# Xiaomi Poco M3 (J19S_MB) Schematic Dagram

Xiaomi
Smartphone



## Schematic Diagram

# I2C Configuration Table

| | |
|---|---|
| GPIO4<br>GPIO5 | AUDIO&NFC&BL |
| GPIO22<br>GPIO23 | 48M&R 8M |
| GPIO29<br>GPIO30 | 2M&2M&F 8M |
| GPIO96<br>GPIO97 | https://Mobile1Tech.com |
| GPIO109<br>GPIO110 | PL&M Sensor I2C |
| LPI_GPIO21<br>LPI_GPIO22 | G&SAR Sensor I2C |



| | | |
|---|---|---|
| Company: Huaqin | | |
| Block Title | I2C Configuration Table | |
| Project | J19S_MB_V1 | Rev 1.0 |
| Date: | Friday, August 28, 2020 | Sheet 2 of 41 |

Table of Content





| | |
|---|---|
| Company: Huaqin | |
| Block Title | Table of Content |
| Project J19S_MB_V1 | Rev 1.0 |
| Date: Friday, August 28, 2020 | Sheet 3 of 41 |

## GPIO MAP — SM6115 GPIO Configuration

| | | | | | |
|---|---|---|---|---|---|
| GPIO_0 | NFC_SPI_MISO | GPIO_42 | | GPIO_84 | |
| GPIO_1 | NFC_SPI_MOSI | GPIO_43 | GRFC_6 | GPIO_85 | LCM_RST |
| GPIO_2 | NFC_SPI_CLK | GPIO_44 | GRFC_7 | GPIO_86 | **NFC_CLK_REQ** |
| GPIO_3 | NFC_SPI_CS1_N | GPIO_45 | GRFC_8 | GPIO_87 | **WCN_SW_CTRL** |
| GPIO_4 | APPS_I2C_SDA | GPIO_46 | GRFC_9 | GPIO_88 | SD_DET |
| GPIO_5 | APPS_I2C_SCL | GPIO_47 | GRFC_10 | GPIO_89 | Modem_ID3 |
| GPIO_6 | TP_SPI_MISO | GPIO_48 | | GPIO_90 | MSS_LTE_COXM_TXD |
| GPIO_7 | TP_SPI_MOSI | GPIO_49 | GRFC_12 | GPIO_91 | MSS_LTE_COXM_RXD |
| GPIO_8 | WCN_UART_CTS_N | GPIO_50 | | GPIO_92 | **WCD9370_RST_N** |
| GPIO_9 | WCN_UART_RFR_N | GPIO_51 | | GPIO_93 | **FP_POWER_EN** |
| GPIO_10 | WCN_UART_TX_N | GPIO_52 | | GPIO_94 | **FORCED_USB_BOOT_POL_SEL** |
| GPIO_11 | WCN_UART_RX_N | GPIO_53 | RFFE1_DATA | GPIO_95 | **FORCED_USB_BOOT** |
| GPIO_12 | MSM_UART_TX | GPIO_54 | RFFE1_CLK | GPIO_96 | **PA_I2C_SDA** |
| GPIO_13 | MSM_UART_RX | GPIO_55 | | GPIO_97 | **PA_I2C_SCL** |
| GPIO_14 | FP_SPI_MISO | GPIO_56 | | GPIO_98 | **PA_SPK_RST** |
| GPIO_15 | FP_SPI_MOSI | GPIO_57 | RFFE3_DATA | GPIO_99 | **LCD_ID0** |
| GPIO_16 | FP_SPI_CLK | GPIO_58 | RFFE3_CLK | GPIO_100 | **LCD_ID1** |
| GPIO_17 | FP_SPI_CS_N | GPIO_59 | | GPIO_101 | **LCD_ID2** |
| GPIO_18 | CAM_3_PDN | GPIO_60 | | GPIO_102 | **USB_SS_SEL** |
| GPIO_19 | CAM_F_RST | GPIO_61 | | GPIO_103 | **CTP_RST** |
| GPIO_20 | CAM_R_MCLK | GPIO_62 | RFFE5_DATA | GPIO_104 | **CTP_EINT** |
| GPIO_21 | CAM_F_MCLK | GPIO_63 | RFFE5_CLK | GPIO_105 | **SMB_STAT** |
| GPIO_22 | CAM_I2C_SDA0 | GPIO_64 | EXT_GPS_LNA_EN0 | GPIO_106 | **ALS_EINT** |
| GPIO_23 | CAM_I2C_SCL0 | GPIO_65 | CH0_GSM_TX_PHASE_D0 | GPIO_107 | **PA_RSV_RST** |
| GPIO_24 | CAM_2_RST | GPIO_66 | CAM_R_RST | GPIO_108 | **DSI_TE** |
| GPIO_25 | PM8008_INT_N | GPIO_67 | NC | GPIO_109 | **Sensor_I2C_SDA** |
| GPIO_26 | PM8008_RST_N | GPIO_68 | Modem_ID1 | GPIO_110 | **Sensor_I2C_SCL** |
| GPIO_27 | CAM_MCLK_2 | GPIO_69 | SUB_ID | GPIO_111 | **CONFIG0** |
| GPIO_28 | CAM_MCLK_3 | GPIO_70 | NFC_ENABLE | GPIO_112 | **CONFIG1** |
| GPIO_29 | CAM_I2C_SDA1 | GPIO_71 | NFC_INT_N | LPI_GPIO_0 | SWR_TX_CLK |
| GPIO_30 | CAM_I2C_SCL1 | GPIO_72 | TP_SPI_SCLK | LPI_GPIO_1 | SWR_TX_DATA0 |
| GPIO_31 | NFC_DWL_REQ | GPIO_73 | UIM2_DATA | LPI_GPIO_2 | SWR_TX_DATA1 |
| GPIO_32 | FP_ID1 | GPIO_74 | UIM2_CLK | LPI_GPIO_3 | SWR_RX_CLK |
| GPIO_33 | FP_ID2 | GPIO_75 | UIM2_RESET | LPI_GPIO_4 | SWR_RX_DATA0 |
| GPIO_34 | FP_EINT | GPIO_76 | UIM2_DET | LPI_GPIO_5 | SWR_RX_DATA1 |
| GPIO_35 | FP_RST | GPIO_77 | UIM1_DATA | LPI_GPIO_14 | QCA_SB_CLK |
| GPIO_36 | G_EINT_ACC | GPIO_78 | UIM1_CLK | LPI_GPIO_15 | QCA_SB_DATA |
| GPIO_37 | GRFC_0 | GPIO_79 | UIM1_RESET | LPI_GPIO_21 | Sensor_I3C_SDA |
| GPIO_38 | GRFC_1 | GPIO_80 | **UIM1_DET** | LPI_GPIO_22 | Sensor_I3C_SCL |
| GPIO_39 | GRFC_2 | GPIO_81 | **TP_SPI_CS_N** | LPI_GPIO_25 | https://Mobile1Tech.com |
| GPIO_40 | ANT_TEST | GPIO_82 | Modem_ID2 | LPI_GPIO_26 | |
| GPIO_41 | | GPIO_83 | Modem_ID4 | | |

## PM4250 GPIO Configuration

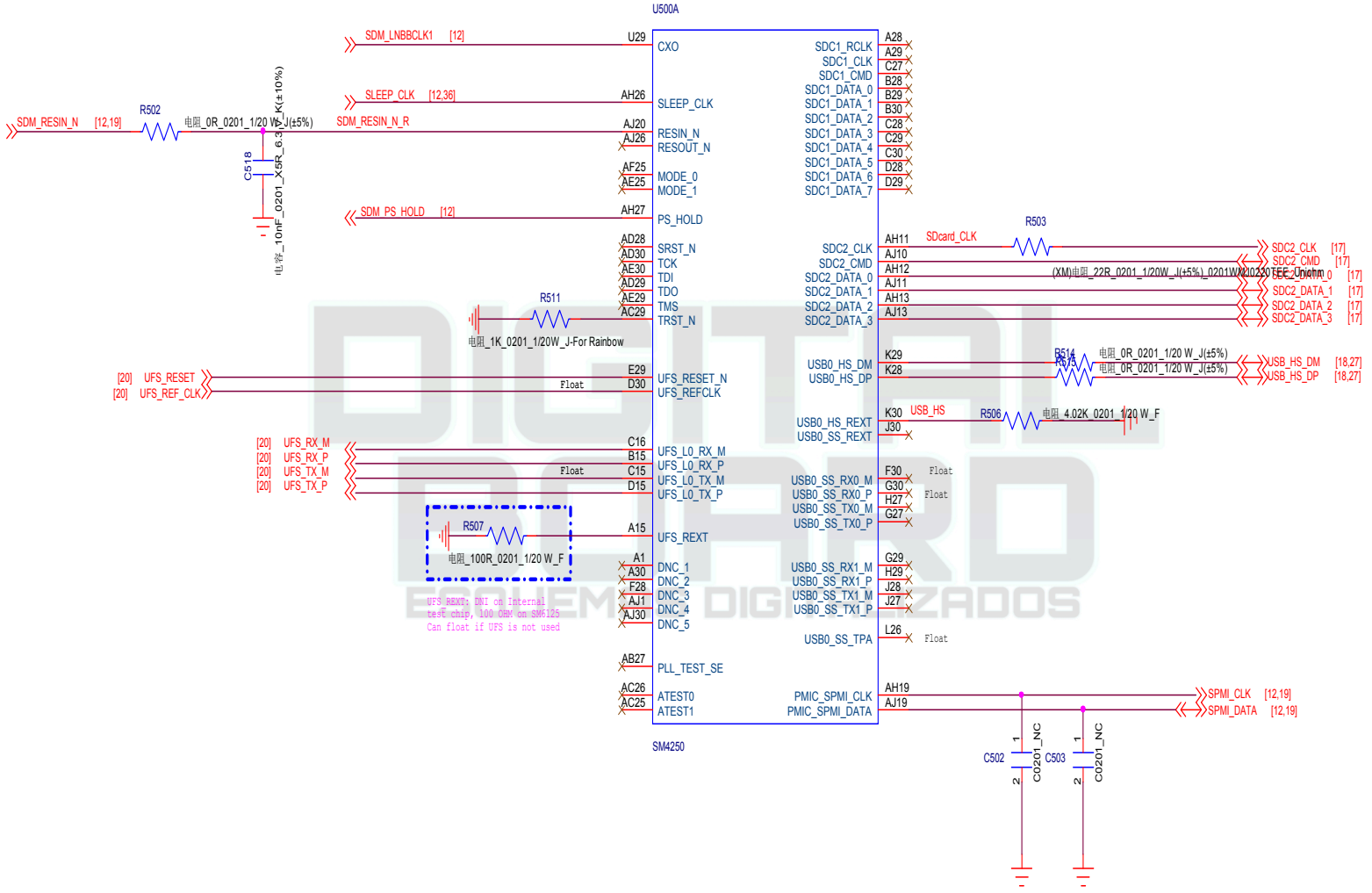
| | | | |
|---|---|---|---|
| GPIO_1 | DSP_CLK | GPIO_8 | USB_MOS_CTRL |
| GPIO_2 | FLASH_THERMAL | GPIO_9 | |
| GPIO_3 | USB1_THERM | | |
| GPIO_4 | USB2_THERM | | |
| GPIO_5 | KEY_VOL_UP | | |
| GPIO_6 | BB_THERM | | |
| GPIO_7 | Modem_ID5 | | |

## PMI632 GPIO Configuration

| | | | |
|---|---|---|---|
| GPIO_1 | NC | GPIO_8 | ISNS_SMB_M |
| GPIO_2 | STAT_CHG | | |
| GPIO_3 | PMI632_THERM | | |
| GPIO_4 | | | |
| GPIO_5 | | | |
| GPIO_6 | | | |
| GPIO_7 | ISNS_SMB_P | | |

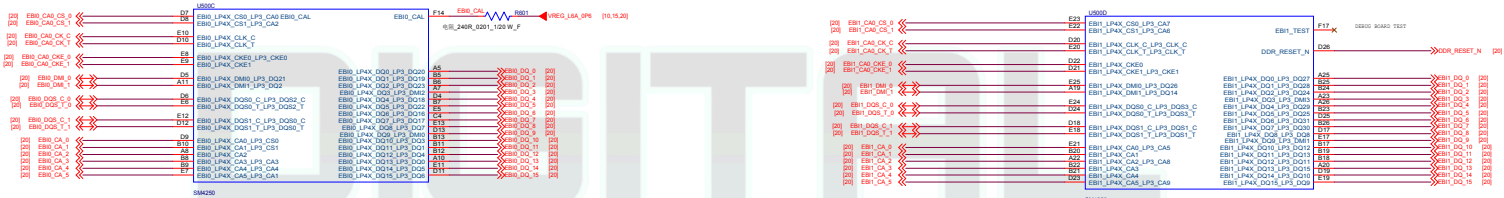


| | |
|---|---|
| Company: Huaqin | |
| Block Title: GPIO MAP | |
| Project: J19S_MB_V1 | Rev: 1.0 |
| Date: Friday, August 28, 2020 | Sheet 4 of 41 |



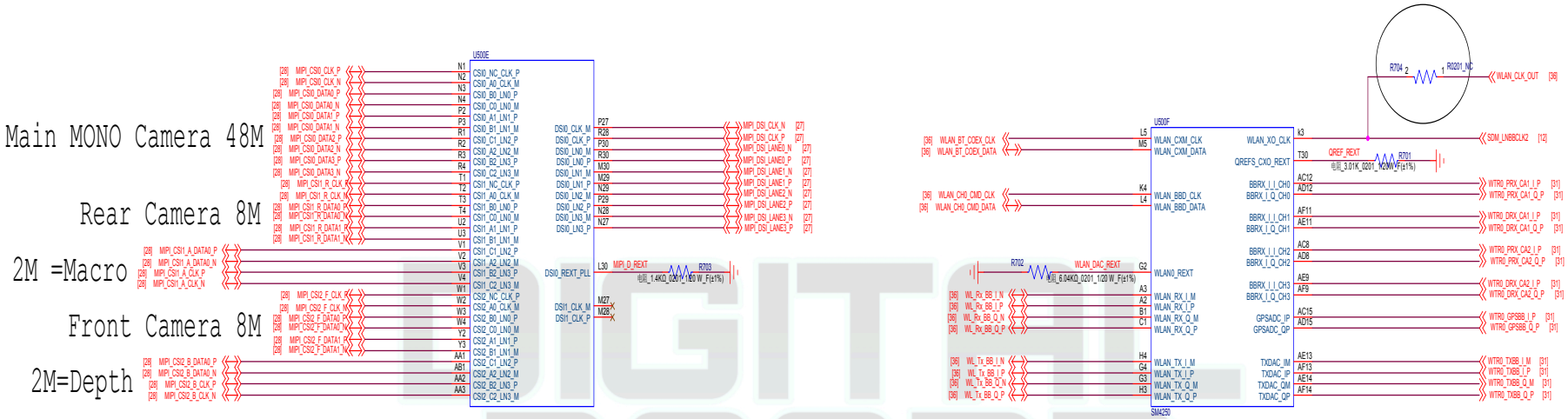



| | |
|---|---|
| Company: Huaqin | |
| Block Title | SM6115 Control/UFS/SDC1/SDC2 |
| Project | J19S_MB_V1 |
| Rev | 1.0 |
| Date: Friday, August 28, 2020 | Sheet 5 of 41 |





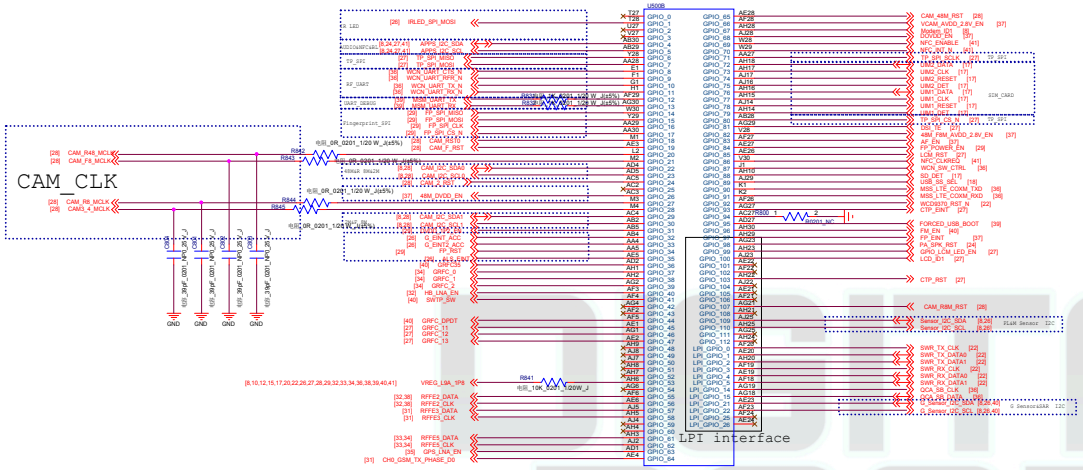

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | SM8115 LPDDR4 | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 6 of 41 |






| | |
|---|---|
| Company: Huaqin | |
| Block Title | SM8115 CSI/DSI |
| Project J19S_MB_V1 | Rev 1.0 |
| Date: Friday, August 28, 2020 | Sheet 7 of 41 |

BOOT Config GPIOs




| BOOT Config GPIOs | Functionality |
|---|---|
| GPIO_95 | Forced_USB_BOOT |
| BOOT Config[0]:GPIO_48 | WDOG_DISABLE |
| BOOT Config[1]:GPIO_50 | FASTBOOT_SEL[0] |
| BOOT Config[2]:GPIO_51 | FASTBOOT_SEL[1] |
| BOOT Config[3]:GPIO_53 | FASTBOOT_SEL[2] |
| BOOT Config[4]:GPIO_55 | FASTBOOT_SEL[3] |
| GPIO_94 | Forced_USB_BOOT_POL_SEL |

| FASTBOOT_SEL[3:0] | BOOT OPTIONS |
|---|---|
| 0b0000 | 0:Default(eMMC>SD>eDL(eDL path-USB only)) |
| 0b0001 | 1:SD>eMMC>eDL(eDL path-USB only)) |
| 0b0010 | 2:SD>eDL(eDL path-USB only) |
| 0b0011 | 3:USB>eDL(eDL path-SD then USB) |
| 0b0100 | 5:UFS HS G1>SD>eDL(eDL path-USB only)) |
| 0b0101 | 4:SD>UFS HS G1>eDL(eDL path-USB only)) |
| 0b1100 | 6:UFS HS G1>eDL(eDL path-USB only)) |
| 0b0111 | 7:eMMC>SD>eDL(eDL path-USB only)) |
| 0b1000 | 8:eMMC>eDL(eDL path-USB only)) |



I2C pull up

Hardware&Board ID
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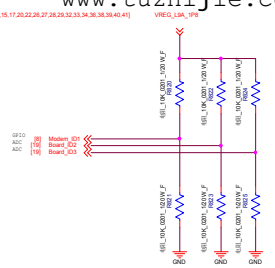

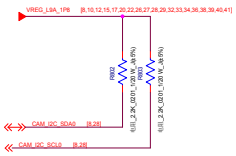


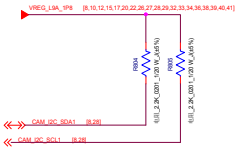


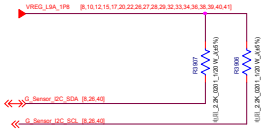


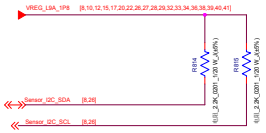


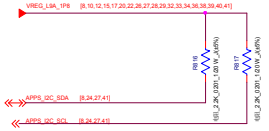


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| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | SM8115 GPIO (Internal Codec) | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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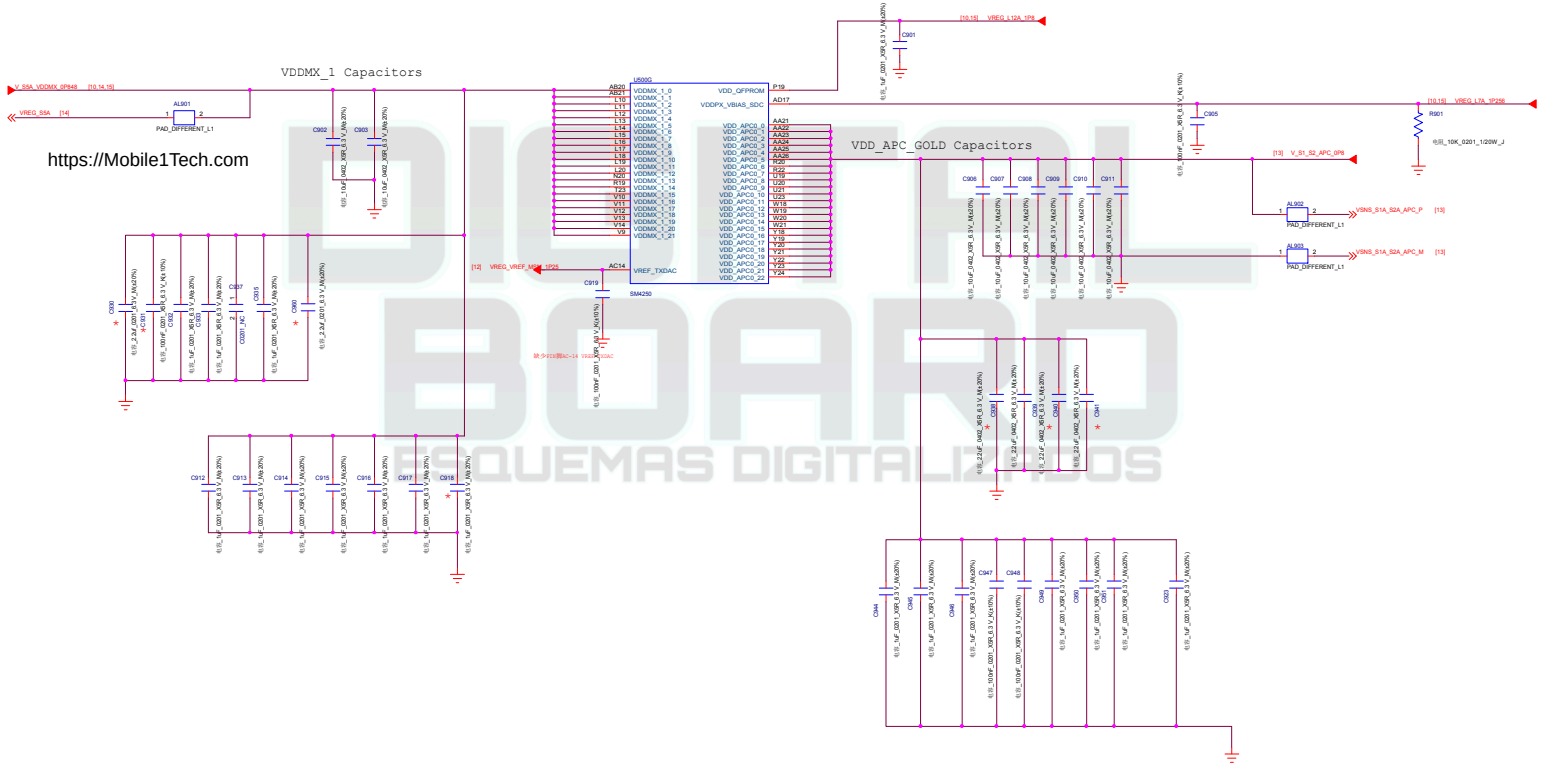
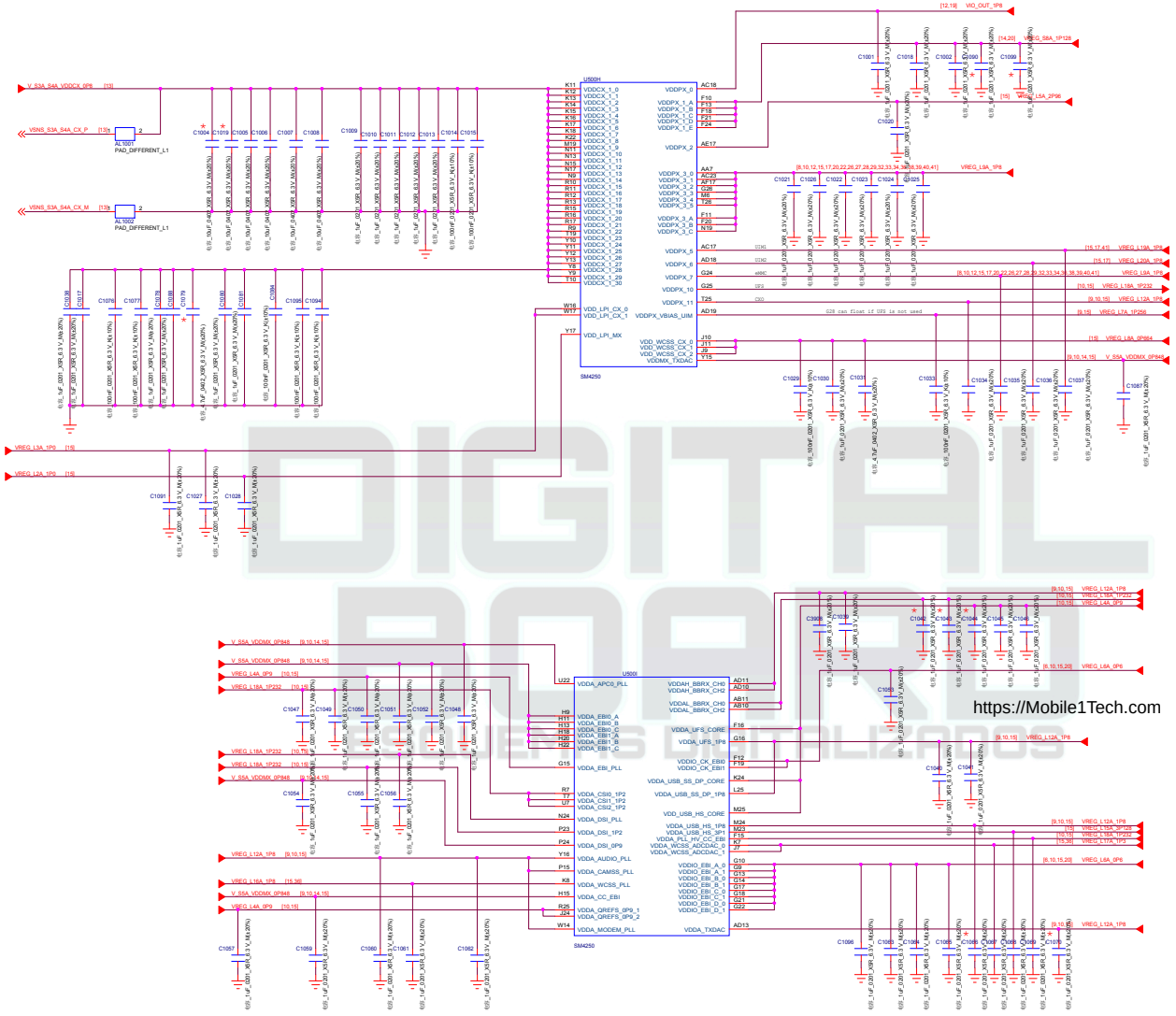


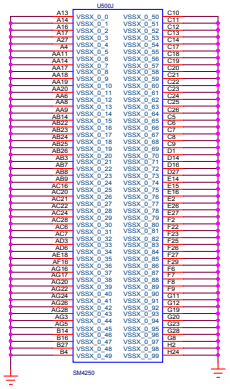


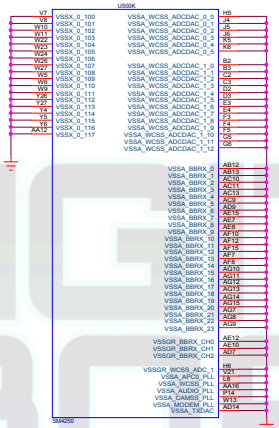

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | SM4250 Power (Core) | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 9 of 41 |

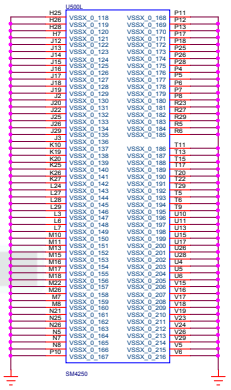




| | |
|---|---|
| Company: Huaqin | |
| Block Title | SM4250 Power (Other, LP4X) |
| Project | J19S_MB_V1 |
| Rev | 1.0 |
| Date: Friday, August 28, 2020 | Sheet 10 of 41 |






| | |
|---|---|
| Company: Huaqin | |
| Block Title | SM4250 Ground |
| Project | J19S_MB_V1 |
| Rev | 1.0 |
| Date: | Friday, August 28, 2020 |
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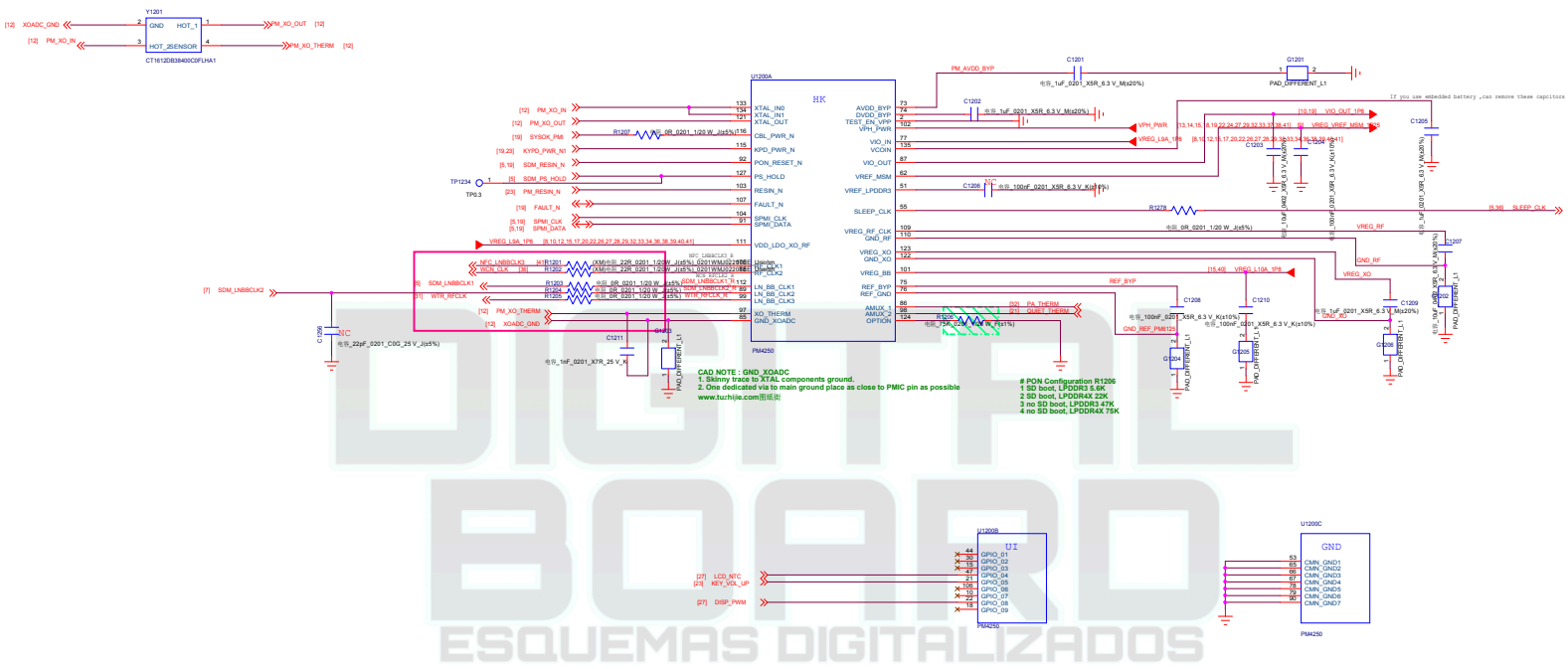


| Option Pin Resistor Value | Configuration |
|---|---|
| 5.6K | No External Boost Bypass, SD Card Boot, LPDDR3 |
| 22K | No External Boost Bypass, SD Card Boot, LPDDR4x |
| 47K | No External Boost Bypass, No SD Card Boot, LPDDR3 |
| 75K | No External Boost Bypass, No SD Card Boot, LPDDR4x |
| 130K | External Boost Bypass, SD Card Boot, LPDDR3 |
| 240K | External Boost Bypass, SD Card Boot, LPDDR4x |
| 330K | External Boost Bypass, No SD Card Boot, LPDDR3 |
| 750K | External Boost Bypass, No SD Card Boot, LPDDR4x |

Note: SD Card Boot implies the voltages for SD card will be enabled during Power On sequence
No SD Card Boot implies the voltages for SD card will be disabled during Power On sequence

| Option Pin Resistor Value | Configuration |
|---|---|
| 5.6K | No External Boost Bypass, SD Card Boot, LPDDR3 |
| 22K | No External Boost Bypass, SD Card Boot, LPDDR4x |
| 47K | No External Boost Bypass, No SD Card Boot, LPDDR3 |
| 75K | No External Boost Bypass, No SD Card Boot, LPDDR4x |
| 130K | External Boost Bypass, SD Card Boot, LPDDR3 |
| 240K | External Boost Bypass, SD Card Boot, LPDDR4x |
| 330K | External Boost Bypass, No SD Card Boot, LPDDR3 |
| 750K | External Boost Bypass, No SD Card Boot, LPDDR4x |

Note: SD Card Boot implies the voltages for SD card will be enabled during Power On sequence
No SD Card Boot implies the voltages for SD card will be disabled during Power On sequence





| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PM4250 CLKs/Control_GND | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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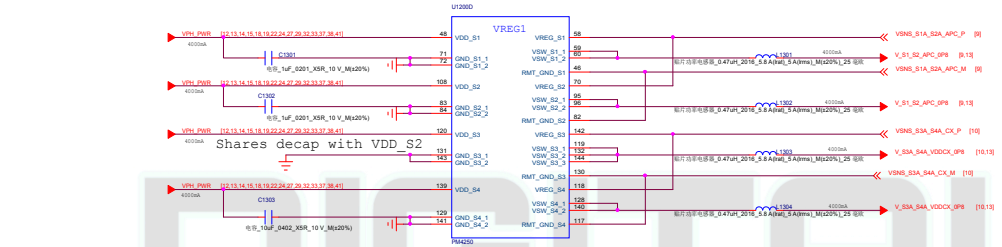


## Nicobar Power Grid v1.31 10/31/2018

| | | | | |
|---|---|---|---|---|
| S1A-2A: | FTS510 | 0.8V default | 8000mA Ipeak 8110.00mA | APC |
| S3A-4A: | FTS510 | 0.8V default | 8000mA Ipeak 8480mA | CX, MODEM |
| S5A: | HFS510 | 0.912V default | 4000mA Ipeak 3620.00mA | EBI, MX, nLDO |
| S6A: | HFS510 | 1.352V default | 4000mA Ipeak 1560mA | LDO |
| S7A: | HFS510 | 2.04V default | 2500mA Ipeak 2350mA | LDO |
| S8A: | FTS510 | 1.128V default | 4000mA Ipeak 1790mA | LDO, LPDDR4x |

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| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PM4250 Buck Converter | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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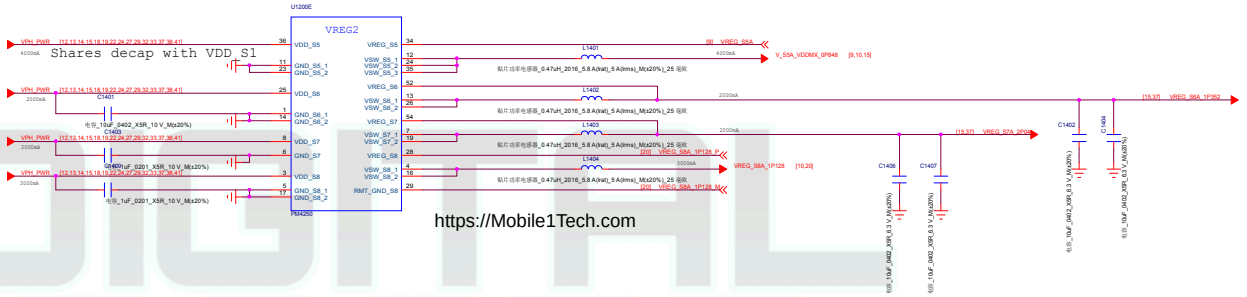
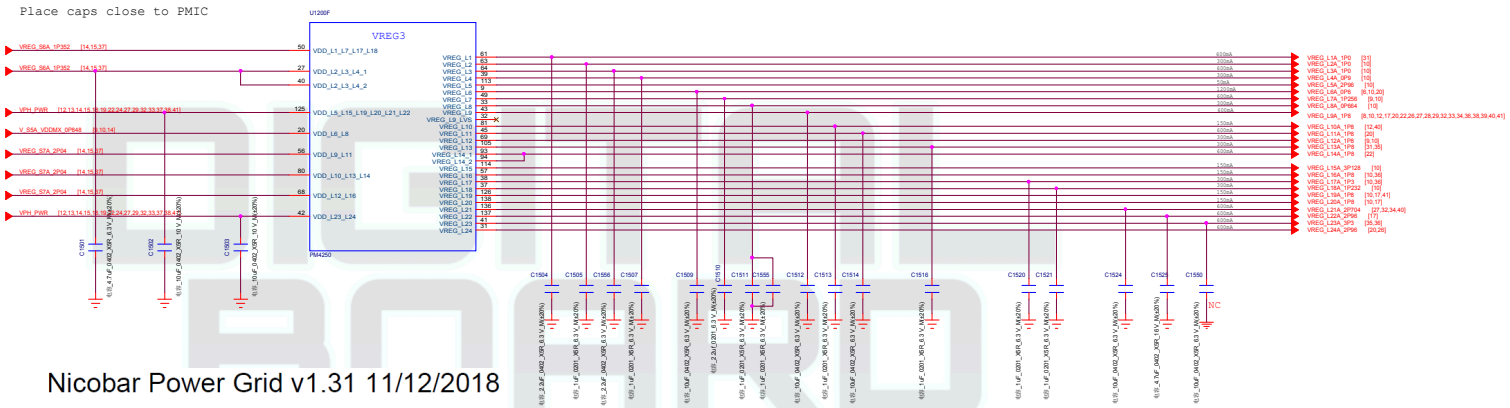





| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PM4250 LDO Circuits | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 14 of 41 |




# Nicobar Power Grid v1.31 11/12/2018

| LDO | Type | Source | V_default (est) | Target | Pin# |
|---|---|---|---|---|---|
| L1 | N600 | S6A | 1.2V (625) | QLN,SDR 1,2 | 61 |
| L2 | N300 | S8A | 1V (320) | SDR VDD 1.0V | 63 |
| L3 | N600 | S8A | 1V (370) | SDR VDD 1.0V | 64 |
| L4 | N300 | S8A | 0.928V (128) | QLINK, EBI, MIPI | 39 |
| L5 | MVP50 | VPH | 2.96V (22) | PX | 113 |
| L6 | N1200 | S5A | 0.624V (1040) | VDDQ, EBI | 9 |
| L7 | N600 | S6A | 0.928V (54.2) | USB | 49 |
| L8 | N300 | S5A | 0.664V (81) | CX | 33 |
| L9 | LVP600 | S7A | 1.8V (754) | Sensors, WCD, TMD, PMI_MSM, QET | 43 |
| L10 | LVP150 | S7A | 1.8V (100) | QFPROM, USB,UFS, PX | 81 |
| L11 | LVP600 | S7A | 1.8V (925) | EMMC/VCCQ | 45 |
| L12 | LVP300 | S7A | 1.8V (121) | OV. USB_REDRIVER | 69 |
| L13 | LVP300 | S7A | 1.8V (204) | QPM 1.8V, BBRX, GPS | 105 |
| L14 | LVP600 | S7A | 1.8V (650) | WCD Buck | 94,93 |
| L15 | MVP150 | VPH | 3.128V (5.28) | USB 3.1V, DP PHY | 114 |
| L16 | LVP150 | S7A | 1.8V (92.5) | WCSS, WCN_XO | 93 |
| L17 | N300 | S6A | 1.304V (246) | WCN, WCSS ADX DAC | 38 |
| L18 | N300 | S6A | 1.232V (133) | MIPI, VDDPX | 37 |
| L19 | MVP150 | VPH/BB | 1.8V (60.2) | Memory, SN100, PX | 126 |
| L20 | MVP150 | VPH/BB | 1.8V (60.2) | Memory, SN100, PX | 138 |
| L21 | MVP600 | VPH/BB | 2.704V (0.68) | QAT, DFE, RTC,QSW | 136 |
| L22 | MVP600 | VPH/BB | 2.96V (800) | MMC | 137 |
| L23 | MVP600 | VPH/BB | 3.304V (591) | WCN 3.3V | 41 |
| L24 | MVP600 | VPH/BB | 2.96V (1170) | EMMC | 31 |

LDO L5/L9/L10/L11/L12/L13/L14/L15/L16/L19/L20/L21/L22/L23/L24 is the Pseudo-capless LDO, so can dni CAP in BOM

PSEUDO CAPLESS LDOs
P-type are psuedo-capless, cap can be at load
For CAPLESS LDOs: If decaps on the load side do not add up to LDO spec, then install the cap close to the PMIC



| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PM4250 Charger_FG | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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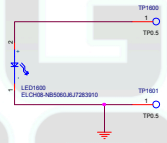
Flash LED SINGLE BOARD






| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | BC25868 | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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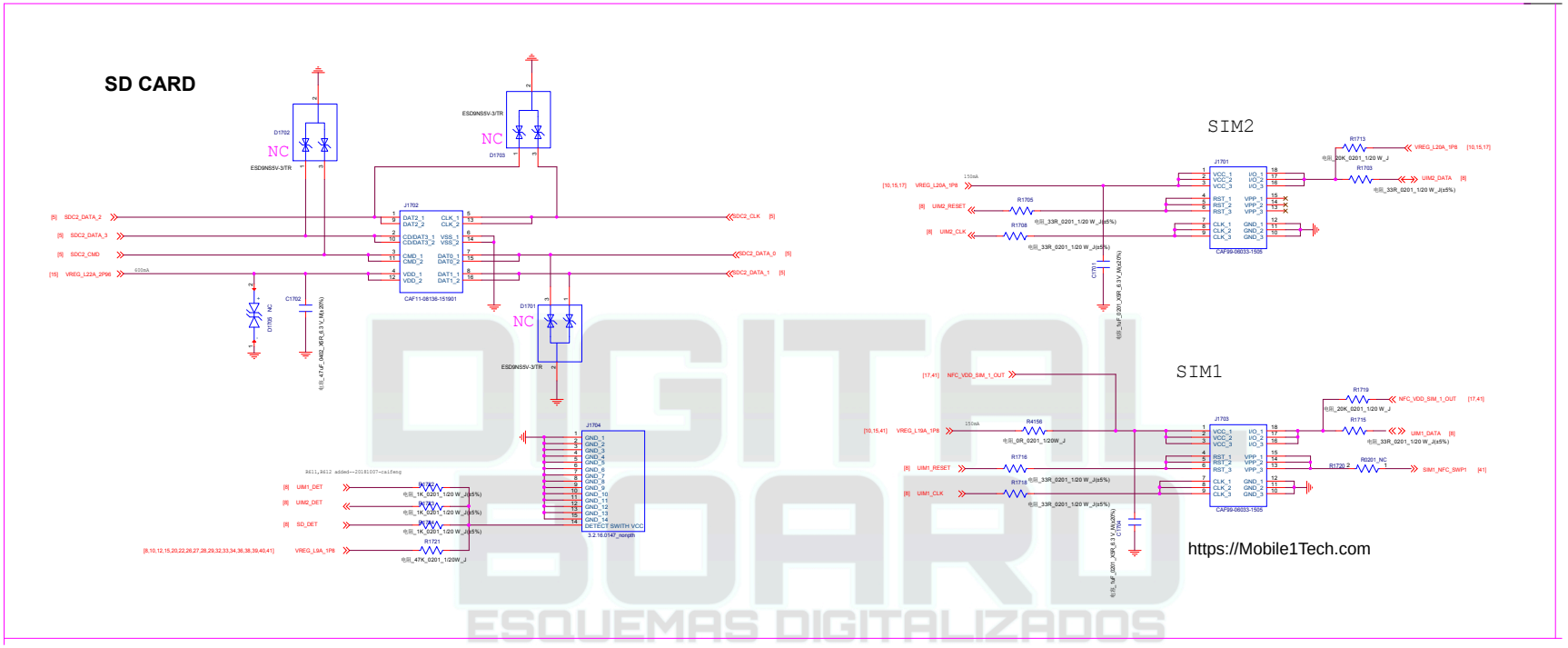




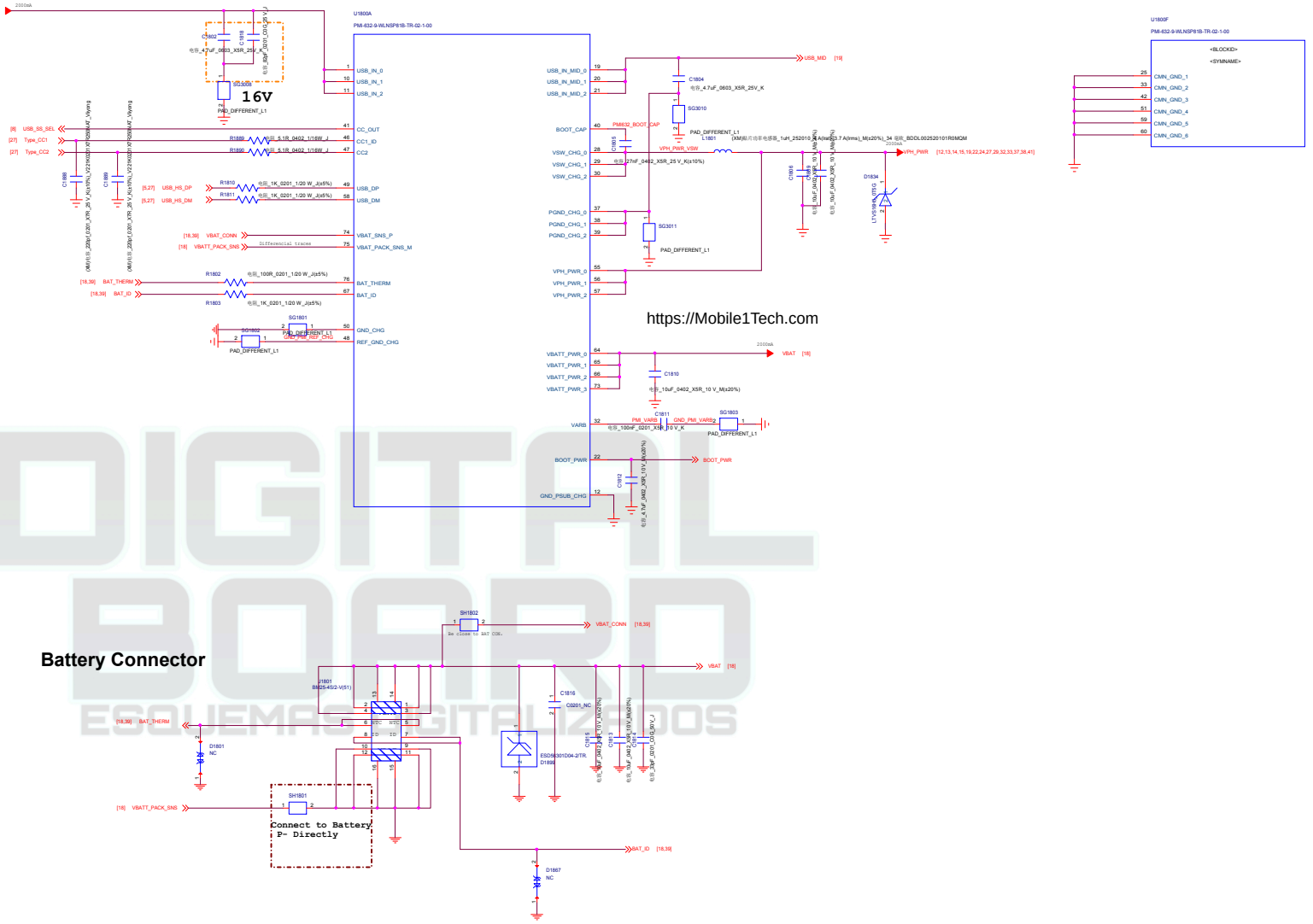

**Schematic design notice of "46_MEMORY_SD Card" page.**

Note 46-1: For better ESD performance, please select suitable components for system protection.

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | SD&SIM | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 17 of 41 |

# PMI632 Charger

| PMI_PIN | connection on device without Mipower | connection on device with Mipower |
|---|---|---|
| CHG_EN | Pull up to VDD_CAP with 51kohm | Shark PBS CHG_EN |
| SDV2_EN | Pull down to GND with 0ohm | Shark PBS SDV2_EN |
| GPIO2 | NO Connect<br>For parallel charging: Connects to SMB EN pin.<br>NO NOT pull up to VDD_CAP | 100KOhm pull down to gnd<br>For parallel charging: Connects to SMB EN pin.<br>NO NOT pull up to VDD_CAP |




**Schematic design notice of "26_POWER_SubPMIC-Charger + PP" page.**

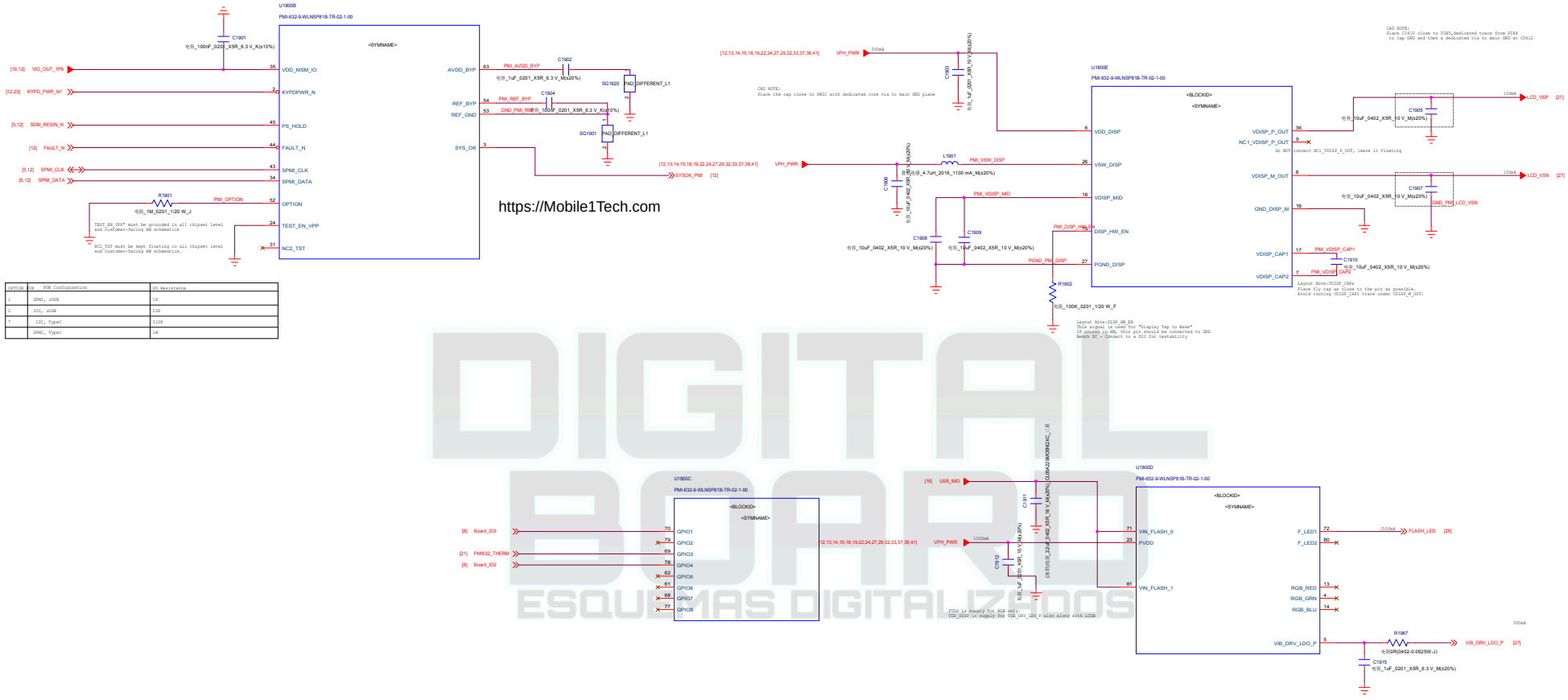
Note 26-1: For better ESD or surge performance we need choose suitable device for system protection. Please refer to [Surge device selection guide V2.0] provide by MTK.

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PMI632 | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 18 of 41 |

# PMI632 Display

REF 80-PG427-41 Rev. B





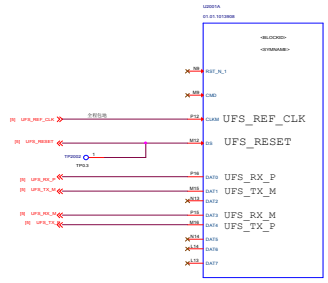

| OPTION | ID | PON Configuration | ID Resistance |
|---|---|---|---|
| 1 | | SPMI, uSID | 1M |
| 2 | | I2C, uSID | 120K |
| 3 | | I2C, TypeC | 510K |
| | | SPMI, TypeC | 1M |

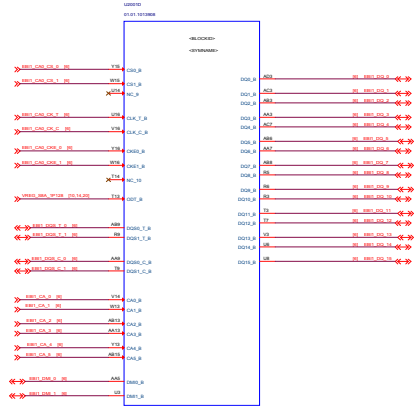


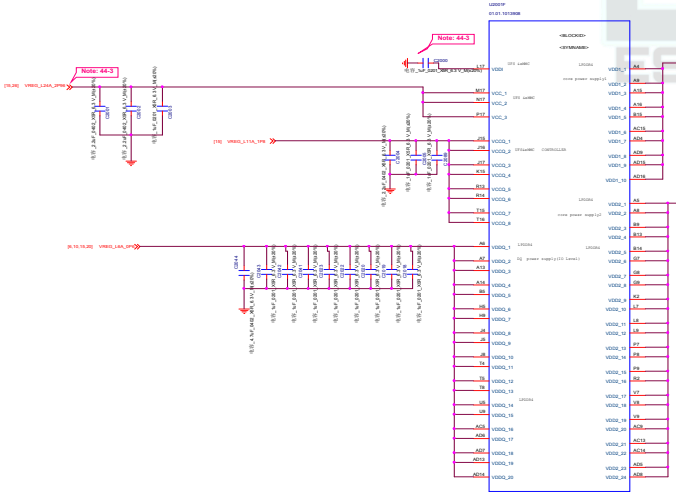
| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | PMI632 Display | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 19 of 41 |

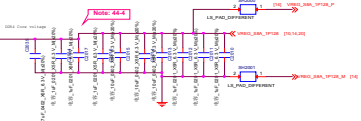
UFS MEMORY

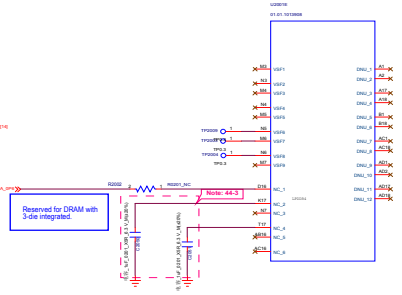
uMCP:LPDDR4x

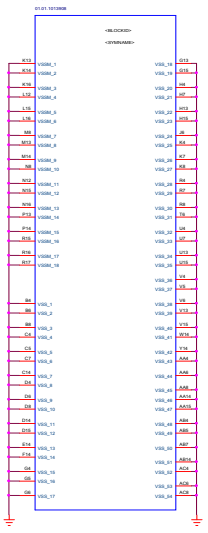






hynix是0.22uF， 最大不超过1uF，
micron是1uF，
三星的不需要贴。
但是为了避免项目使用几家的uMCP时bom出错， 统一贴1uF




| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | NTC | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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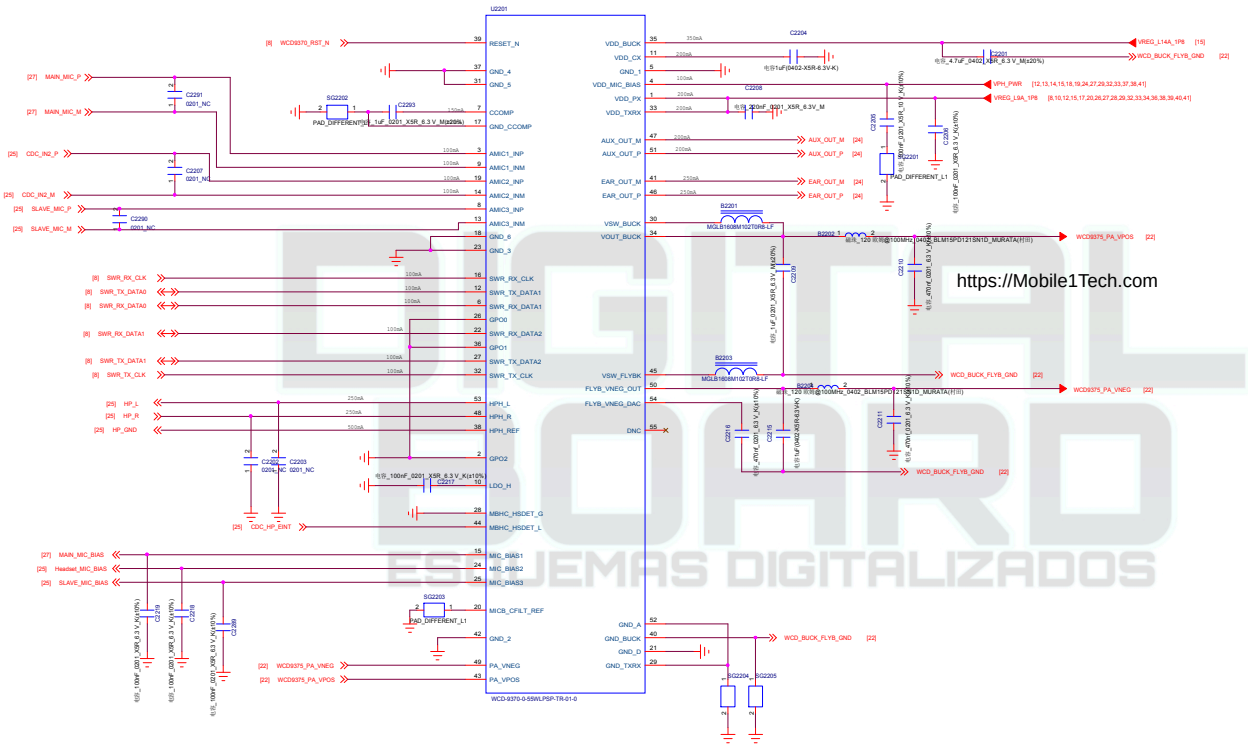
# WCD9370





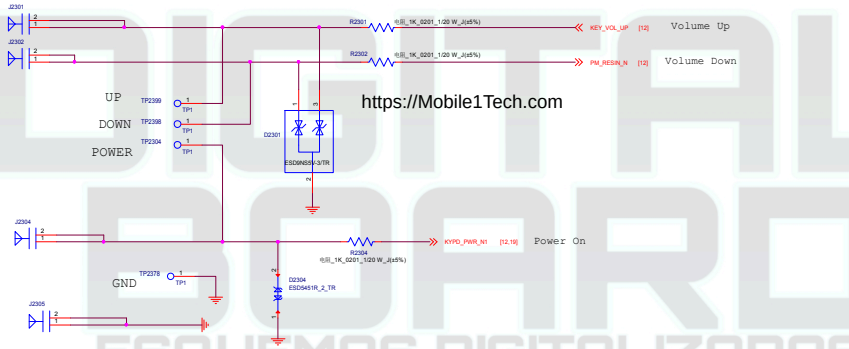

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | Codec | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 22 of 41 |

# Test Points

REF 2301-2399

**Power Key => PWRKEY + GND**
**Volume Up => COL0 + GND (Download Key)**
**Volume Down => FCHR_ENB + GND**
**www.tuzhijie.com图纸街**

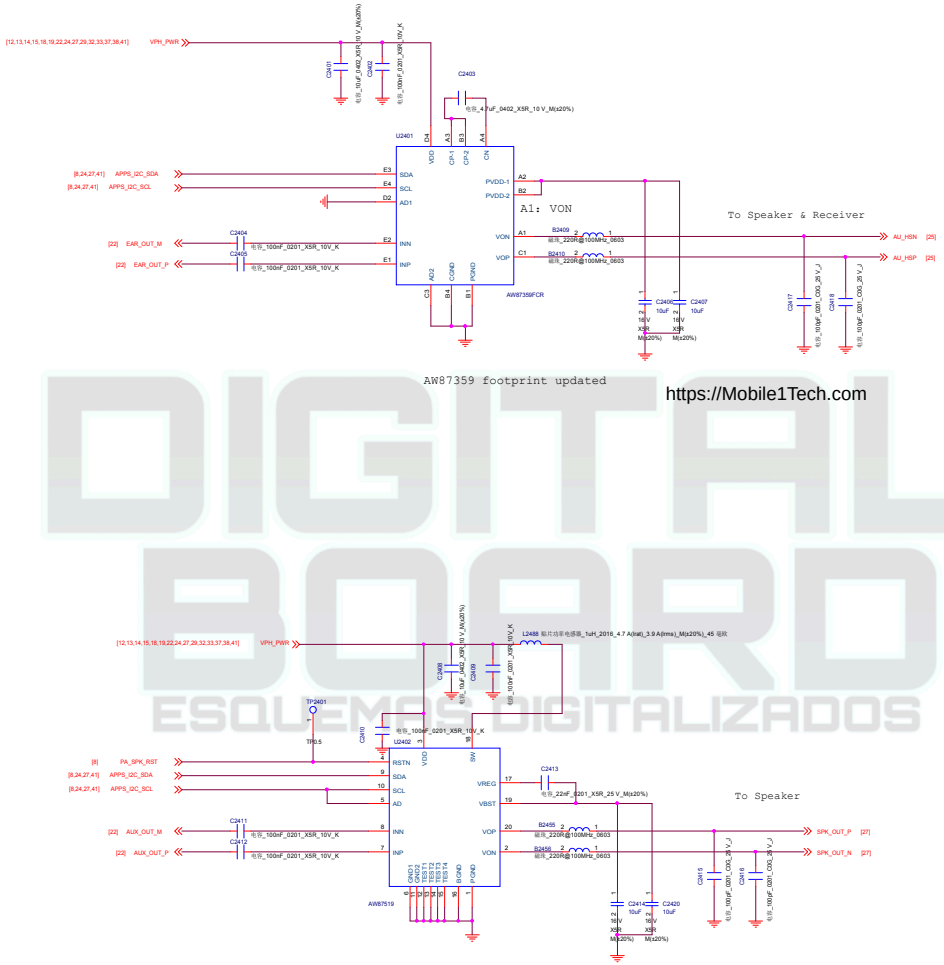
**DO NOT put pull-up resistor on PWRKEY**






TP/GND/Shielding

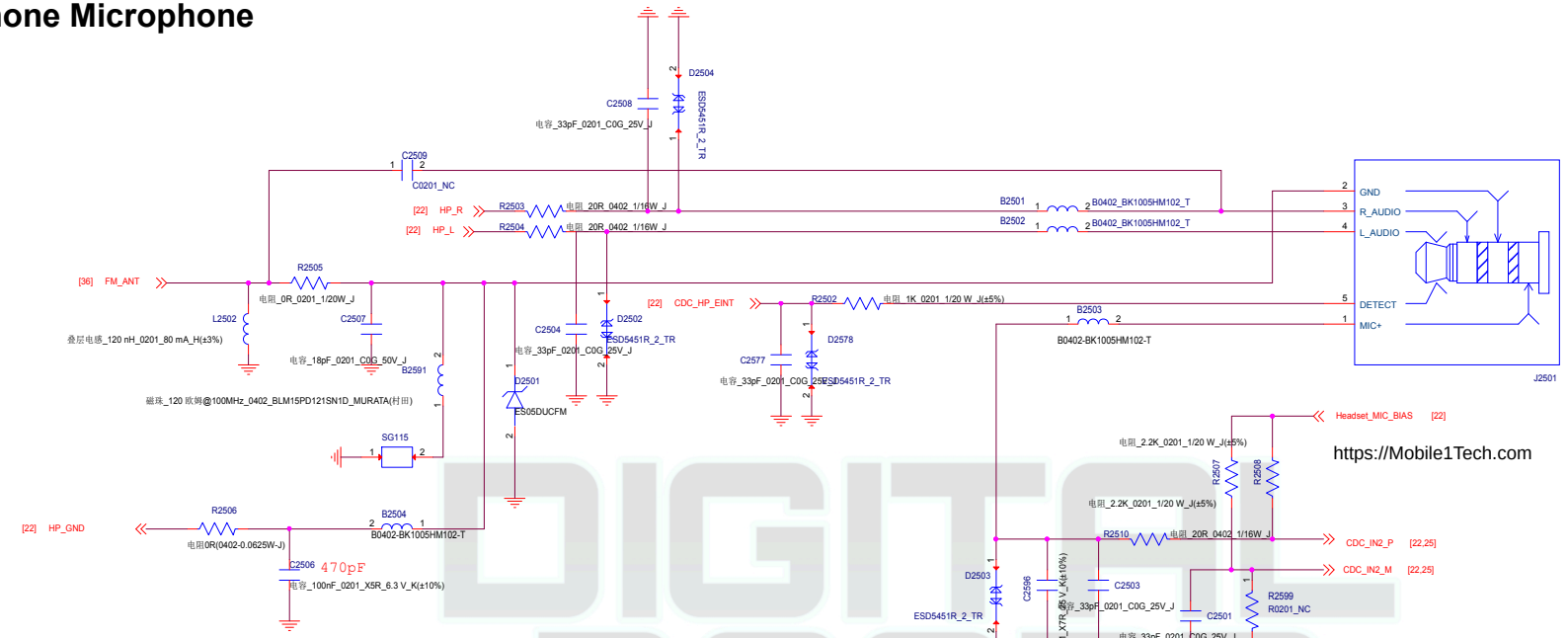
| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | Test Points | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 23 of 41 |





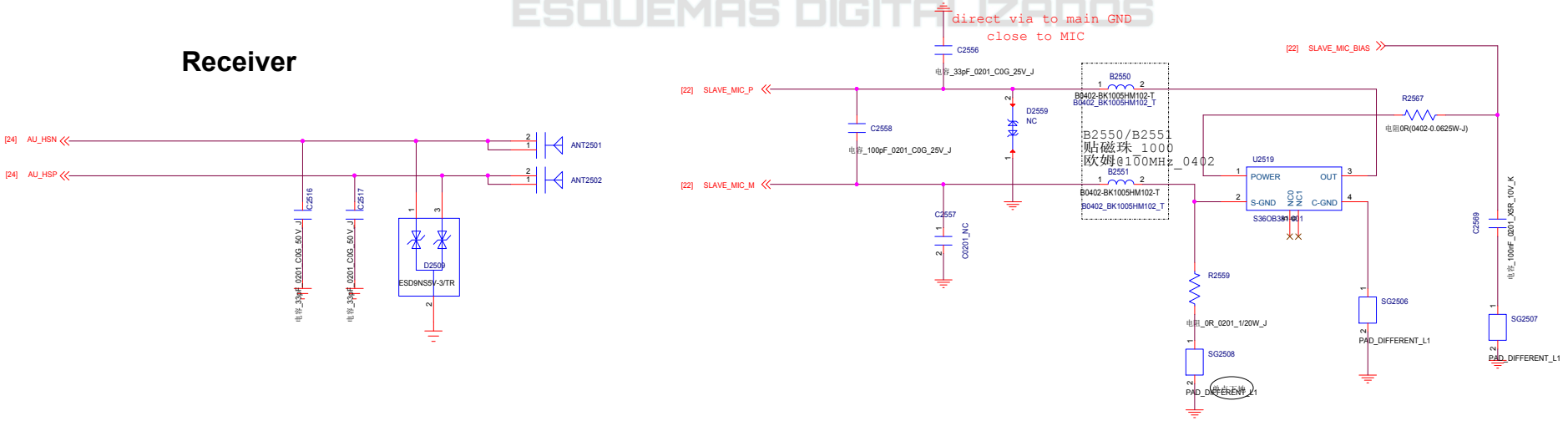

| | |
|---|---|
| Company: Huaqin | |
| Block Title | AUDIO_Stereo_SPK |
| Project | J19S_MB_V1 |
| Rev | 1.0 |
| Date: | Friday, August 28, 2020 |
| Sheet | 24 of 41 |

# Earphone Microphone



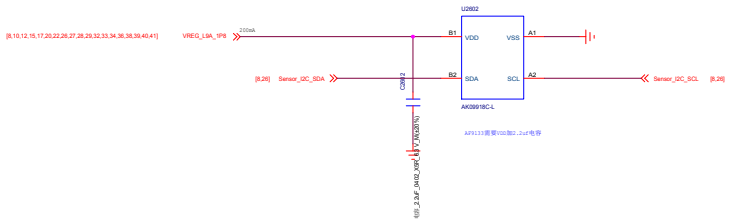



# Receiver

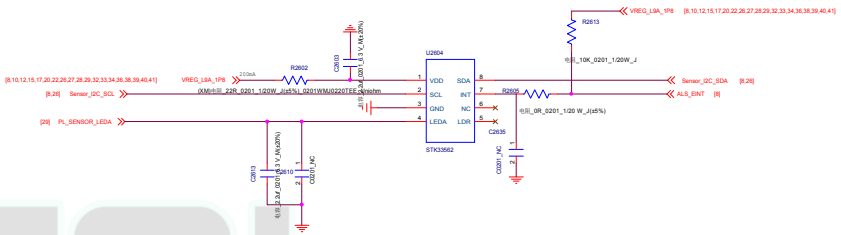


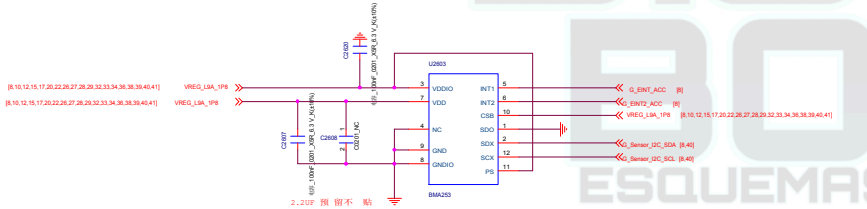
## M-Sensor

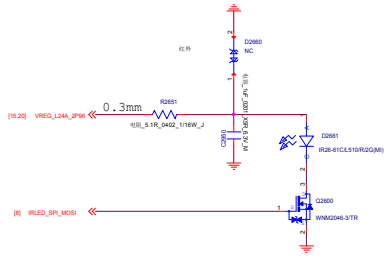
AK09918 / M-Sensor I2C Address : 0x0C (Write:0x18, Read:0x19)




## ALS SENSOR

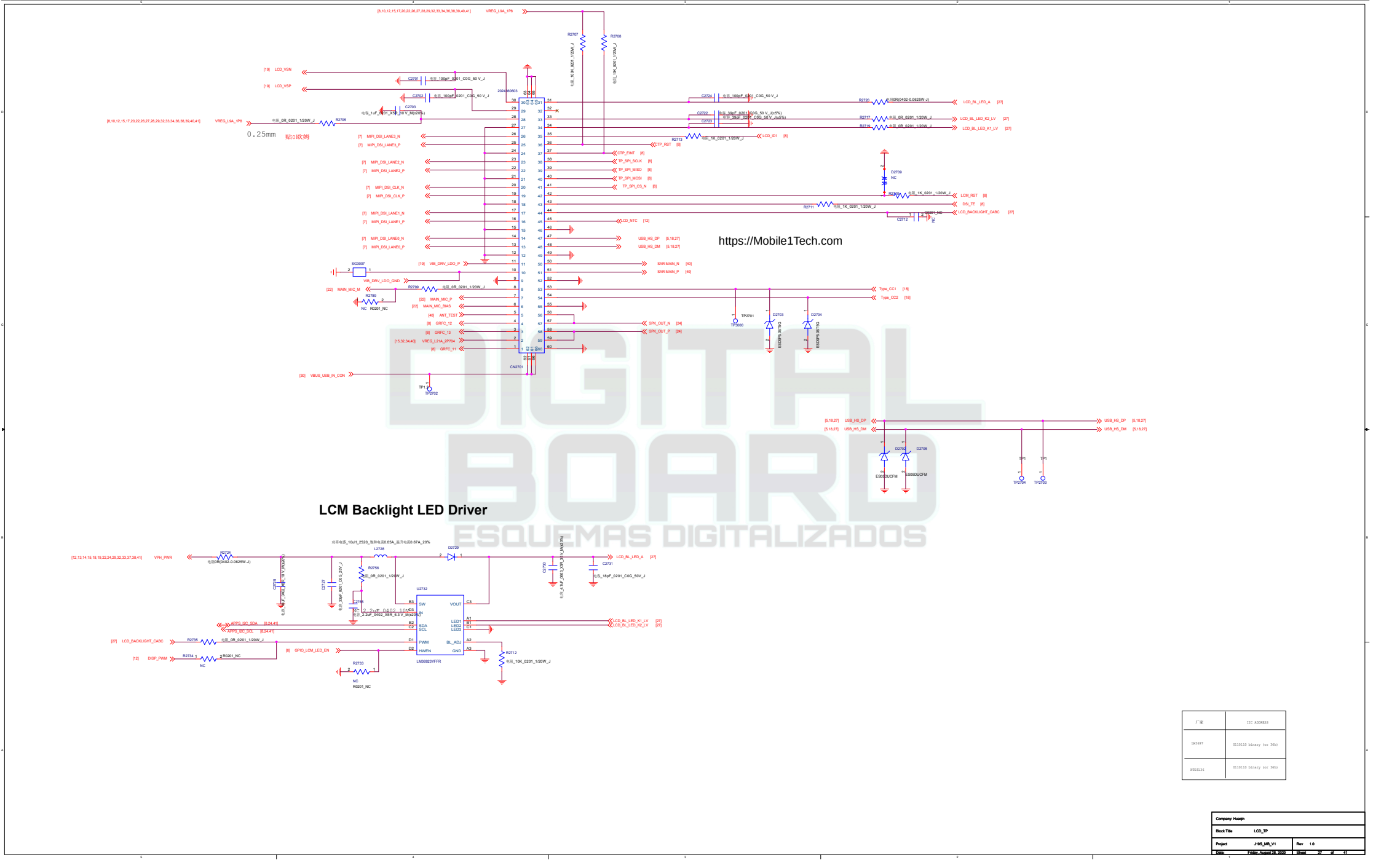





| | |
|---|---|
| Company: Huaqin | |
| Block Title: SENSORS | |
| Project: J19S_MB_V1 | Rev: 1.0 |
| Date: Friday, August 28, 2020 | Sheet 28 of 41 |




| 厂家 | I2C ADDRESS |
|---|---|
| LM3697 | 0110110 binary (or 36h) |
| RT03134 | 0110110 binary (or 36h) |

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | LCD_TP | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
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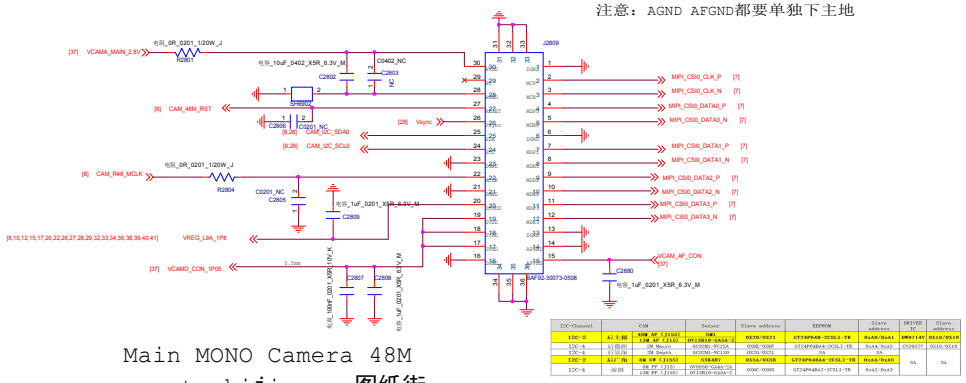
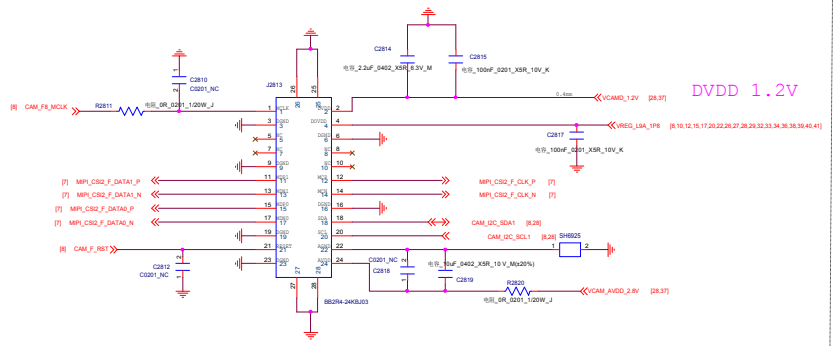
注意：AGND AFGND都要单独下主地



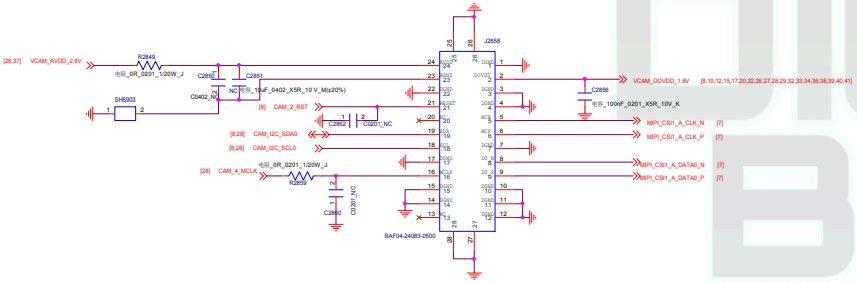
Main MONO Camera 48M



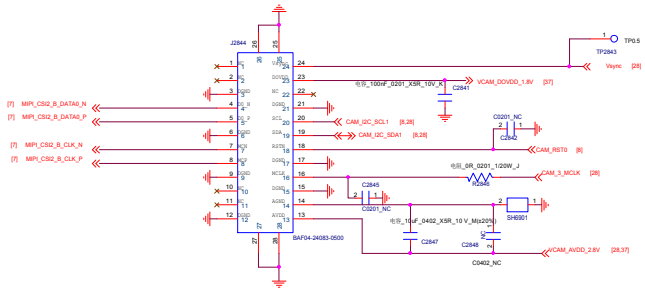
## Front Camera - 8M

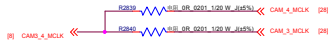



微 距 Camera 2M =Macro

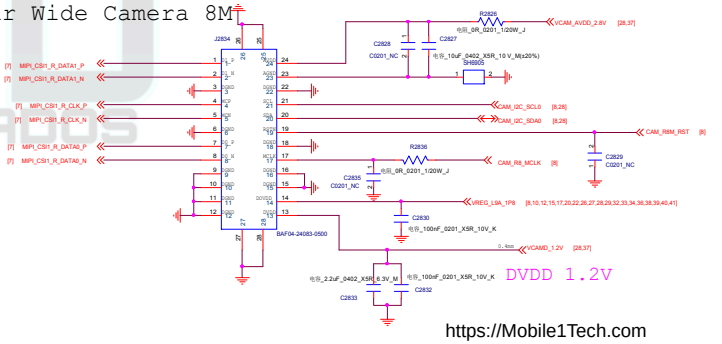


景 深 Camera 2M=Depth



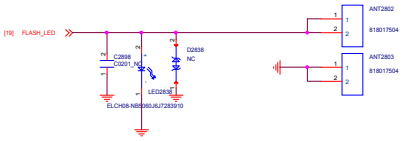


## Rear Wide Camera 8M






## FLASH LED



| | |
|---|---|
| Company: Huaqin | |
| Block Title | REAR_CAMFLASH |
| Project | J19S_MB_V1 |
| Rev | 1.0 |
| Date: | Friday, August 28, 2020 |
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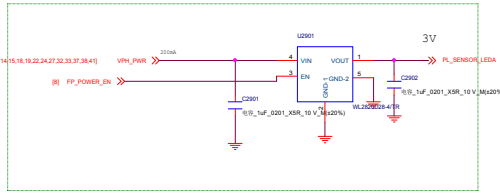
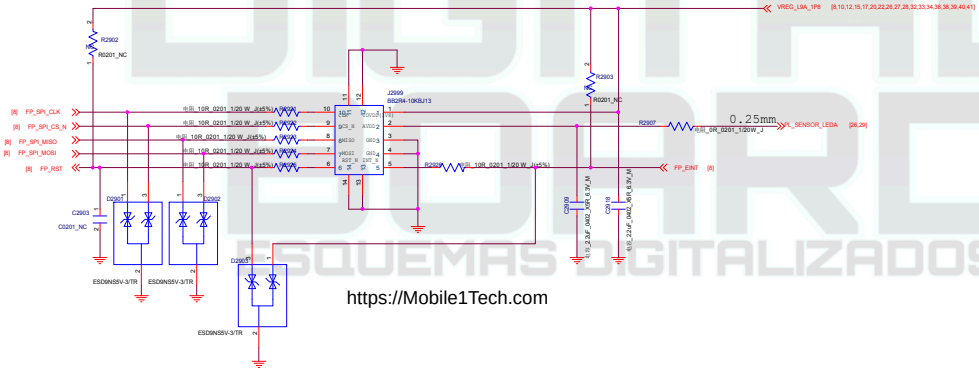



## Fingerprint






| | | |
|---|---|---|
| Title | Basin 10inch | |
| Size | Document Number | Rev |
| D | J19S_MB_V1 | 1.0 |
| Date: | Sheet 29 of 41 | |

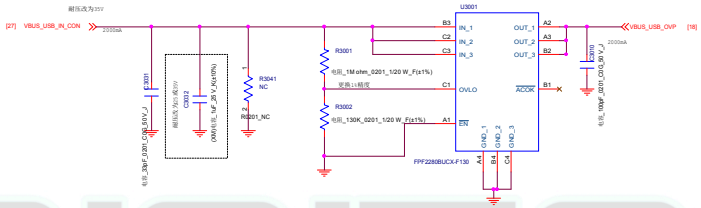
**Schematic design notice of "71_PERI_USB 2.0" page.**

Note 71-1: For better ESD or surge performance we need choose suitable device for system protection. Please refer to [Surge device selection guide V2.0] provide by MTK.

## BTB Connector

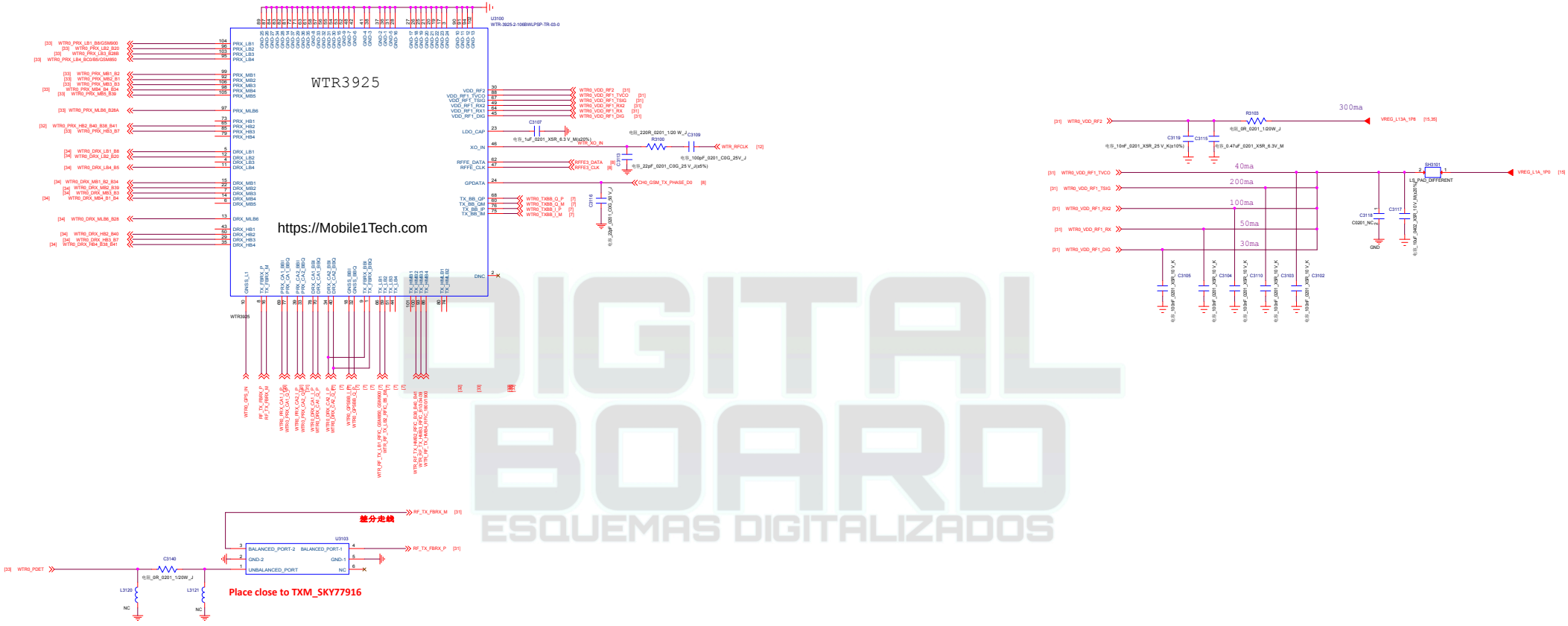
Grond protected separately each lane
90Ohm Differential impedance

Grond protected separately each lane
90Ohm Differential impedance





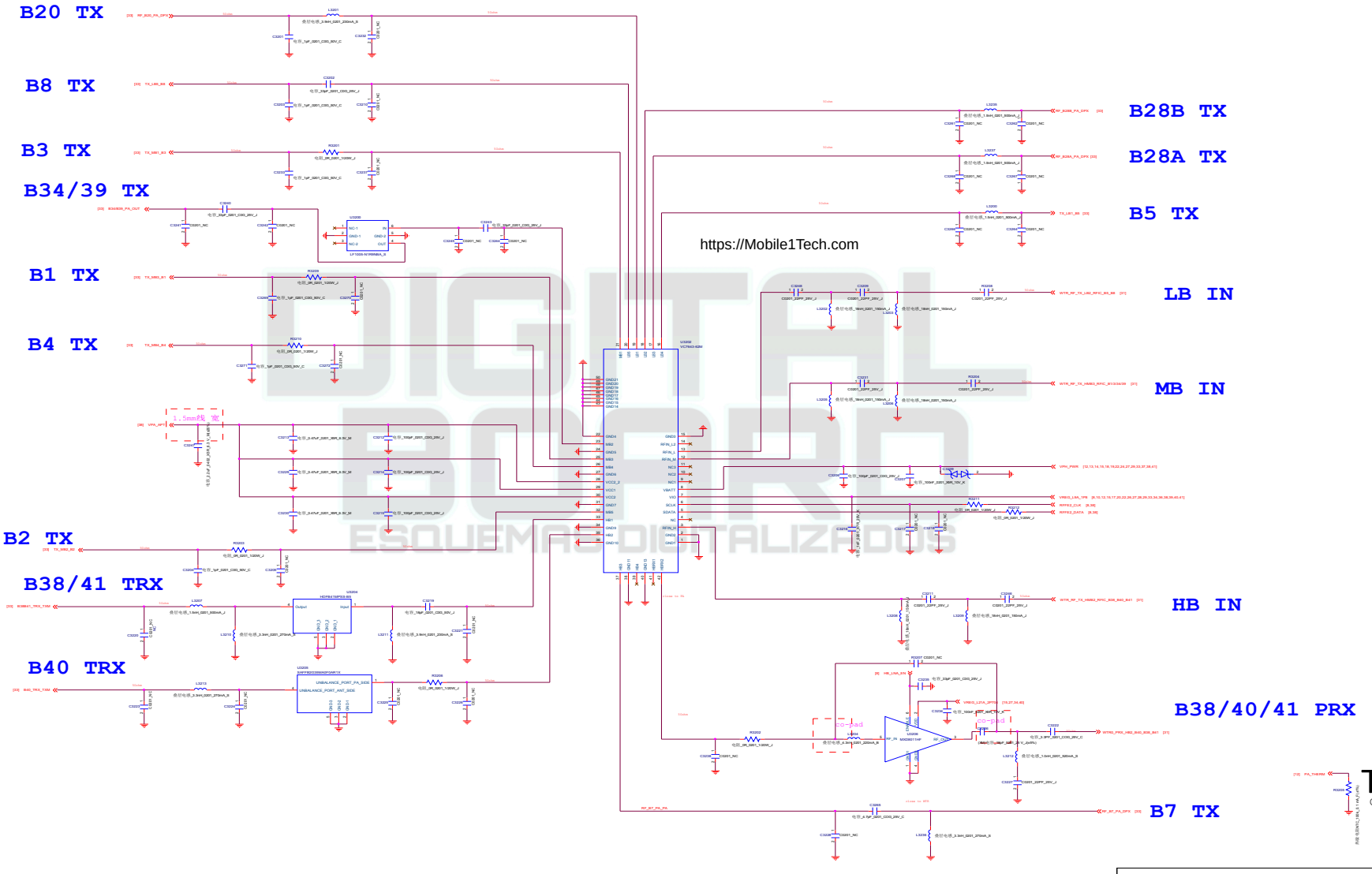

| | | | |
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | SIM_SD_KEY_LINK_BATT | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 30 of 41 |





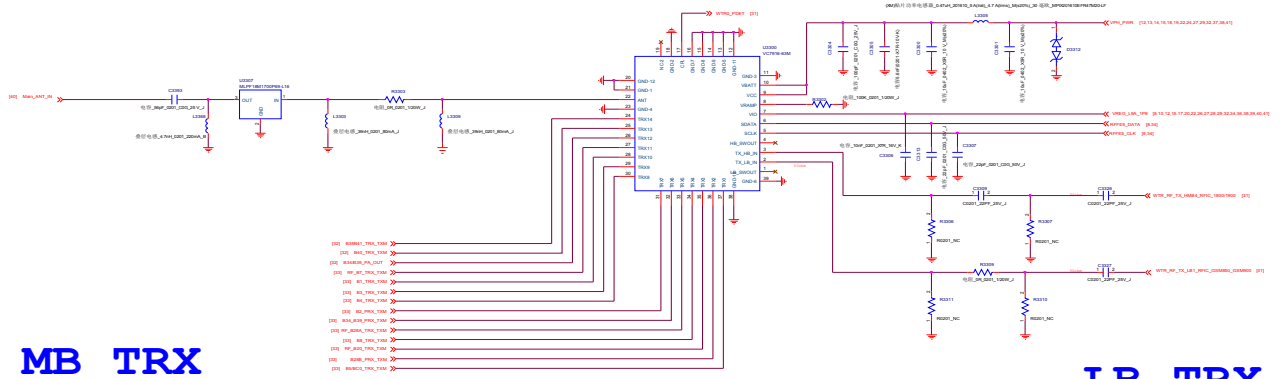

| | | |
|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title | 31_RF_SDR425_Pin_Out | |
| Size D | Project Soda_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | Sheet 31 of 41 | |

# MMMB PA



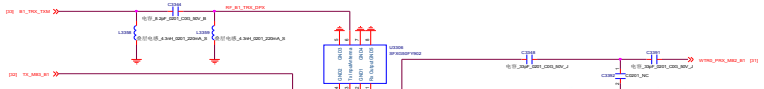

| | | |
|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title | 32_RF_MT6177_RF_TX | |
| Size E | Project SM4250_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | Sheet 32 of 41 | |

# TXM

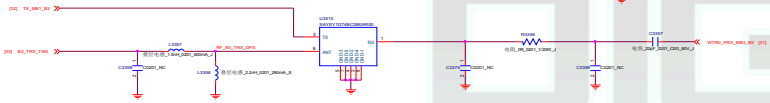


# MB TRX

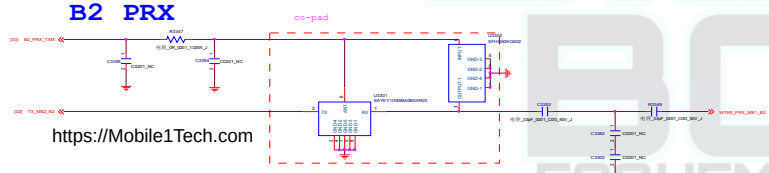
## B1 TRX



## B3 TRX

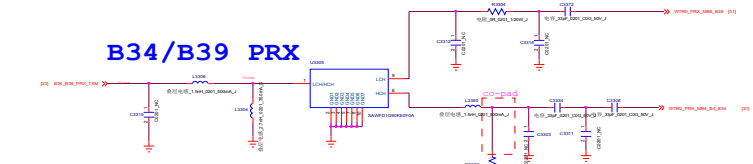


## B2 PRX



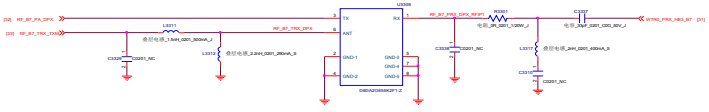



## B34/B39 PRX



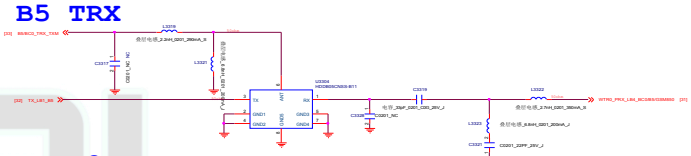

## B4 TRX

## B7 TRX

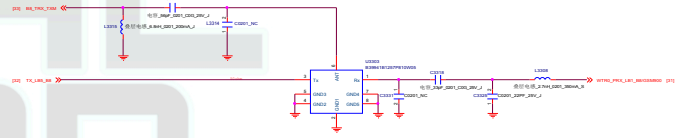


# LB TRX

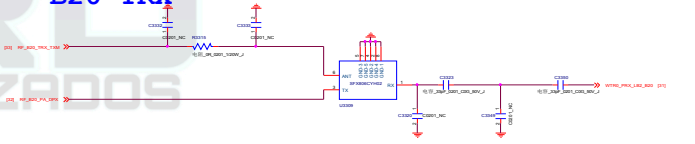
## B5 TRX



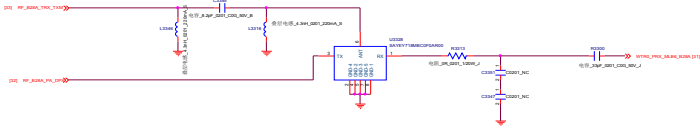
## B8 TRX



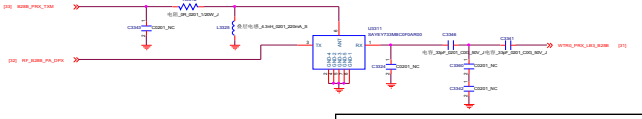
## B20 TRX



## B28A TRX



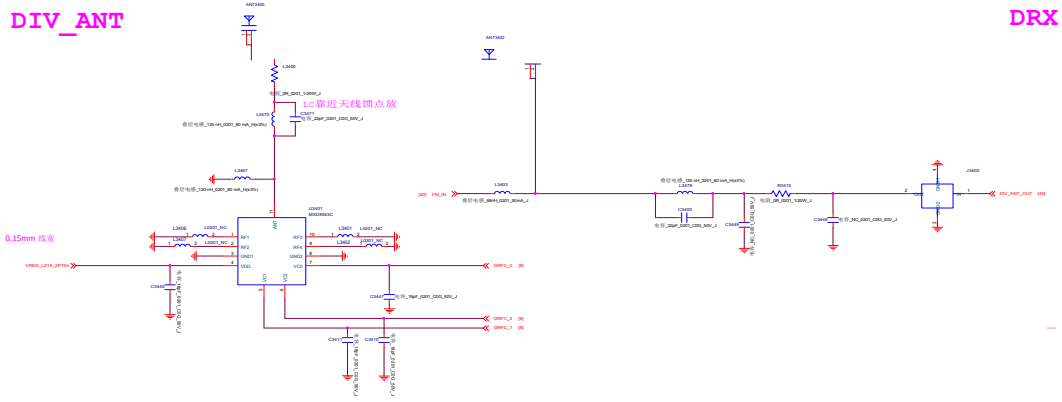
## B28B TRX



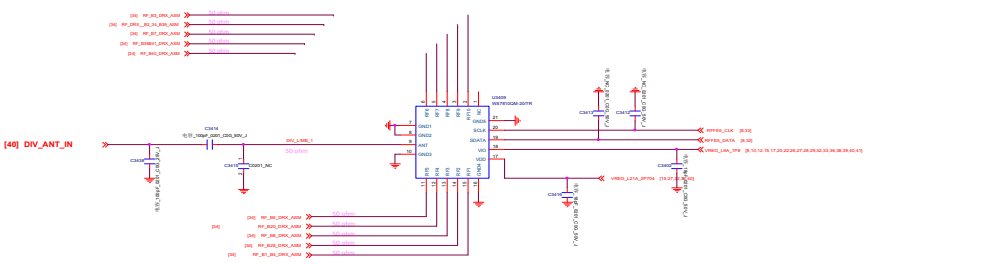


| | | | |
|---|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | | |
| Title | 33_RF_MT6177_RF_PRX | | |
| Size E | Project SM4250_MB_V1 | | Rev V1 |
| Date: Friday, August 28, 2020 | | Sheet 33 of 41 | |

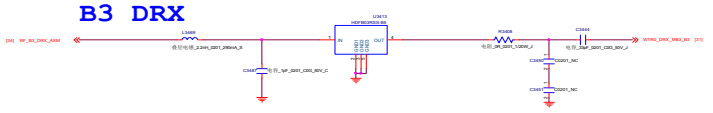
## DIV_ANT



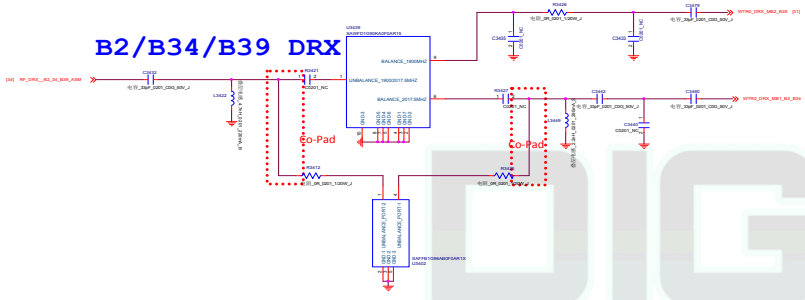

## DRX Switch



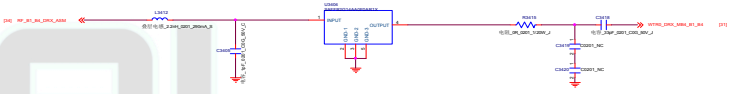

## B3 DRX



## B2/B34/B39 DRX

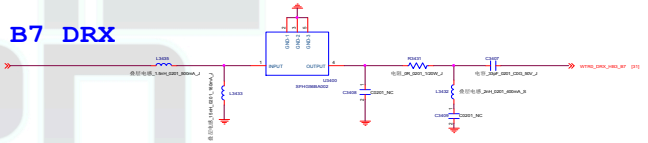



## B1/4 DRX

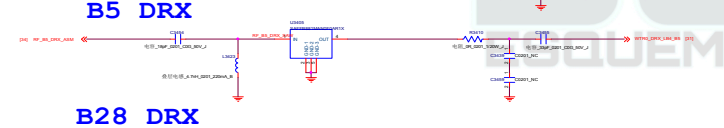


## B8 DRX

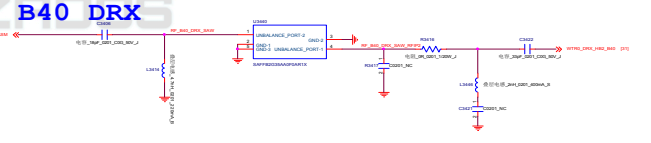
## B7 DRX



## B5 DRX

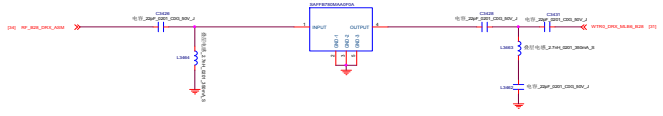


## B40 DRX

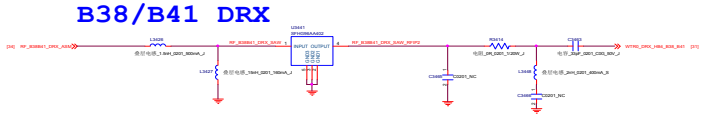




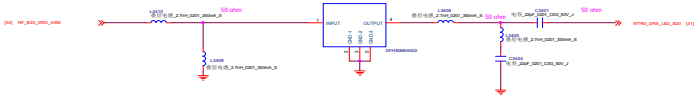
## B28_DRX



## B38/B41 DRX



## B20_DRX





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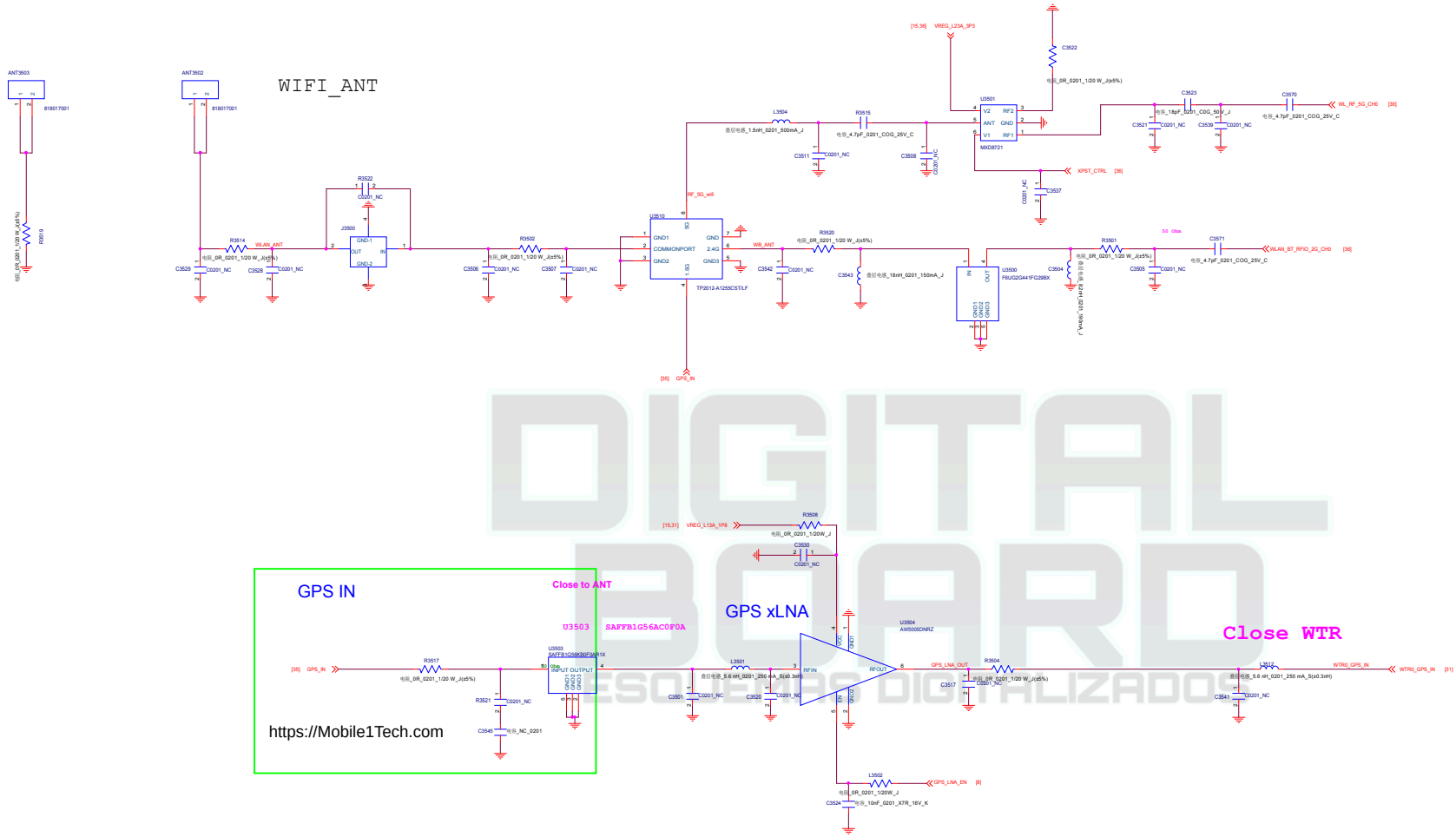
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title | 34_RF_SDR425_RF_DRX | |
| Size E | Project J19S_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | Sheet 34 of 41 | |






| Schematic design notice of "51_CONNECTIVITY_CONSYS_MT6631" | |
|---|---|
| Note 51-1: | For R5015 size, please select 0402 size or larger one |
| Note 51-2: | Please refer to MT6765 Baseband design notice for VCN33 LDO selection guide |
| Note 51-3: | If WiFi 5G not support, connect pin 34(WF_RF_5G) to GND |
| Note 51-4: | Pin 36 (AVDD28_FM) must be connected to VCN28 even if FM not support |

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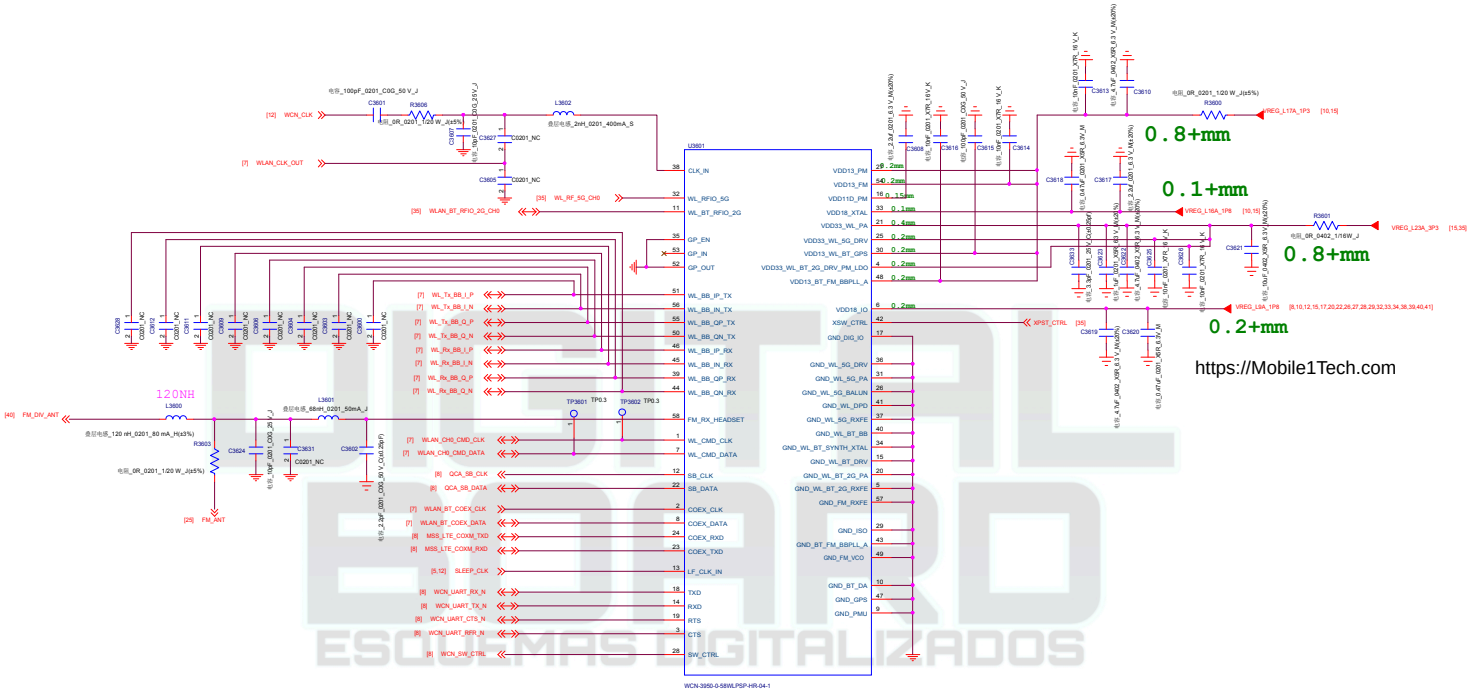
|---|---|---|
| Title | 35_CONNECTIVITY_CONSYS_WCN3950 | |
| Size D | Project J19S_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | | Sheet 35 of 41 |

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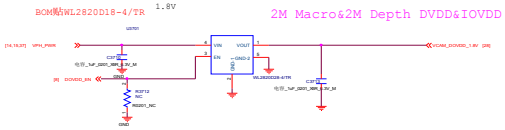
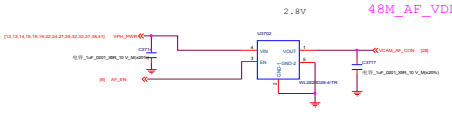
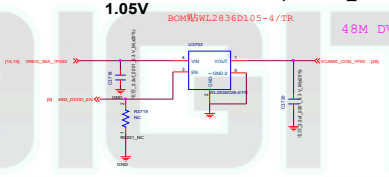
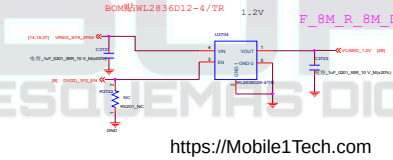
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title | 35_CONNECTIVITY_CONSYS_WCN3950 | |
| Size D | Project J19S_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | Sheet 36 of 41 | |



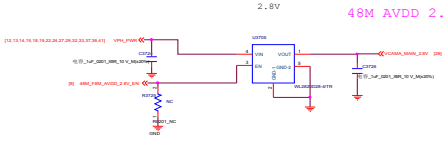



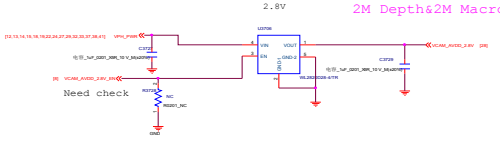

**LDO for Rear Camera (VCAMD_EXT1)**
**1.05V**



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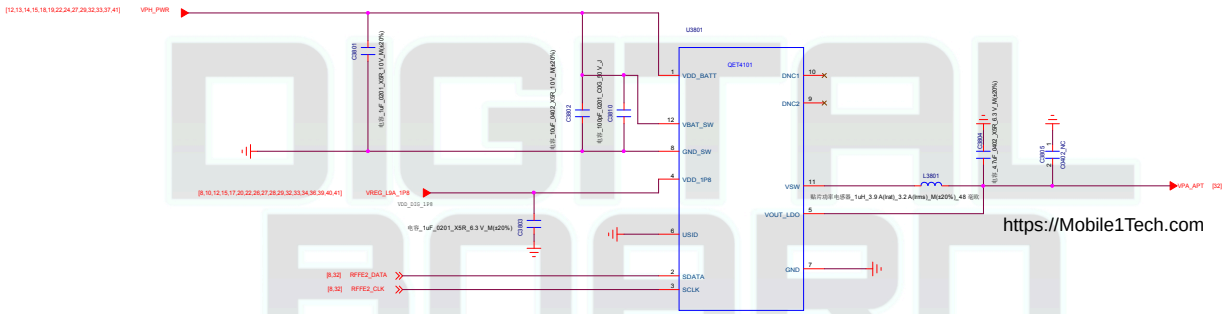
|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title: 37_NFC | | |
| Size: E | Project: J19S_MB_V1 | Rev: V1 |
| Date: Friday, August 28, 2020 | Sheet 37 of 41 | |



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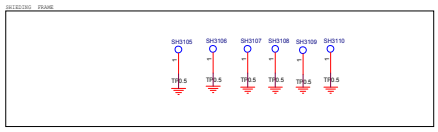
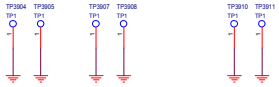
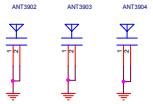
|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | |
| Title 38_QET | | |
| Size D | Project J19S_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | | Sheet 38 of 41 |




螺丝孔



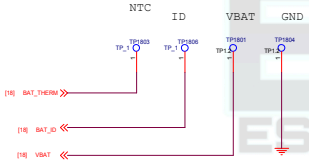

GND



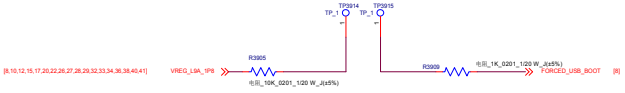



UART DEBUG POINT


VBAT TEST POINT




SMT Downlond Mode



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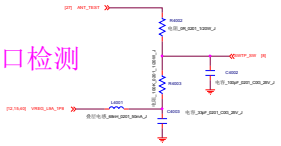
|---|---|---|---|
| Company: Huaqin | | | |
| Block Title | Test Points | | |
| Project | J19S_MB_V1 | Rev | 1.0 |
| Date: | Friday, August 28, 2020 | Sheet | 39 of 41 |

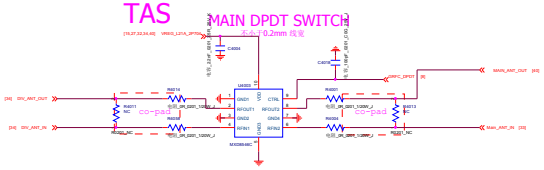
同轴座


空口检测

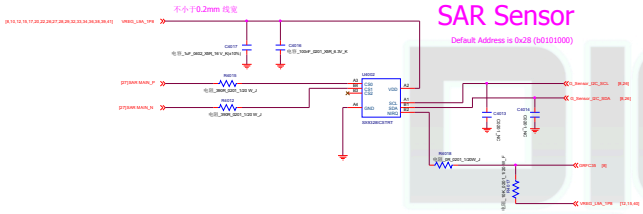


TAS

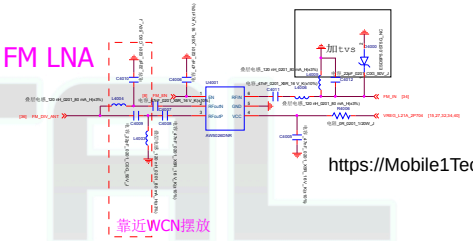
MAIN DPDT SWITCH




SAR Sensor




FM LNA



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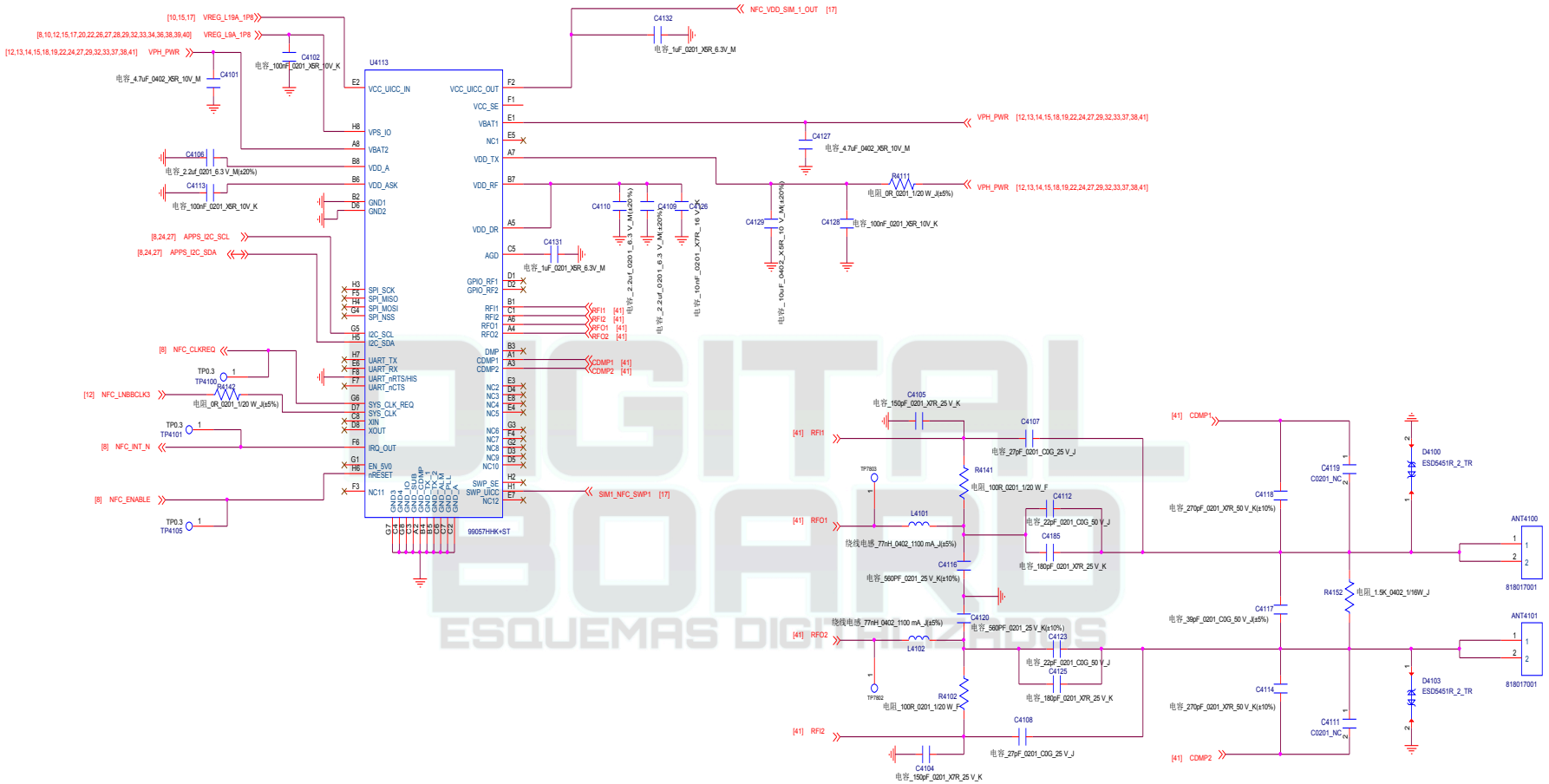
|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | |
| Title | 40_ASDIV |

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|---|---|---|---|
| 华勤通讯 Huaqin Telecom Technology Com.,Ltd | | | |
| Title | 41_NFC | | |
| Size E | Project | J19S_MB_V1 | Rev V1 |
| Date: Friday, August 28, 2020 | | Sheet 41 of 41 | |