# REVISION HISTORY

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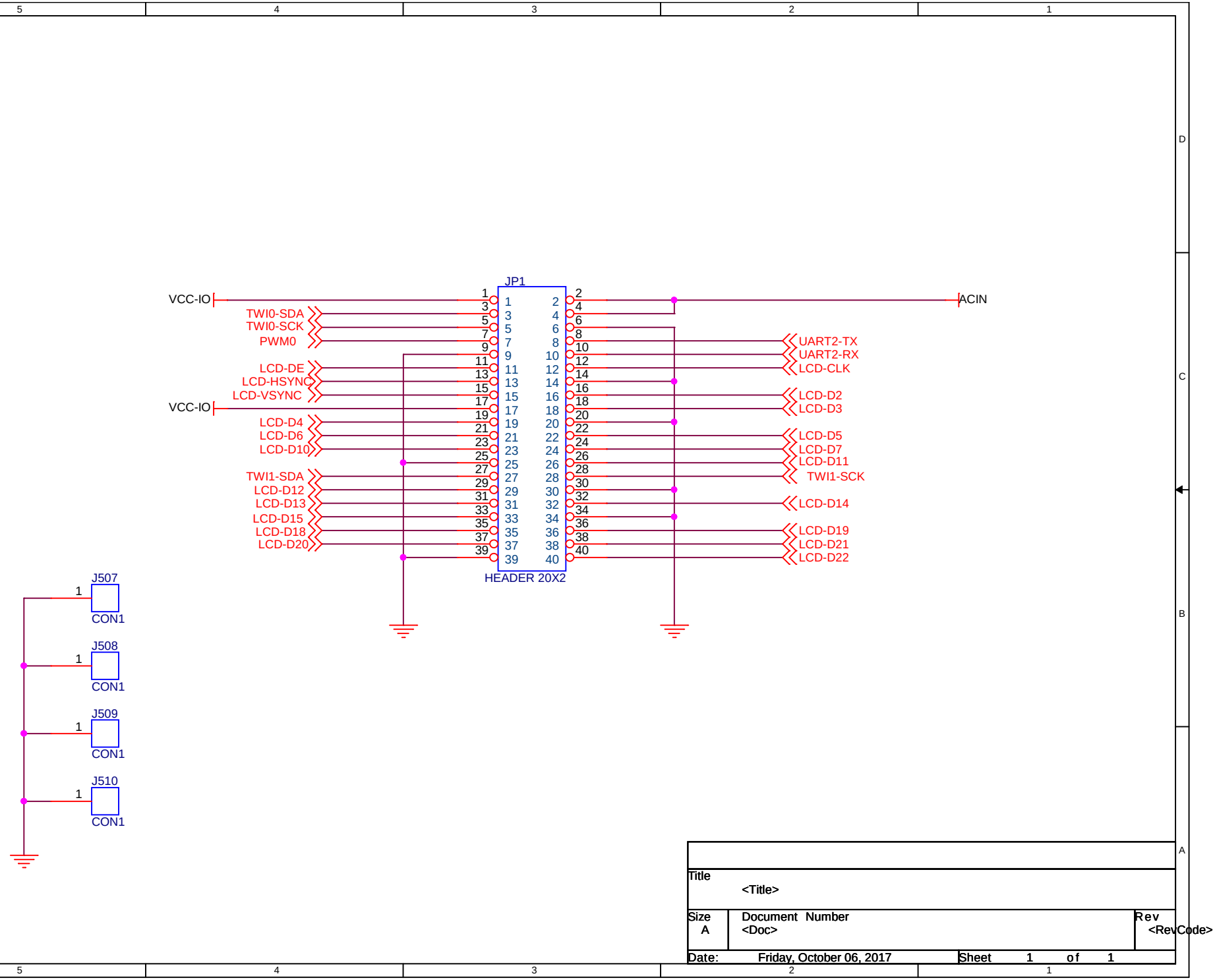
| Revision | Description | Date | Drawn | Checked |
|---|---|---|---|---|
| Ver 0.1 | Initial | 2015-02-04 | HW | |
| Ver 1.1 | changelist.txt | 2015-08-17 | WJW | |

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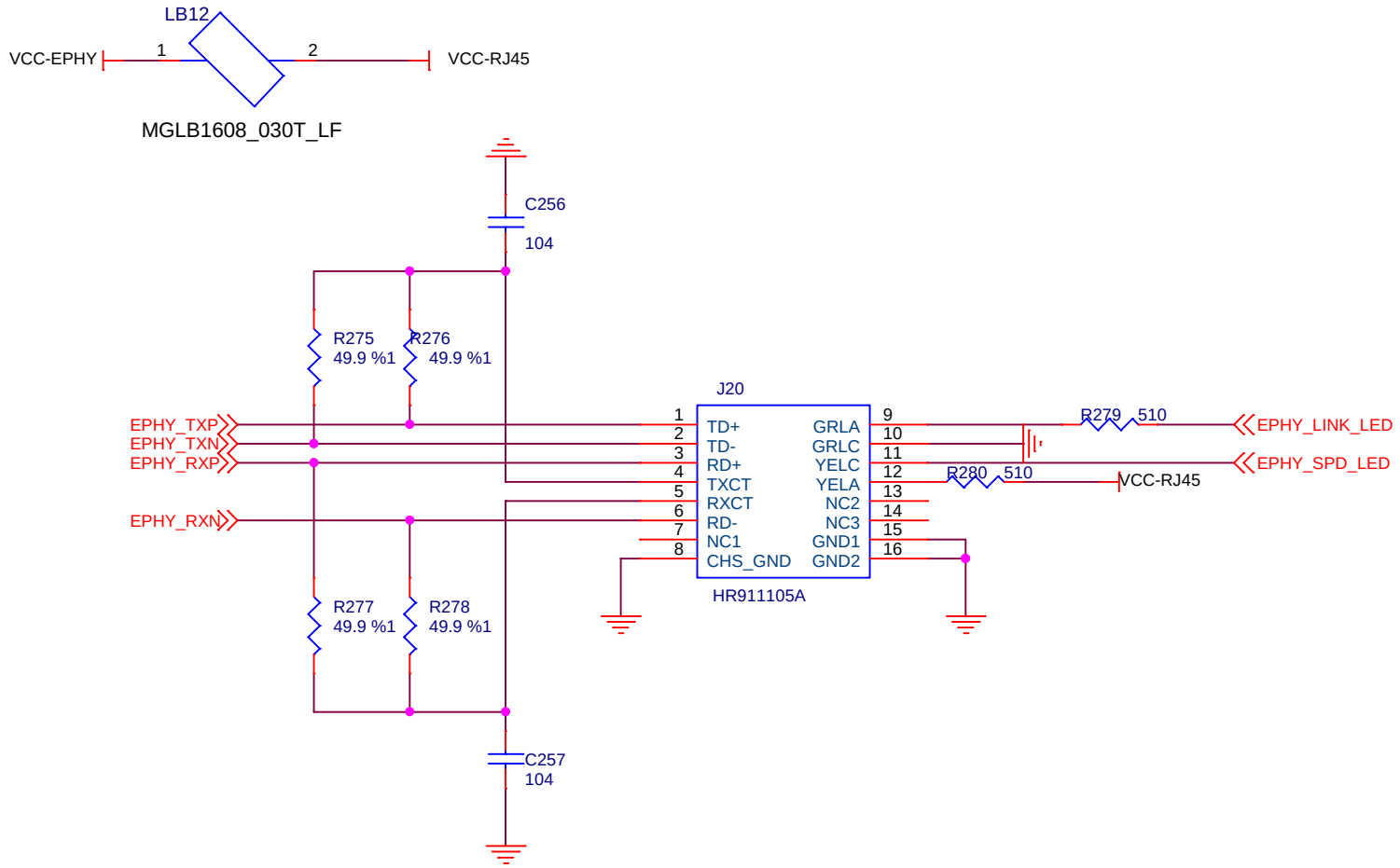
| Size A | Document Number <Doc> | Rev <RevCode> |
| Date: Friday, October 06, 2017 | Sheet 1 of 1 | |

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| Size A | Document Number <Doc> | Rev <RevCode> |
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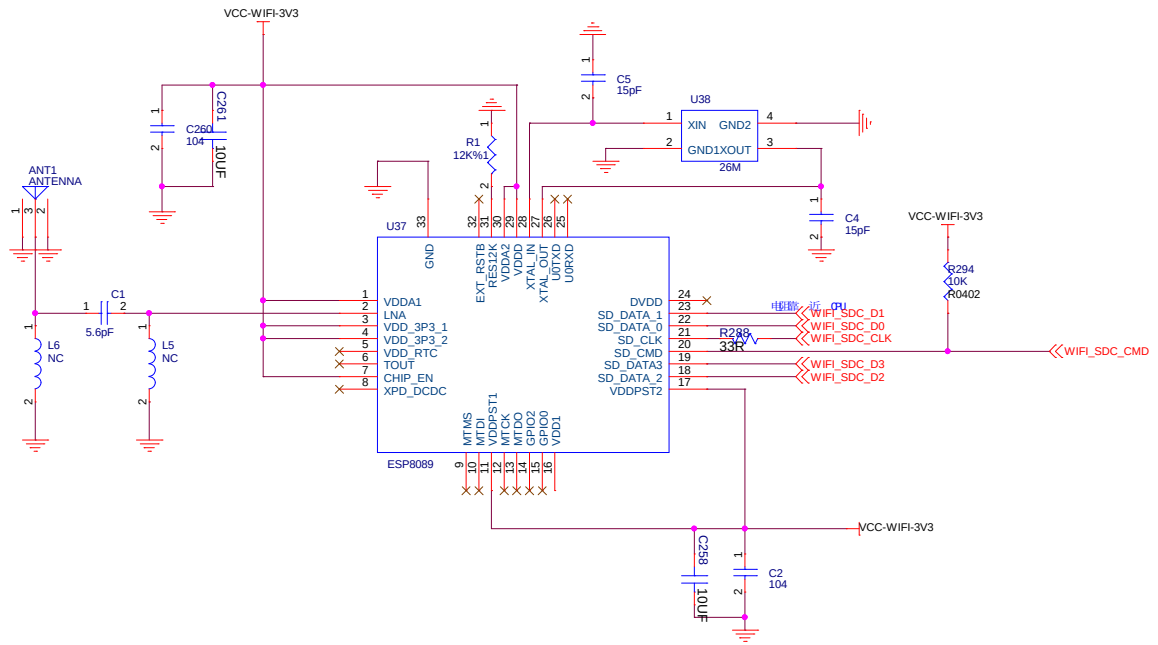
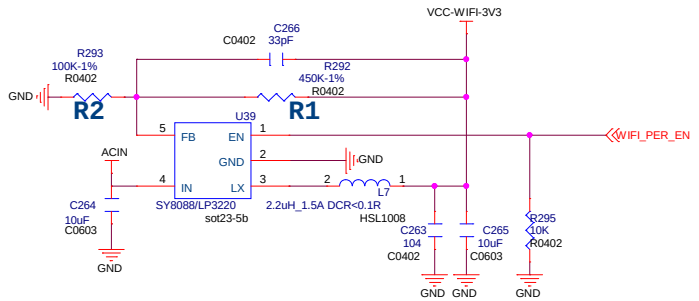
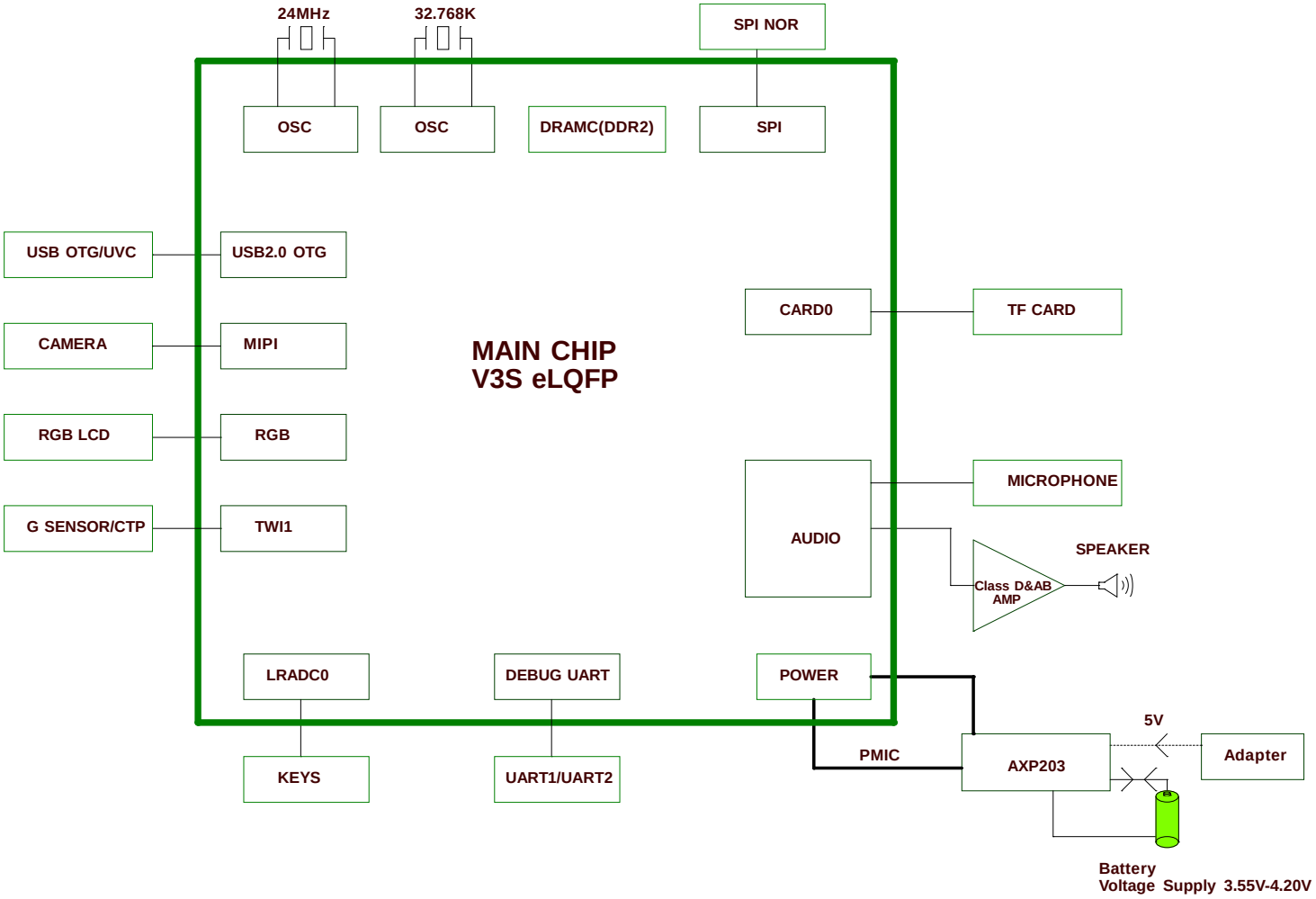



**Vout = 0.6*(1+R1/R2)=1.8V**

| | | |
|---|---|---|
| Title | <Title> | |
| Size A3 | Document Number <Doc> | Rev <RevCode> |
| Date: Friday, October 06, 2017 | Sheet 1 of 1 | |

# BLOCK DIAGRAM

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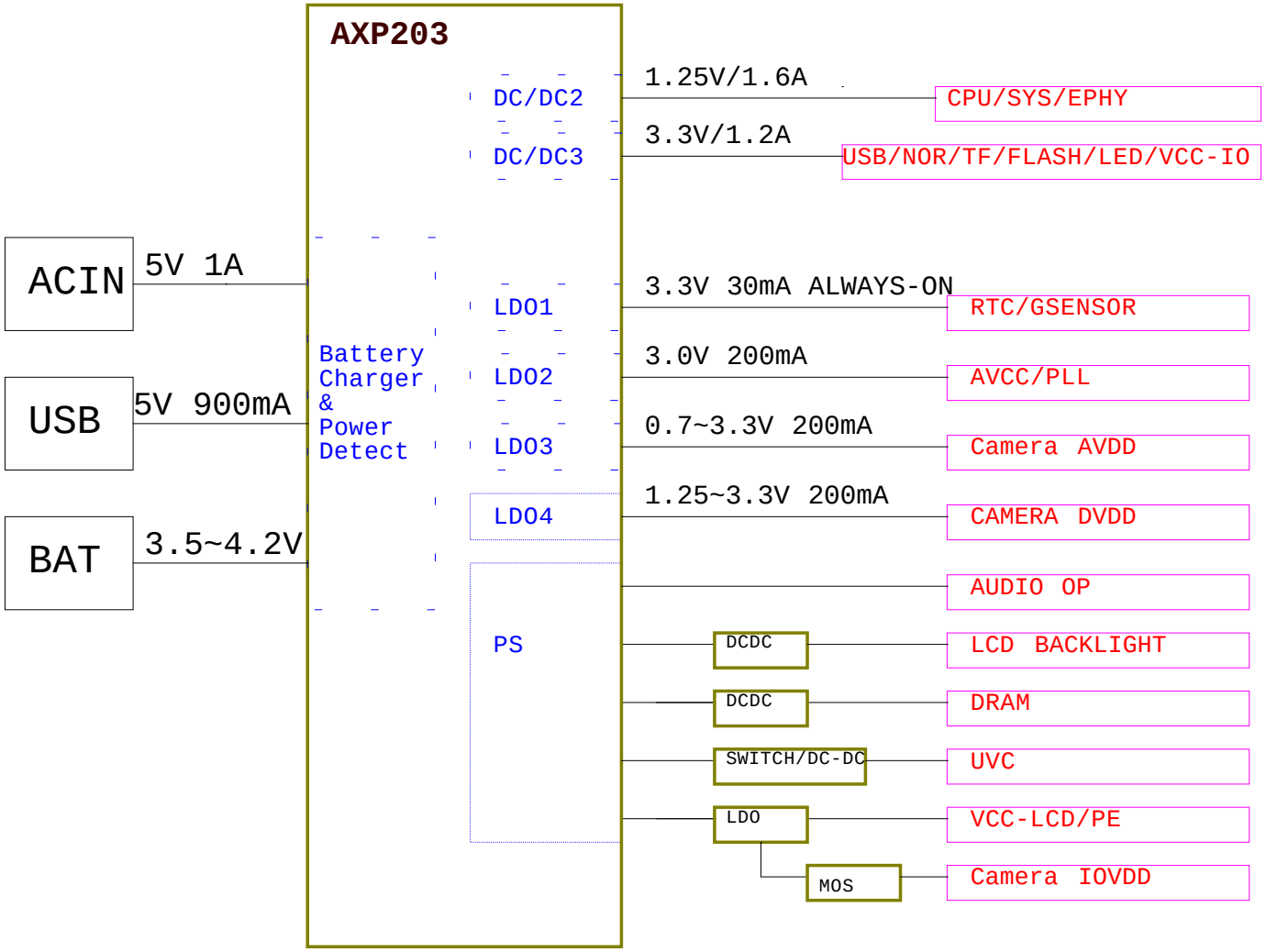
|---|---|---|
| AllWinner Technology Co.,Ltd | | |
| Design Name: V3S_STD_CDR_V1_0 | | |
| Size: A3 | Page Name: BLOCK DIAGRAM | Rev: 0.1 |
| Date: Sunday, October 22, 2017 | Sheet 2 of 12 | |

# POWER TREE


AXP203
DC/DC2
DC/DC3
LDO1
LDO2
LDO3
LDO4
PS
Battery
Charger
&
Power
Detect
ACIN
5V 1A
USB
5V 900mA
BAT
3.5~4.2V
1.25V/1.6A
CPU/SYS/EPHY
3.3V/1.2A
USB/NOR/TF/FLASH/LED/VCC-IO
3.3V 30mA ALWAYS-ON
RTC/GSENSOR
3.0V 200mA
AVCC/PLL
0.7~3.3V 200mA
Camera AVDD
1.25~3.3V 200mA
CAMERA DVDD
AUDIO OP
DCDC
LCD BACKLIGHT
DCDC
DRAM
SWITCH/DC-DC
UVC
LDO
VCC-LCD/PE
MOS
Camera IOVDD

# GPIO ASSIGNMENT

| PIN | Define | CFG | Function |
|---|---|---|---|
| PB0 | CTP-WAKE | 1 | CTP |
| PB1 | CTP-INT | 0 | |
| PB2 | LCD-BL-EN | 1 | LCD |
| PB3 | LCD-PWR-EN | 1 | |
| PB4 | PWM0 | 2 | |
| PB5 | PA-SHDN | 1 | AUDIO |
| PB6 | TWI0-SCK | 2 | PMU |
| PB7 | TWI0-SDA | 2 | |
| PB8 | TWI1_SCK | 2 | G-SENSOR |
| PB9 | TWI1_SDA | 2 | |
| | | | |
| | | | |
| | | | |
| | | | |

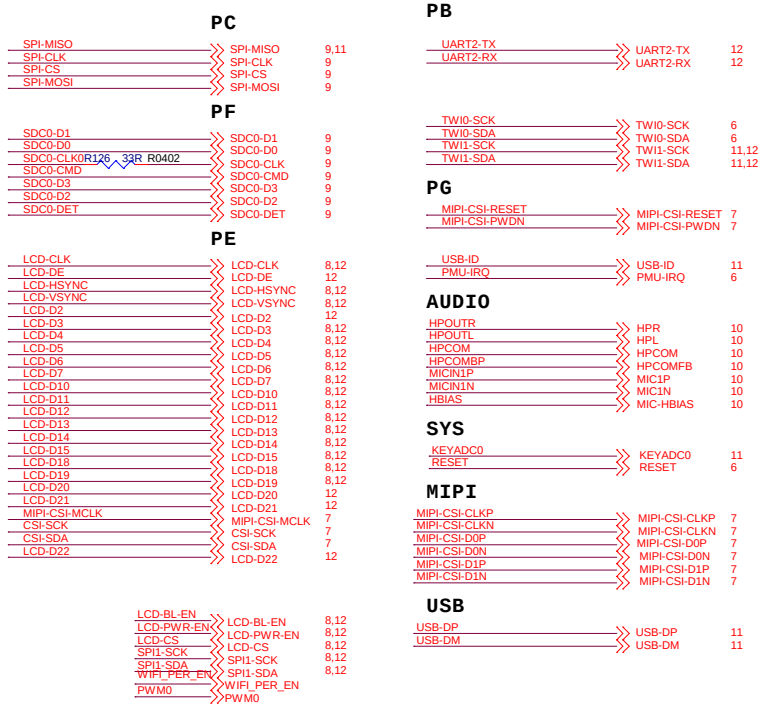
| PIN | Define | CFG | Function |
|---|---|---|---|
| PC0 | SPI0_MISO | 3 | NOR/ NAND |
| PC1 | SPI0_CLK | 3 | |
| PC2 | SPI0_CS | 3 | |
| PC3 | SPI0_MOSI | 3 | |

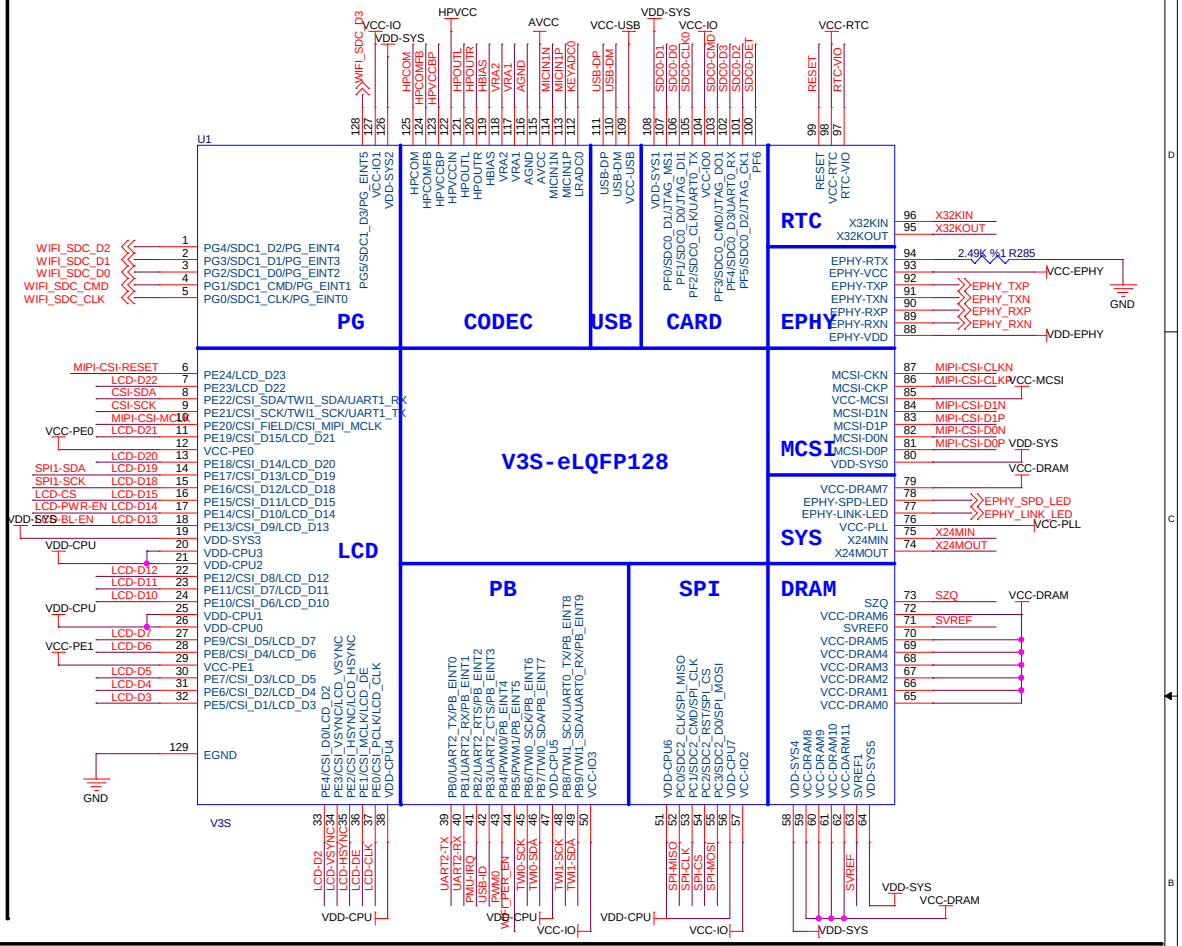
| PIN | Define | CFG | Function |
|---|---|---|---|
| PE0 | LCD_CLK | 3 | LCD |
| PE1 | LCD_DE | 3 | |
| PE2 | LCD_HSYNC | 3 | |
| PE3 | LCD_VSYNC | 3 | |
| PE4 | LCD_D2 | 3 | |
| PE5 | LCD_D3 | 3 | |
| PE6 | LCD_D4 | 3 | |
| PE7 | LCD_D5 | 3 | |
| PE8 | LCD_D6 | 3 | |
| PE9 | LCD_D7 | 3 | |
| PE10 | LCD_D8 | 3 | |
| PE11 | LCD_D11 | 3 | |
| PE12 | LCD_D12 | 3 | |
| PE13 | LCD_D13 | 3 | |
| PE14 | LCD_D14 | 3 | |
| PE15 | LCD_D15 | 3 | |
| PE16 | LCD_D18 | 3 | |
| PE17 | LCD_D19 | 3 | |
| PE18 | LCD_D20 | 3 | |
| PE19 | LCD_D21 | 3 | |
| PE20 | CSI-MIPI-MCLK | 2 | MIPI |
| PE21 | CSI-SDA | 2 | |
| PE22 | CSI-SCK | 2 | |
| PE23 | LCD_D22 | 3 | LCD |
| PE24 | LCD_D23 | 3 | |

| PIN | Define | CFG | Function |
|---|---|---|---|
| PF0 | SDC0-D1 | 2 | TF CARD |
| PF1 | SDC0-D0 | 2 | |
| PF2 | SDC0-CLK | 2 | |
| PF3 | SDC0-CMD | 2 | |
| PF4 | SDC0-D3 | 2 | |
| PF5 | SDC0-D2 | 2 | |
| PF6 | SDC0-DET | 0 | |

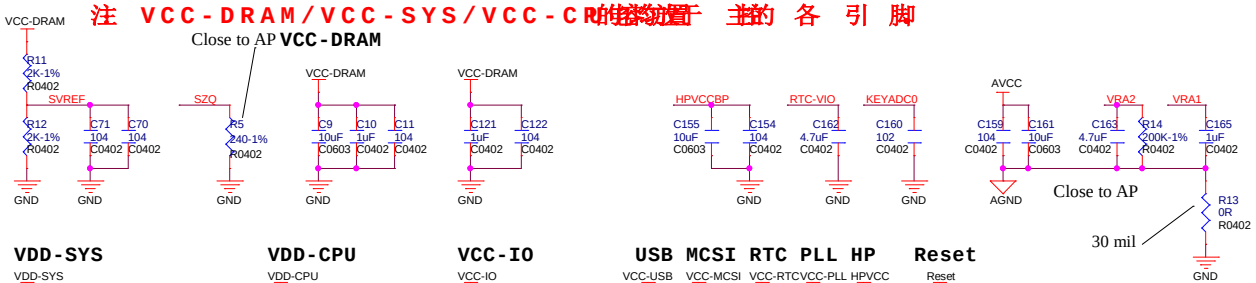
| PIN | Define | CFG | Function |
|---|---|---|---|
| PG0 | MIPI-CSI-RESET | 1 | GPIO |
| PG1 | MIPI-CSI-PWDN | 1 | |
| PG2 | PG2 | 0 | |
| PG3 | USB-DRVVBUS | 1 | |
| PG4 | USB-ID | 0 | |
| PG5 | PMU-IRQ | 0 | |

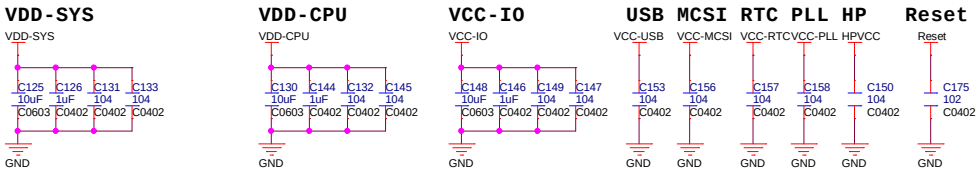
# CPU

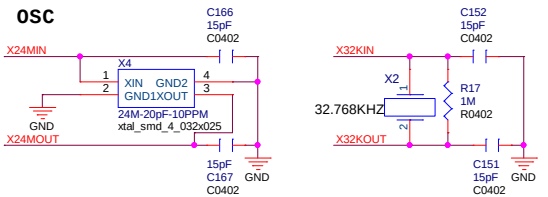



注 VCC-DRAM/VCC-SYS/VCC-CPU的摆放位置 主控 各 引 脚

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|---|---|---|
| AllWinner Technology Co.,Ltd | | |
| Design Name: V3S_STD_CDR_V1_0 | | |
| Size: A3 | Page Name: CPU | Rev |
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# POWER

LDO1 3.3V

LDO2 3.0V

LDO3 0V

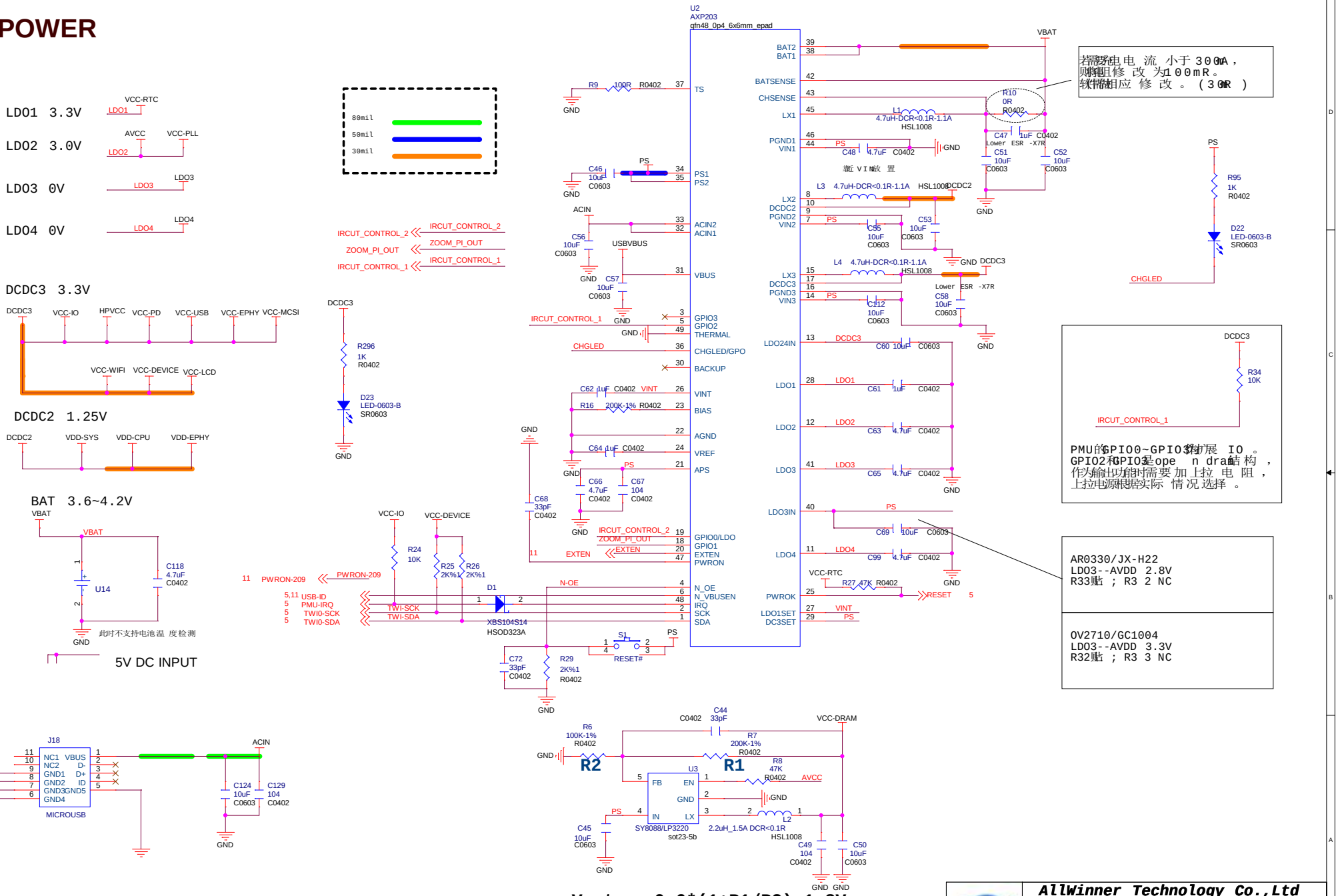
LDO4 0V

DCDC3 3.3V

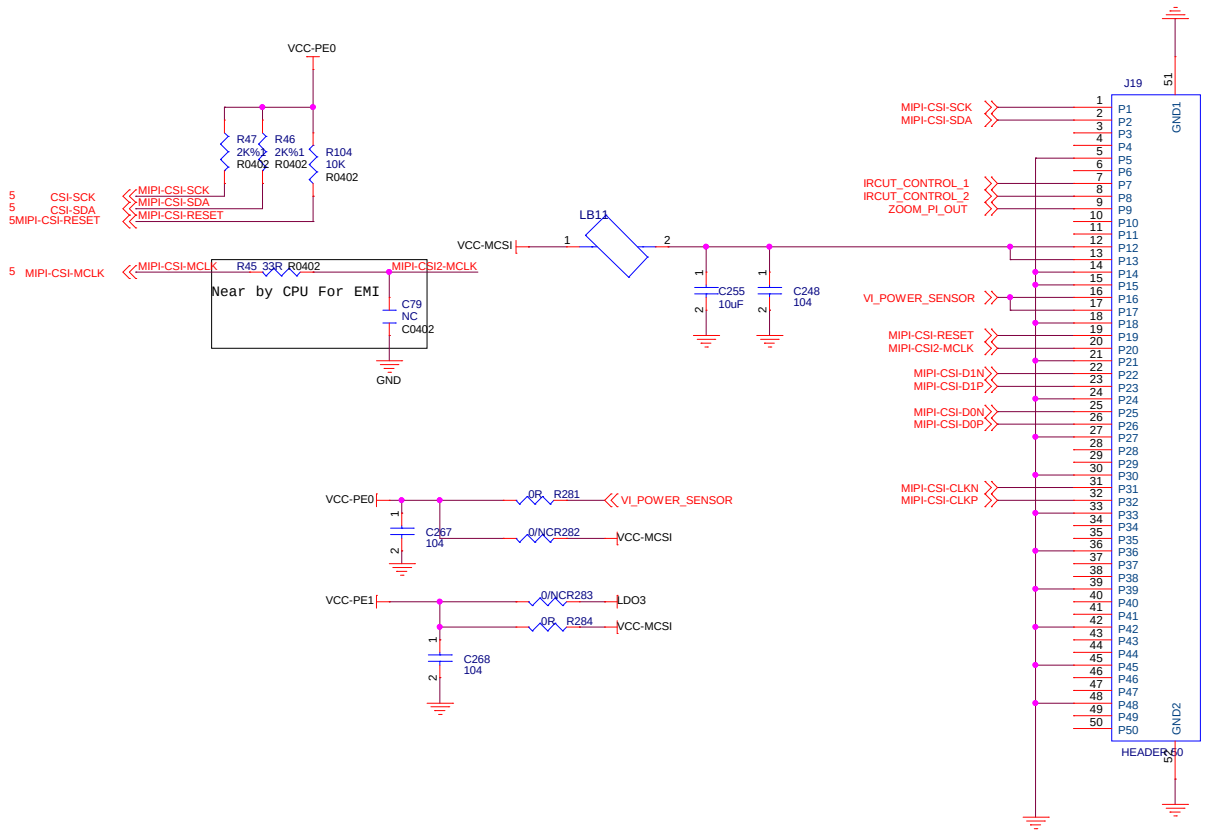
DCDC2 1.25V

BAT 3.6~4.2V

5V DC INPUT



# CAMERA

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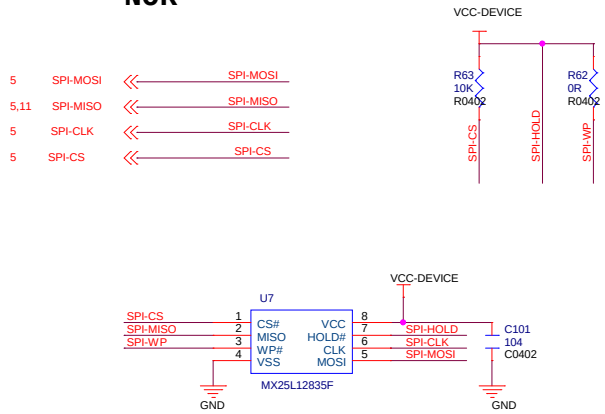
|---|---|---|
| AllWinner Technology Co.,Ltd | | |
| Design Name: V3S_STD_CDR_V1_0 | | |
| Size: A3 | Page Name: CAMERA-MIPI | Rev |
| Date: Friday, October 06, 2017 | Sheet 7 of 12 | |

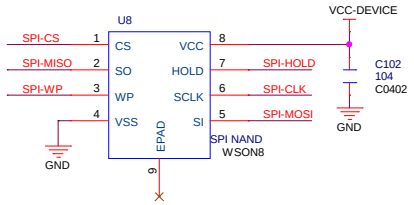
# Flash

## NOR



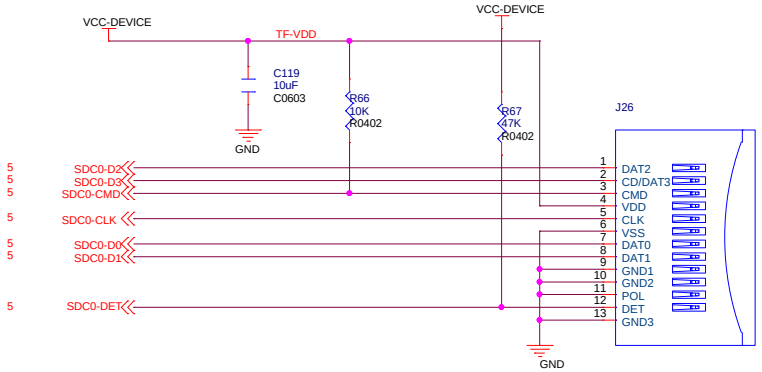

U7 Mount MX25L12835F

## OPTION:NAND




# SD CARD

## CARD0




| | | | |
|---|---|---|---|
| AllWinner Technology Co.,Ltd | | | |
| Design Name: V3S_STD_CDR_V1_0 | | | |
| Size: A3 | Page Name: MEMORY | | Rev |
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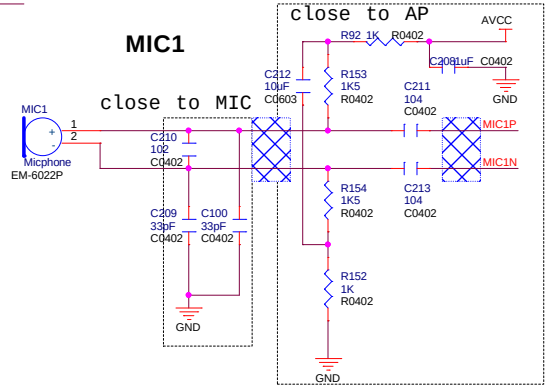
# AUDIO

## Analog Microphone ( Main MIC )

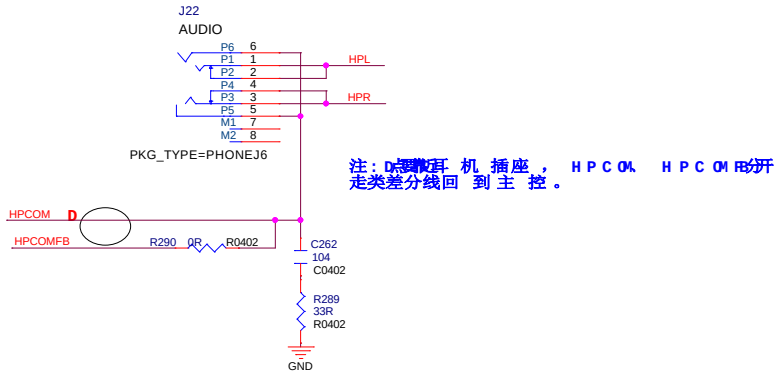
5 MIC1P
5 MIC1N




Differential pairs

## OPTION:Head Phone

5 MIC-HBIAS
5,10 HPR
5,10 HPL
5 HPCOM
5 HPCOMFB



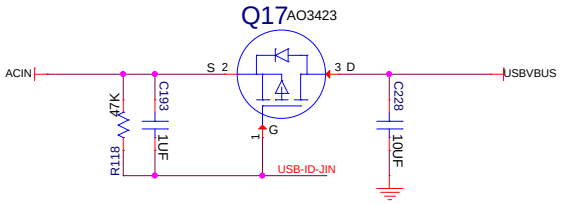

注：D:耳机插座，HPCOM、HPCOMFB分开走类差分线回到主控。

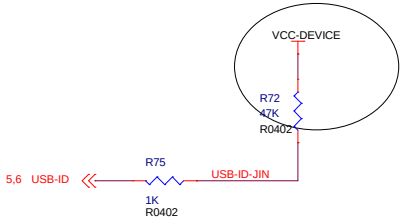
| | | |
|---|---|---|
| AllWinner Technology Co.,Ltd | | |
| Design Name: V3S_STD_CDR_V1_0 | | |
| Size: A3 | Page Name: Speaker/Microphone/LED | Rev |
| Date: Friday, October 06, 2017 | Sheet 10 of 12 | |

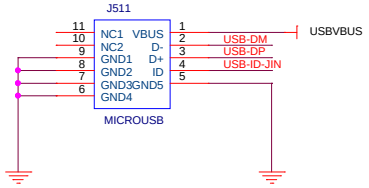
# USB/WIFI/KEY/GSENSOR

## USB OTG/UVC

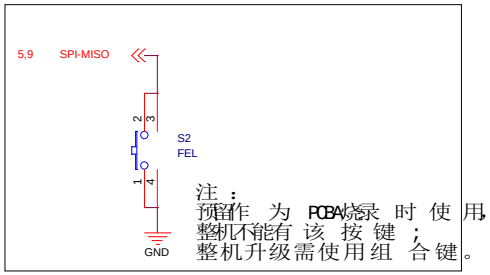
注：
USB-ID用作OTG功能ID脚检测，用来区别HOST还是DEVICE接入；倒转检测功能和USB摄像头实现，通过USB上报。



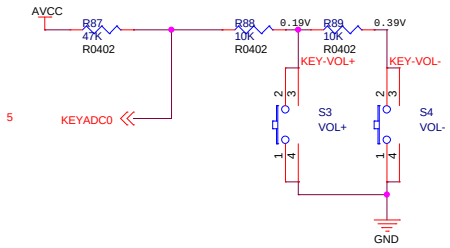




## KEY




注：
预留作为PCBA烧录时使用，
整机不能有该按键；
整机升级需使用组合键。

注：每隔0.2V一个按键

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| Design Name: V3S_STD_CDR_V1_0 | | | |
| Size: A3 | Page Name: USB/WIFI/KEY/GSENSOR | | Rev |
| Date: Tuesday, October 17, 2017 | Sheet 11 of 12 | | |