_SPOT_10_ILPM | 0    | 1   | 0   | 0     | 1     | 1     | 1     |
| LB_SPOT_0H_NFM  | 0    | 0   | 1   | 0     | 0     | 0     | 0     | HB_SPOT_0_NFM   | 0    | 1   | 0   | 1     | 0     | 0     | 0     |
| LB_SPOT_0H_MPM  | 0    | 0   | 1   | 0     | 0     | 0     | 1     | HB_SPOT_0_MPM   | 0    | 1   | 0   | 1     | 0     | 0     | 1     |
| LB_SPOT_0H_LPM  | 0    | 0   | 1   | 0     | 0     | 1     | 0     | HB_SPOT_0_LPM   | 0    | 1   | 0   | 1     | 0     | 1     | 0     |
| LB_SPOT_0H_ILPM | 0    | 0   | 1   | 0     | 0     | 1     | 1     | HB_SPOT_0_ILPM  | 0    | 1   | 0   | 1     | 0     | 1     | 1     |
| LB_SPOT_10_NFM  | 0    | 0   | 1   | 0     | 1     | 0     | 0     | TRX1_SPOT_0H    | 1    | 0   | 0   | 0     | 0     | X     | X     |
| LB_SPOT_10_MPM  | 0    | 0   | 1   | 0     | 1     | 0     | 1     | TRX1_SPOT_0     | 1    | 0   | 0   | 0     | 1     | X     | X     |
| LB_SPOT_10_LPM  | 0    | 0   | 1   | 0     | 1     | 1     | 0     | TRX2_SPOT_0H    | 1    | 0   | 0   | 1     | 0     | X     | X     |
| LB_SPOT_10_ILPM | 0    | 0   | 1   | 0     | 1     | 1     | 1     | TRX2_SPOT_0     | 1    | 0   | 0   | 1     | 1     | X     | X     |
| LB_SPOT_0_NFM   | 0    | 0   | 1   | 1     | 0     | 0     | 0     | TRX3_SPOT_0H    | 1    | 0   | 1   | 0     | 0     | X     | X     |
| LB_SPOT_0_MPM   | 0    | 0   | 1   | 1     | 0     | 0     | 1     | TRX3_SPOT_0     | 1    | 0   | 1   | 0     | 1     | X     | X     |
| LB_SPOT_0_LPM   | 0    | 0   | 1   | 1     | 0     | 1     | 0     | TRX4_SPOT_0H    | 1    | 0   | 1   | 1     | 0     | X     | X     |
| LB_SPOT_0_ILPM  | 0    | 0   | 1   | 1     | 0     | 1     | 1     | TRX4_SPOT_0     | 1    | 0   | 1   | 1     | 1     | X     | X     |
| HB_SPOT_0H_NFM  | 0    | 1   | 0   | 0     | 0     | 0     | 0     | TRX1_ANT        | 1    | 1   | 0   | 1     | 0     | X     | X     |
| HB_SPOT_0H_MPM  | 0    | 1   | 0   | 0     | 0     | 0     | 1     | TRX2_ANT        | 1    | 1   | 0   | 1     | 1     | X     | X     |
| HB_SPOT_0H_LPM  | 0    | 1   | 0   | 0     | 0     | 1     | 0     | TRX3_ANT        | 1    | 1   | 1   | 0     | 0     | X     | X     |
| HB_SPOT_0H_ILPM | 0    | 1   | 0   | 0     | 0     | 1     | 1     | TRX4_ANT        | 1    | 1   | 1   | 0     | 1     | X     | X     |
| HB_SPOT_10_NFM  | 0    | 1   | 0   | 0     | 1     | 0     | 0     | RX1             | 1    | 1   | 1   | 1     | 0     | X     | X     |
| HB_SPOT_10_MPM  | 0    | 1   | 0   | 0     | 1     | 0     | 1     | RX2             | 1    | 1   | 1   | 1     | 1     | X     | X     |

|   |                           |                 |                       |
|---|---------------------------|-----------------|-----------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |                       |
| Title   | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality   | GSM_TRX_FRONT             | Document Number | Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet           | 12 of 40              |
| Designer:   | Checker:                  |                 |                       |



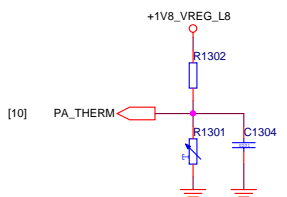
### PA LOGIC B8

| Power Setting | PA_ON3 | PA0_RANGE0 | PA0_RANGE1 | VCC |
|---------------|--------|------------|------------|-----|
| POWER DOWN    | L      | L          | L          | ON  |
| Standby Mode  | L      | —          | —          | ON  |
| High Power    | H      | L          | —          | ON  |
| Medium Power  | H      | H          | L          | ON  |
| Low Power     | H      | H          | H          | ON  |

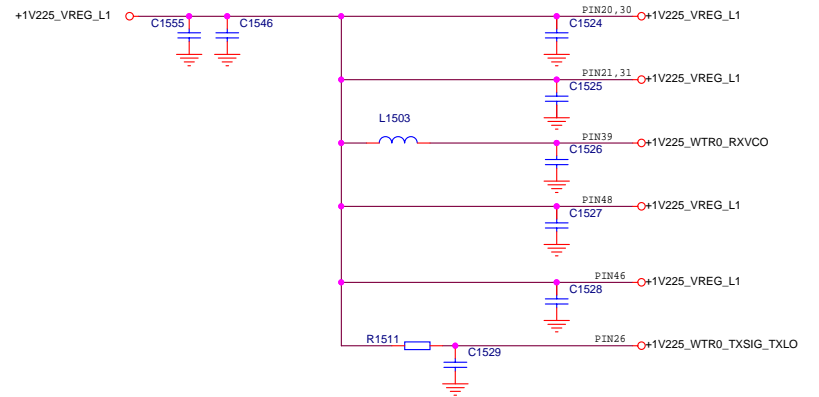
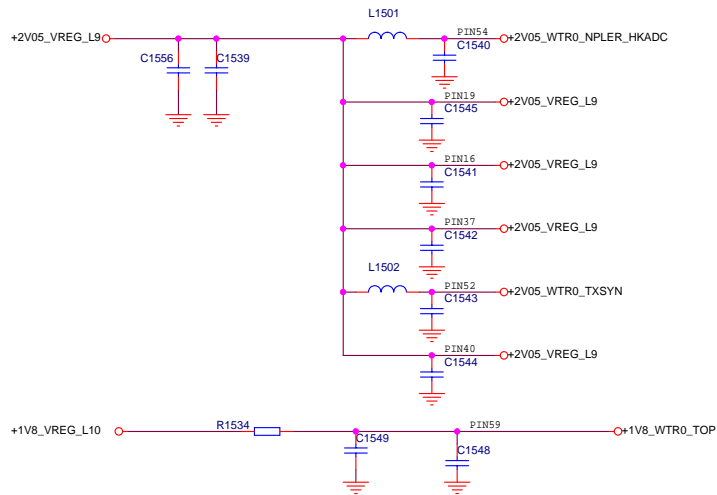
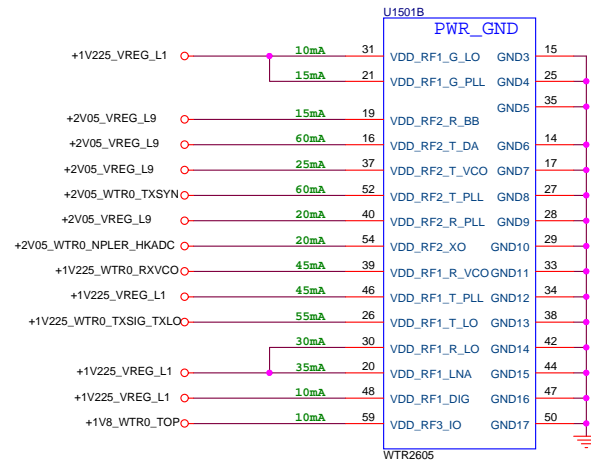
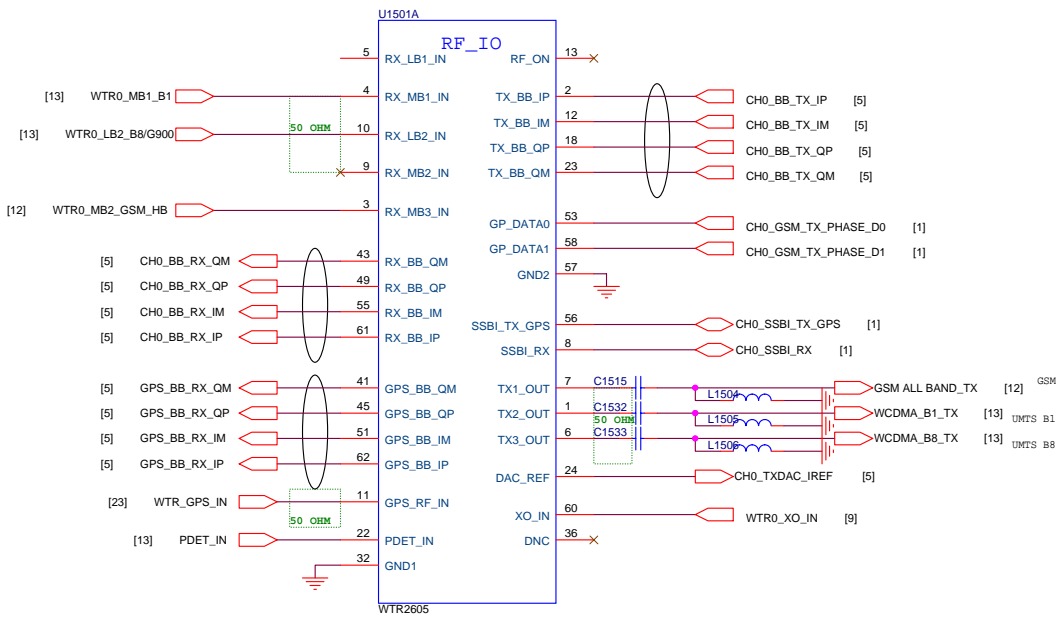


### PA LOGIC B1

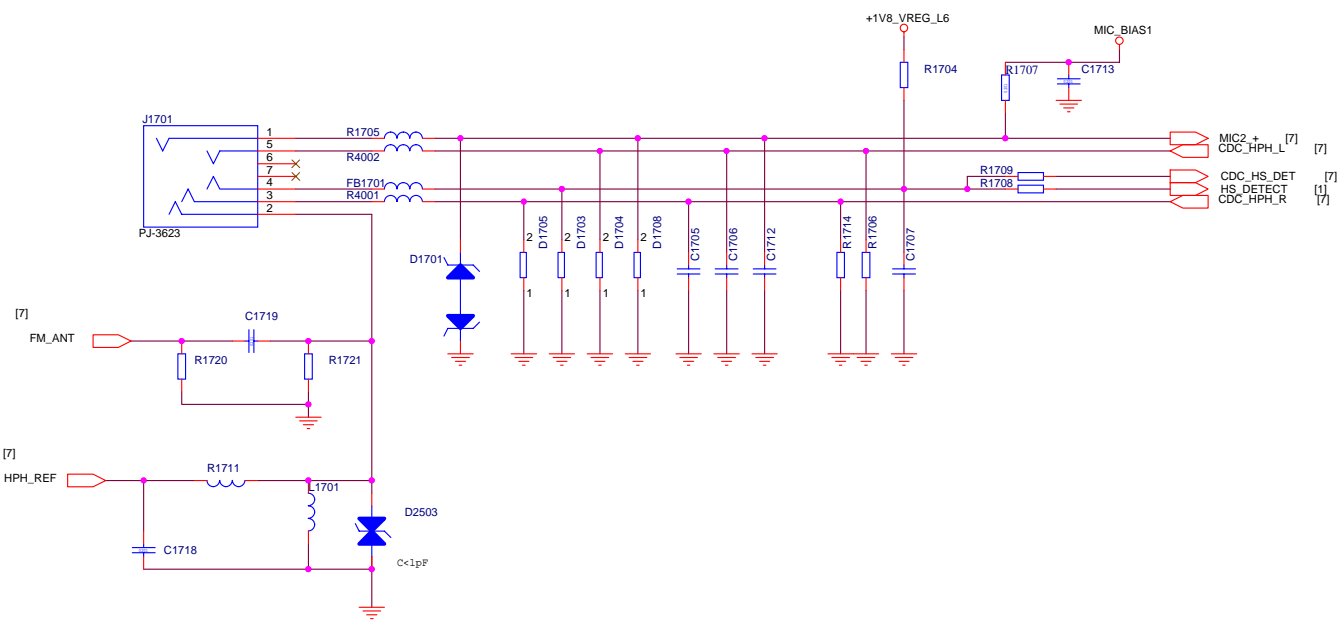
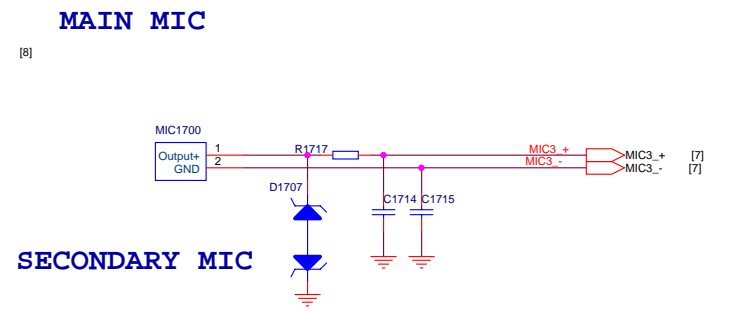
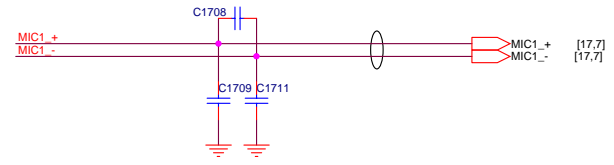
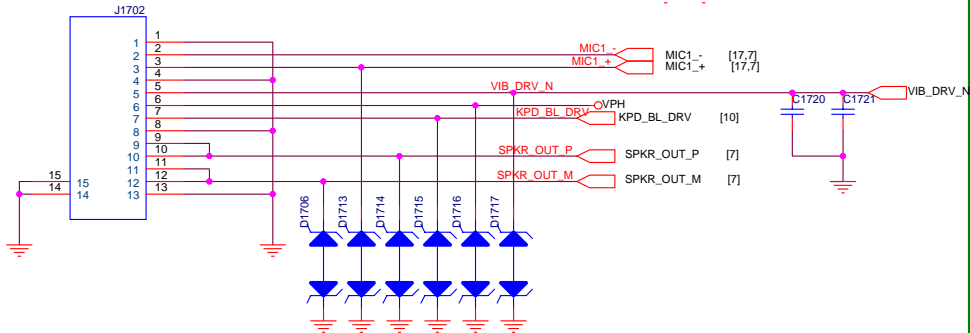
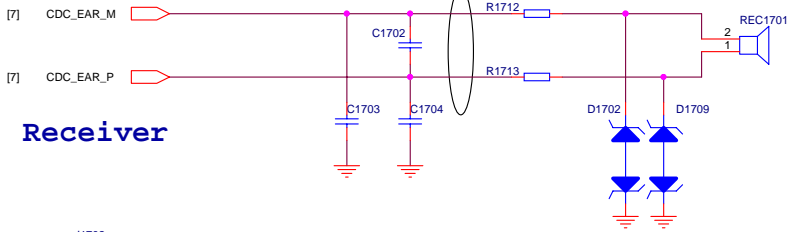
| Power Setting | PA_ON2 | PA0_RANGE0 | PA0_RANGE1 | VCC |
|---------------|--------|------------|------------|-----|
| POWER DOWN    | L      | L          | L          | ON  |
| Standby Mode  | L      | —          | —          | ON  |
| High Power    | H      | L          | —          | ON  |
| Medium Power  | H      | H          | L          | ON  |
| Low Power     | H      | H          | H          | ON  |



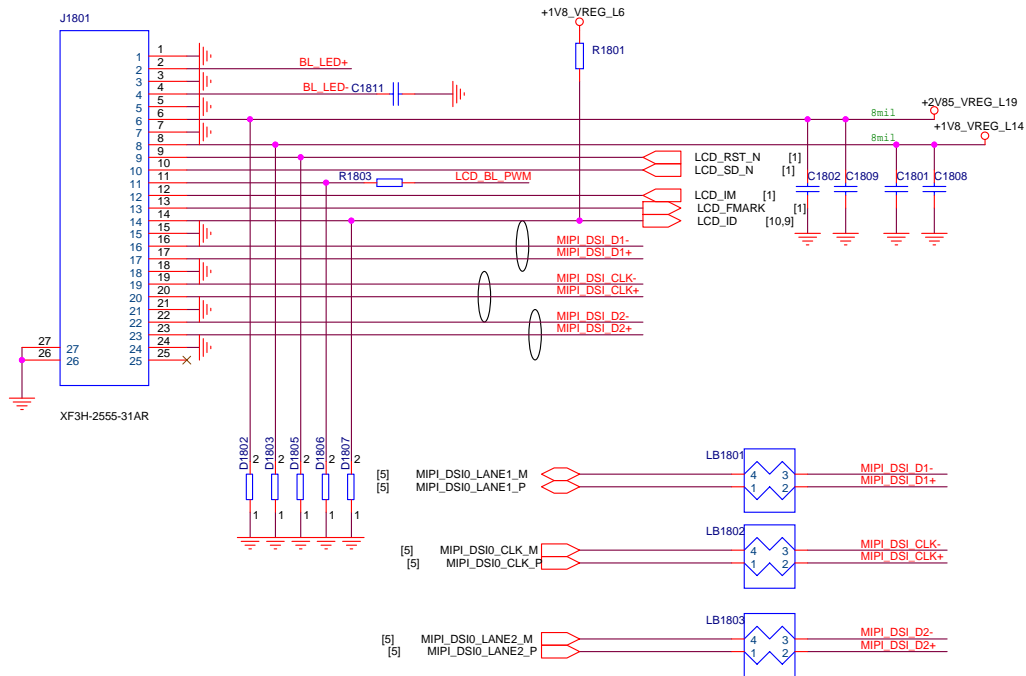
|   |                           |                 |
|---|---------------------------|-----------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |
| Title   | CP7576U_MAINBOARD         | Ver V1.0        |
| Functionality   | WCDMA_TRX                 | Document Number |
| Date:   | Wednesday, March 12, 2014 | Sheet 13 of 40  |
| Designer:   | Checker:                  |                 |



|   |                           |                 |
|---|---------------------------|-----------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |
| Title   | CP7576U_MAINBOARD         | Ver V1.0        |
| Functionality   | WTR2605 TRANCEIVER        | Document Number |
| Date:   | Wednesday, March 12, 2014 | Sheet 15 of 40  |
| Designer:   | Checker:                  |                 |

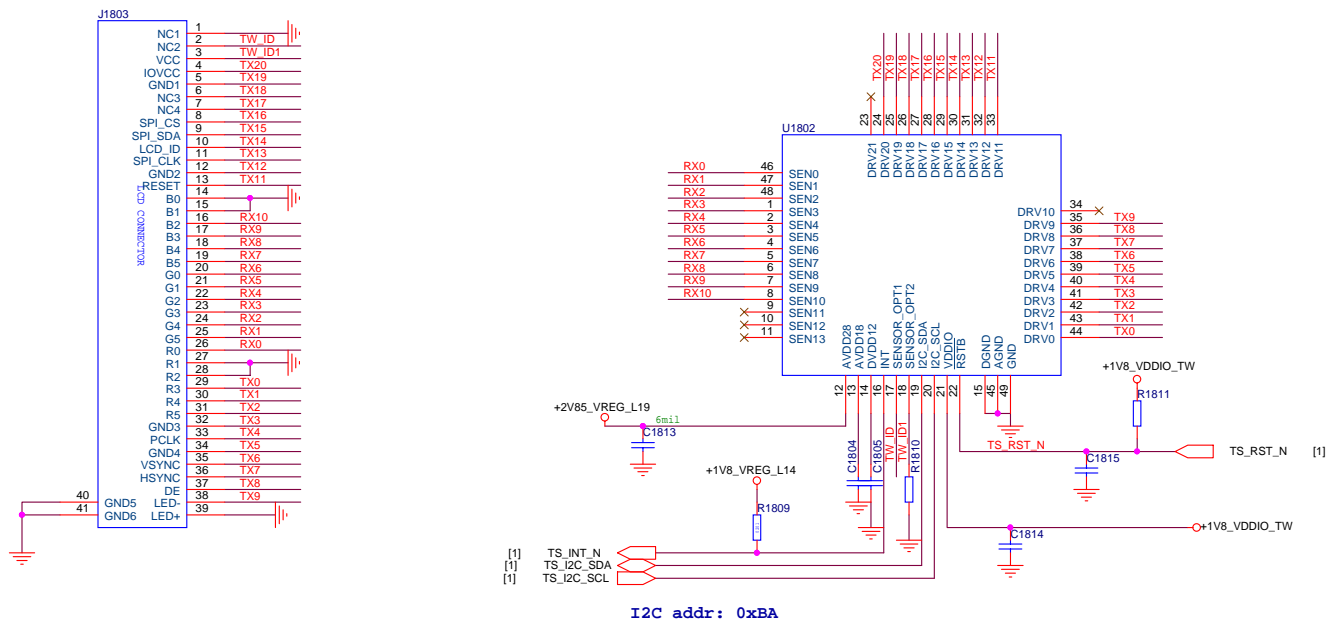
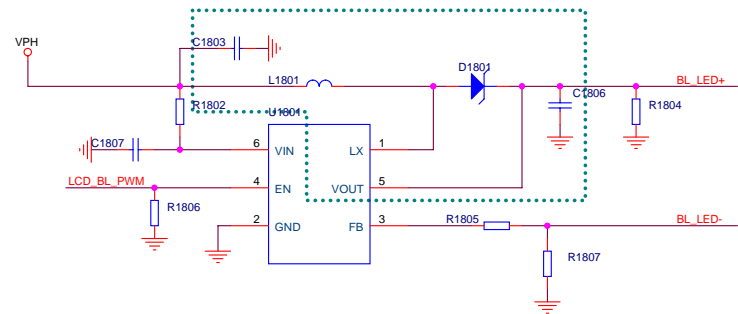


|   |                           |                 |                       |
|---|---------------------------|-----------------|-----------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                 |                       |
| Title   | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality   | AUDIO                     | Document Number | Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet           | 17 of 40              |
| Designer:   |                           | Checker:        |                       |



4.5' LCD

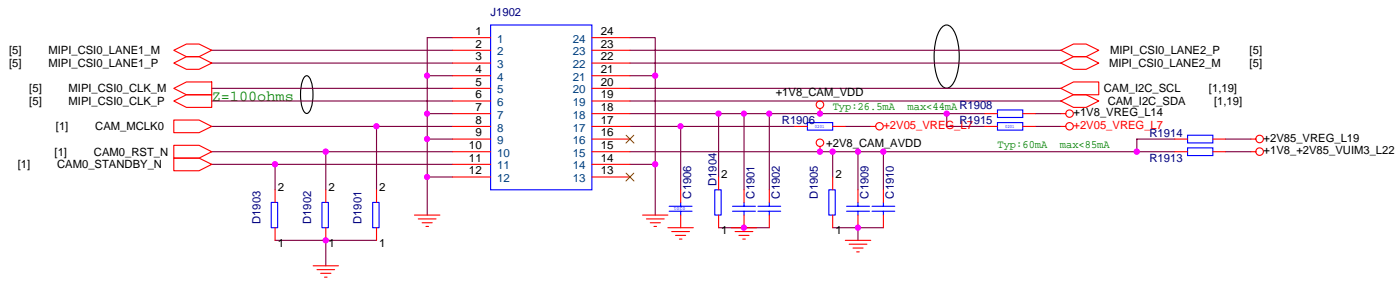
LCD



TW

|   |                           |                                    |
|---|---------------------------|------------------------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                                    |
| Title   | CP7576U_MAINBOARD         | Ver V1.0                           |
| Functionality   | LCD&BL&TW                 | Document Number Keep Secret 15year |
| Date:   | Wednesday, March 12, 2014 | Sheet 18 of 40                     |
| Designer:   | Checker:                  |                                    |

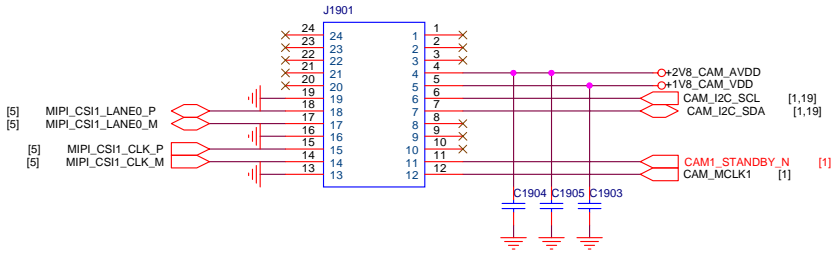




OV5648 IIC Address: 0X36(W) 0X37(R)

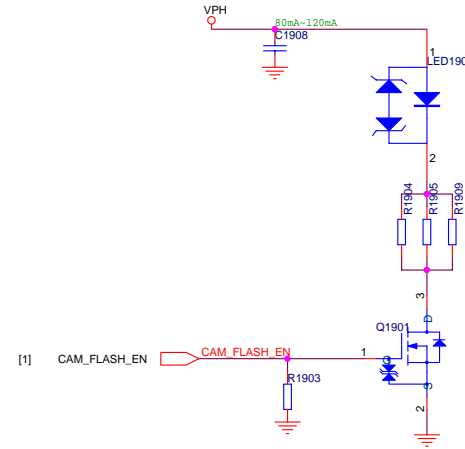
VCM Driver DW9714L IIC Address: 0X18(W) 0X19(R)

### 5M Camera: AR0542&ov5648



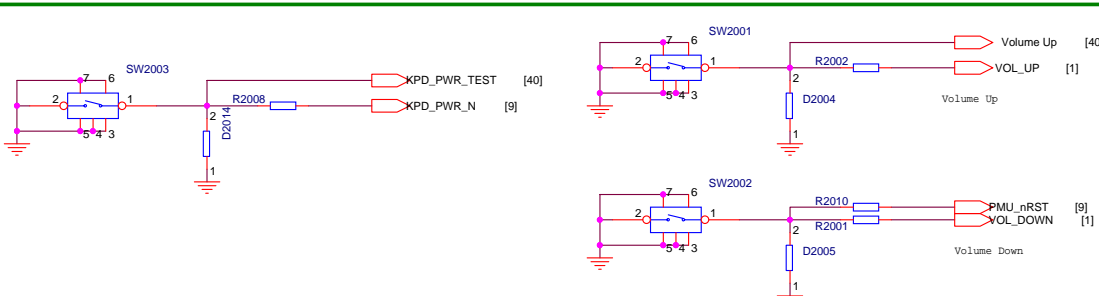
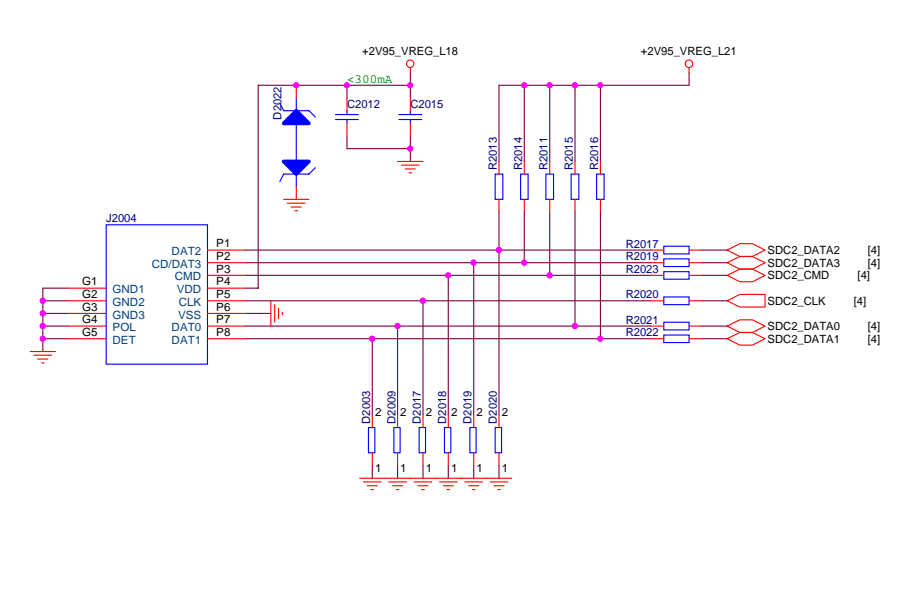
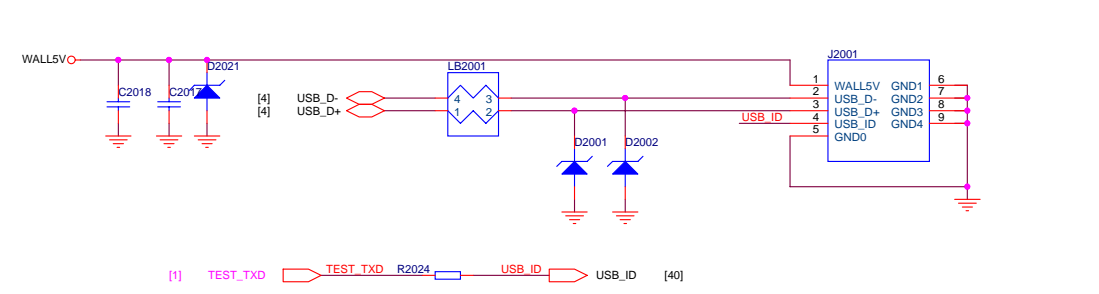
P2N01D IIC Address: 0X7A(W) 0X7B(R)

### 0.3M CAMERA



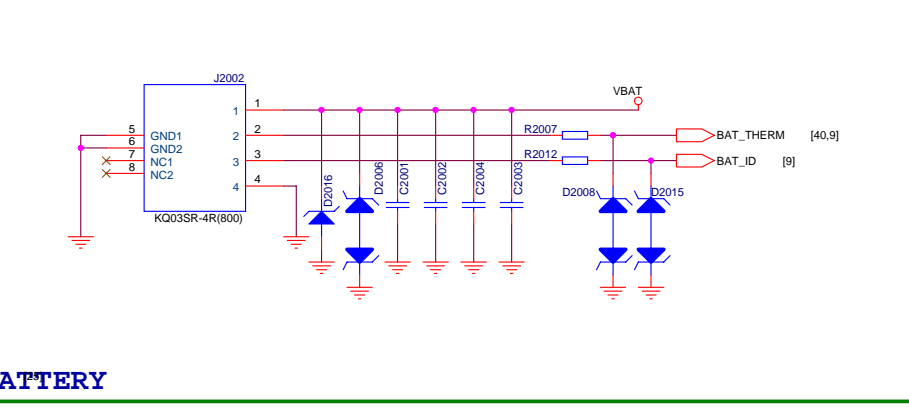
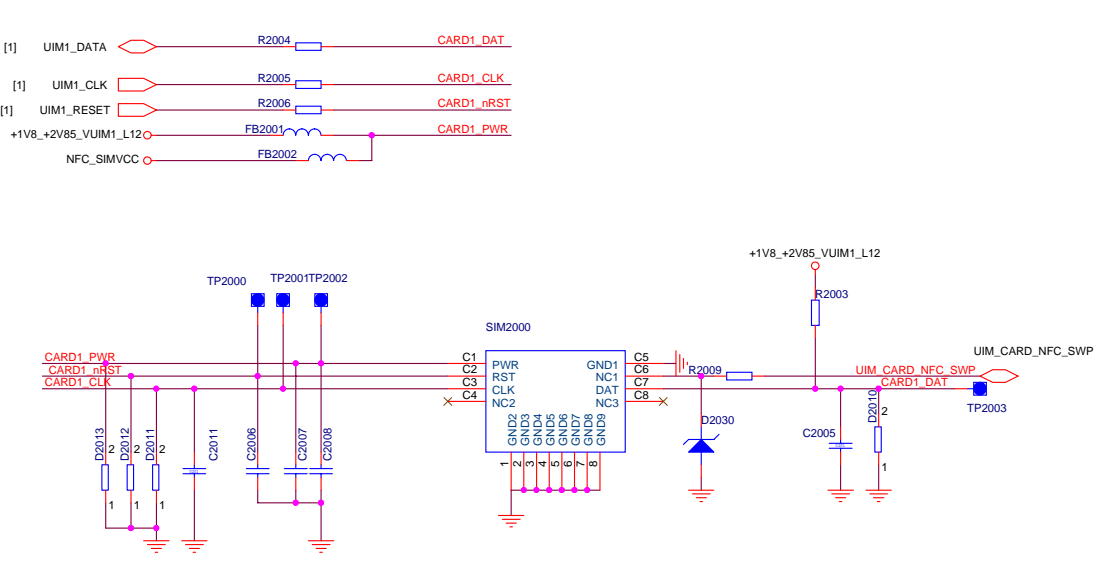
### Flash LED

|   |                           |                                       |
|---|---------------------------|---------------------------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                                       |
| Title   | CP7576U_MAINBOARD         | Ver V1.0                              |
| Functionality   | Camera                    | Document Number Keep Secret<br>15year |
| Date:   | Wednesday, March 12, 2014 | Sheet 19 of 40                        |
| Designer:   | Checker:                  |                                       |



### Buttons

### TFlash Card

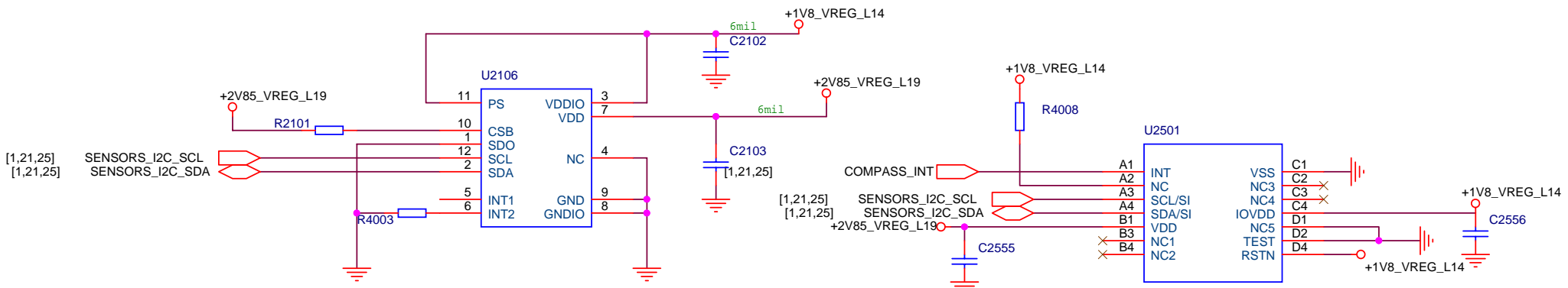


### BATTERY

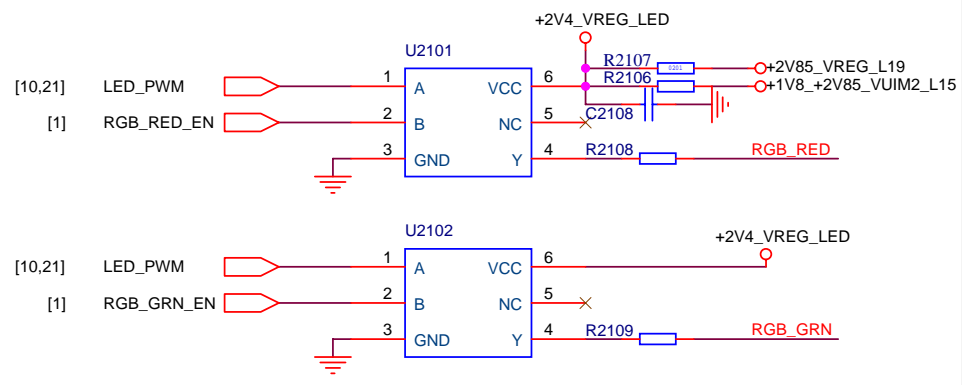
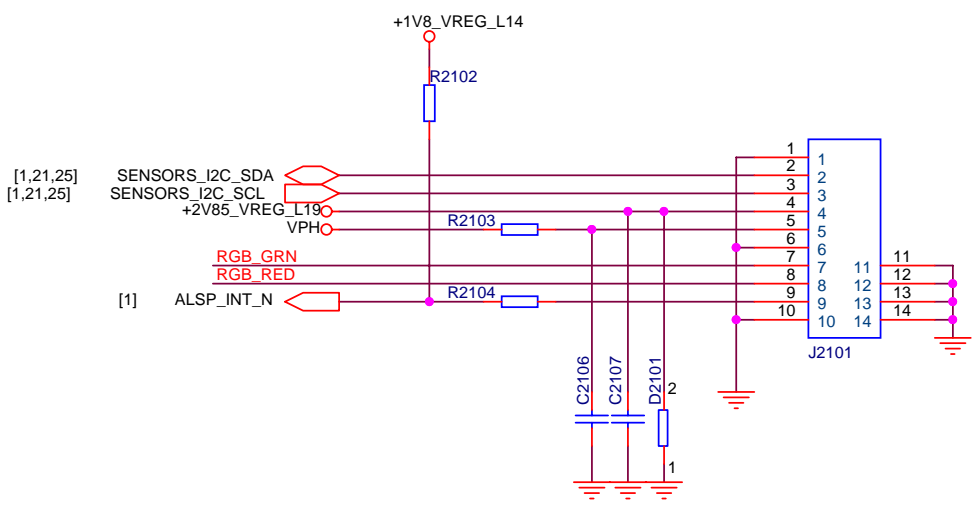
### UIM Card

|   |                           |                    |
|---|---------------------------|--------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                           |                    |
| Title   | CP7576U_MAINBOARD         | Ver V1.0           |
| Functionality   | INTERFACE                 | Document Number    |
|   |                           | Keep Secret 15year |
| Date:   | Wednesday, March 12, 2014 | Sheet 20 of 40     |
| Designer:   |                           | Checker:           |

### UIM Card

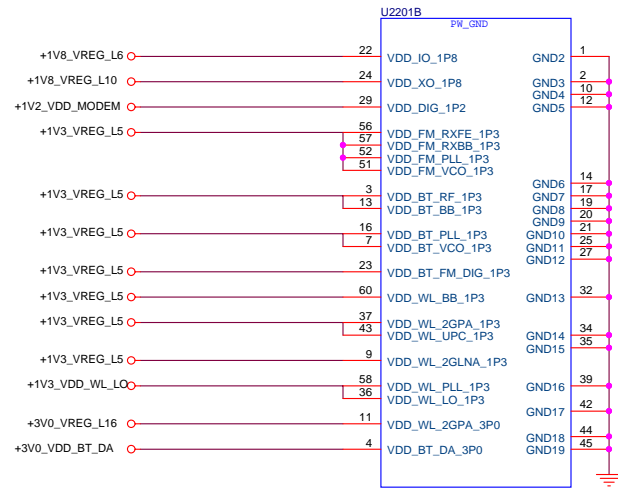
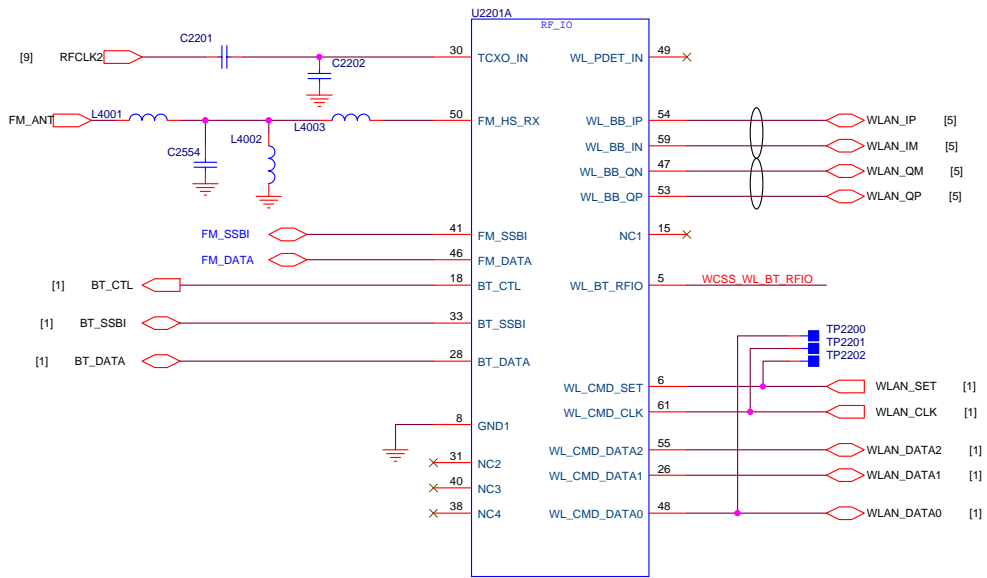


## Acceleration Sensor

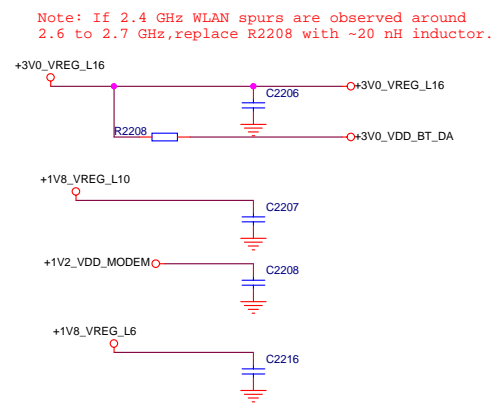
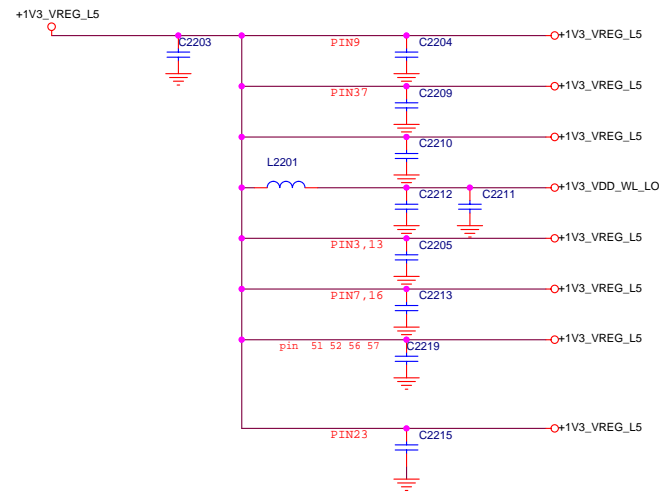
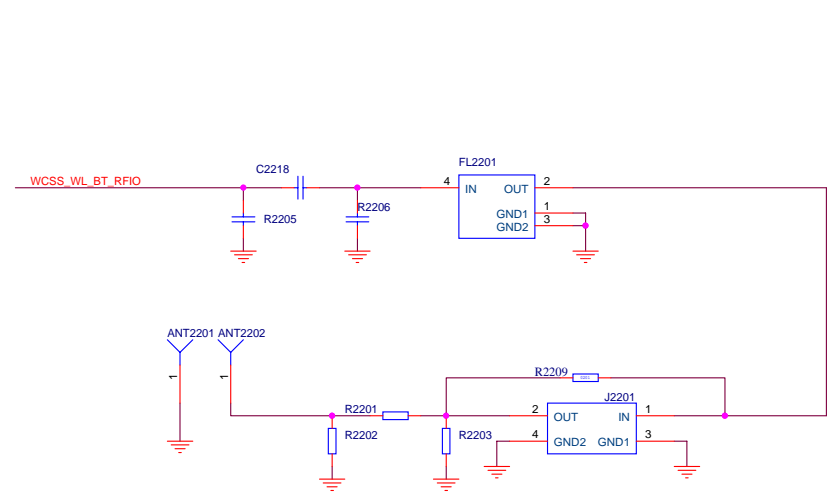


## ALS and PROXIMITY SENSOR

|  |                   |             |
|--|-------------------|-------------|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |                   |             |
| Title  | CP7576U_MAINBOARD |             |
| Ver  | V1.0              |             |
| Functionality  | Document Number   | Keep Secret |
| SENSOR   |                   | 15year      |
| Date: Wednesday, March 12, 2014  | Sheet             | 21 of 40    |
| Designer:  | Checker:          |             |

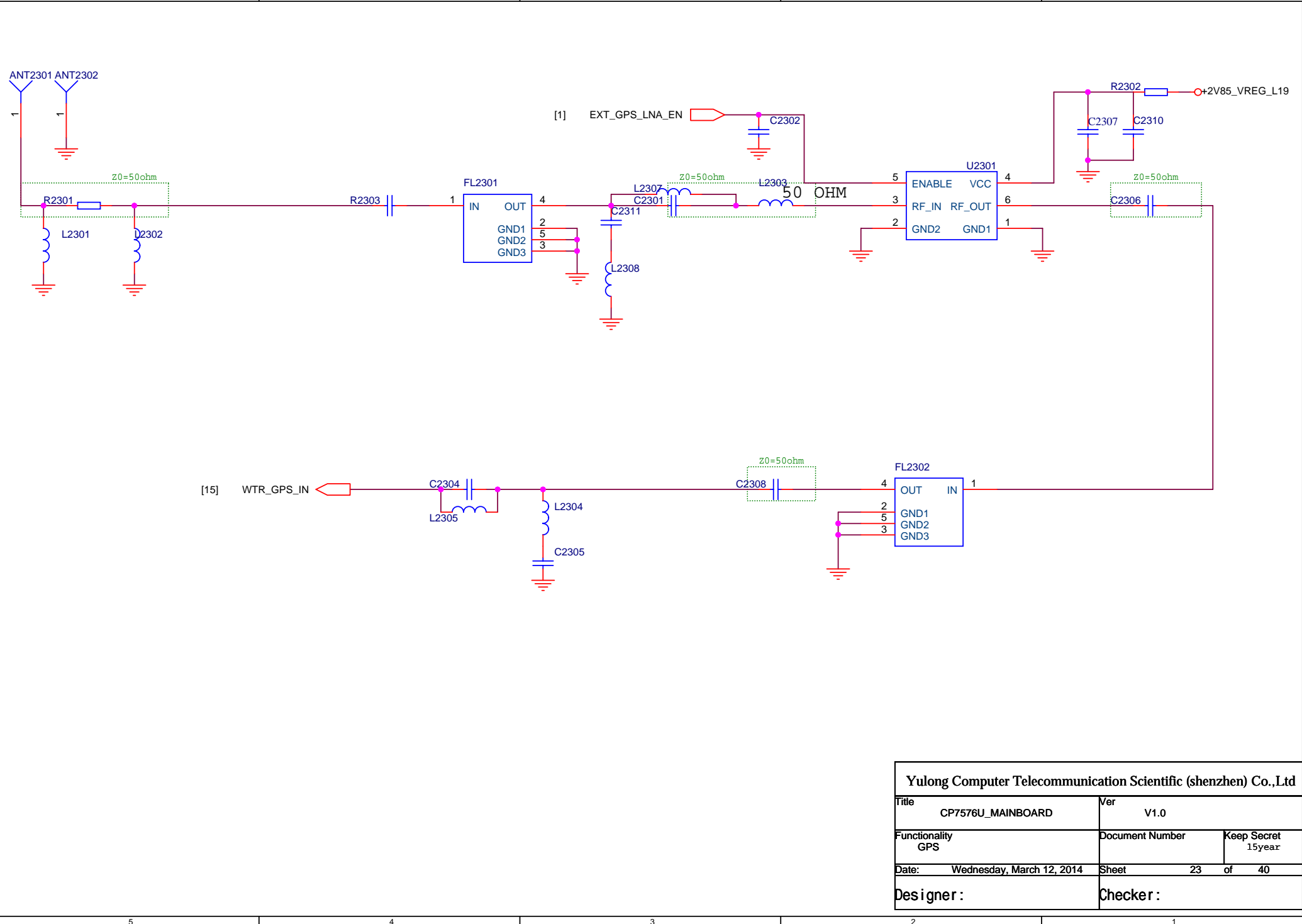


Isolate the 1.3 V and 3.3 V traces from each other;  
do not route in parallel

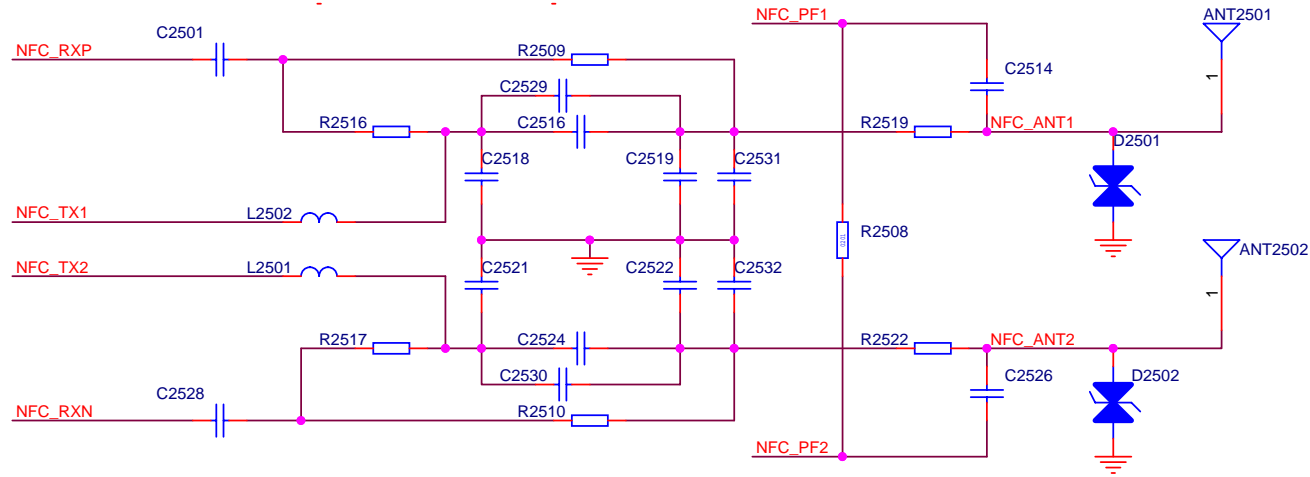
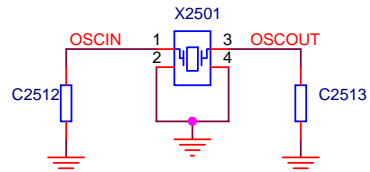
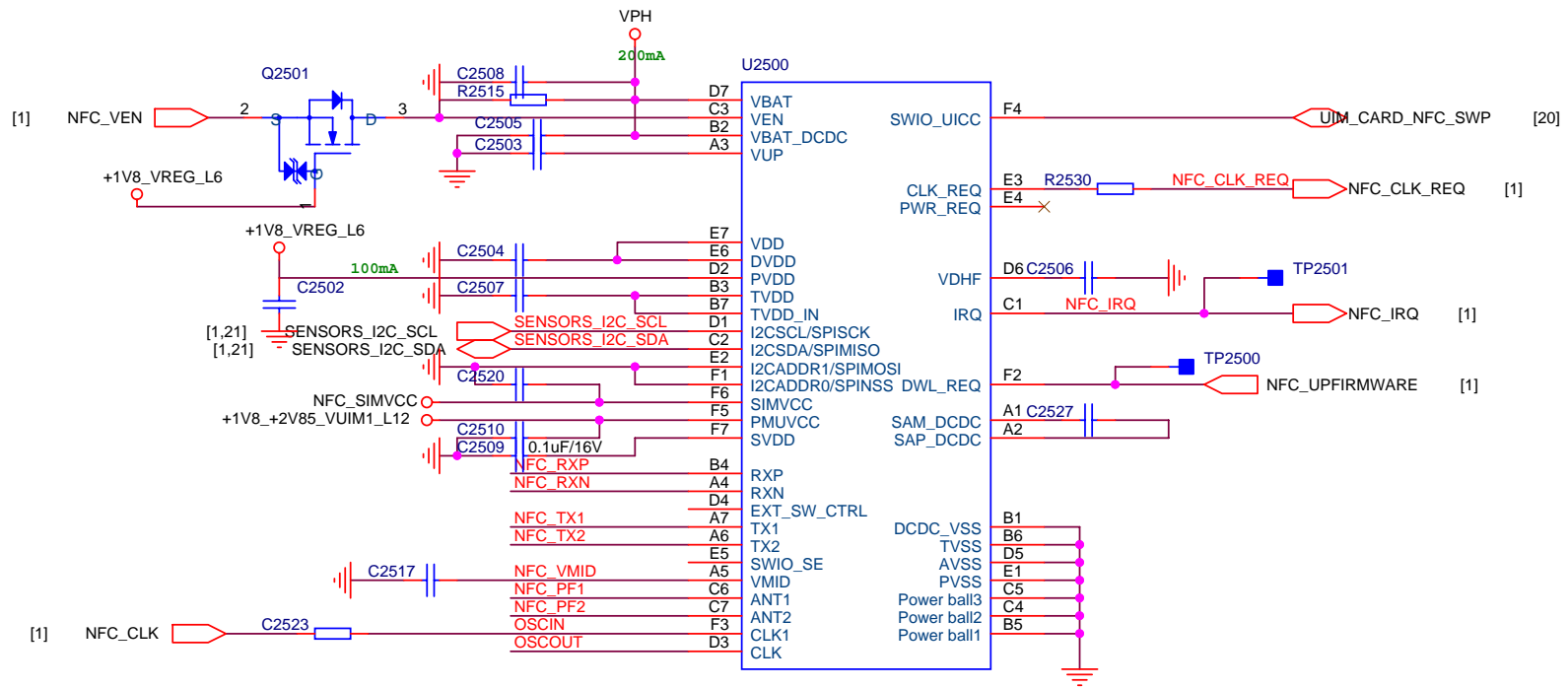


Note: If 2.4 GHz WLAN spurs are observed around 2.6 to 2.7 GHz, replace R2208 with ~20 nH inductor.

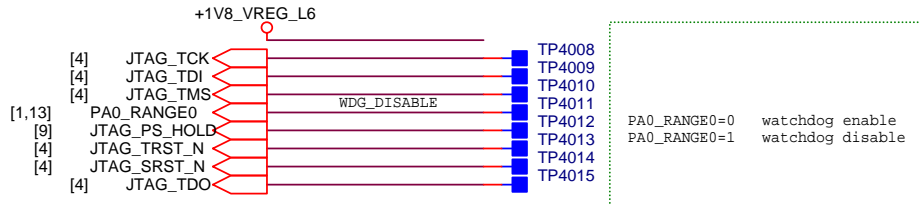
|  |                           |                 |                       |
|--|---------------------------|-----------------|-----------------------|
| Yulong Computer Telecommunication Scientific (shenzhen) Co., Ltd |                           |                 |                       |
| Title  | CP7576U_MAINBOARD         | Ver             | V1.0                  |
| Functionality  | WCN3620                   | Document Number | Keep Secret<br>15year |
| Date:  | Wednesday, March 12, 2014 | Sheet           | 22 of 40              |
| Designer:  |                           |                 | Checker:              |



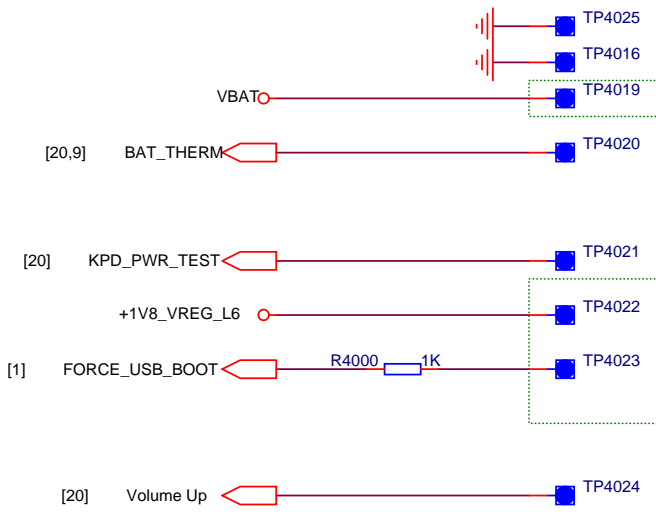
|  |             |  |
|--|-------------|--|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |             |  |
| Title<br>CP7576U_MAINBOARD   |             | Ver<br>V1.0                              |
| Functionality<br>GPS   |             | Document Number<br>Keep Secret<br>15year |
| Date:<br>Wednesday, March 12, 2014                                     | Sheet<br>23 | of<br>40                                 |
| Designer :   |             | Checker :                                |



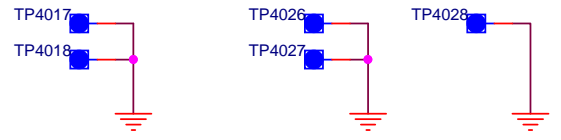
| Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd |                   |                                    |
|---|-------------------|------------------------------------|
| Title   | CP7576U_MAINBOARD | Ver V1.0                           |
| Functionality   | NFC               | Document Number Keep Secret 15year |
| Date: Wednesday, March 12, 2014                                 | Sheet 25          | of 40                              |
| Designer :  | Checker :         |                                    |



**JTAG**



**MSM8210**



**screw hole**



**MARK**



|  |                   |             |
|--|-------------------|-------------|
| <b>Yulong Computer Telecommunication Scientific (shenzhen) Co.,Ltd</b> |                   |             |
| Title  | CP7576U_MAINBOARD |             |
| Ver  | V1.0              |             |
| Functionality  | Document Number   | Keep Secret |
| TEST POINT   |                   | 15year      |
| Date: Wednesday, March 12, 2014  | Sheet             | 40 of 40    |
| Designer:  | Checker:          |             |