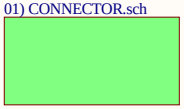
凌阳A8开发板底板电路图

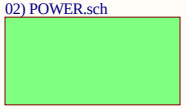
Revision	Data	Description
V1	2011.11.01	Design by WJR

Table of Contents

01) CONNECTOR.sch
01) CONNECTOR.sch

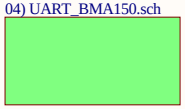


02) POWER.sch
02) POWER.sch

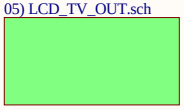


03) USBHOST_JTAG.sch
03) USBHOST_JTAG.sch

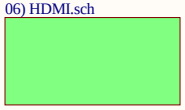
04) UART_BMA150.sch
04) UART_BMA150.sch



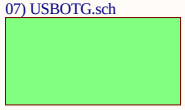
05) LCD_TV_OUT.sch
05) LCD_TV_OUT.sch



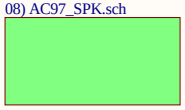
06) HDMI.sch
06) HDMI.sch



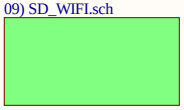
07) USBOTG.sch
07) USBOTG.sch



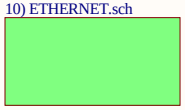
08) AC97_SPK.sch
08) AC97_SPK.sch



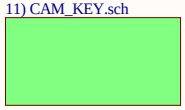
09) SD_WIFI.sch
09) SD_WIFI.sch



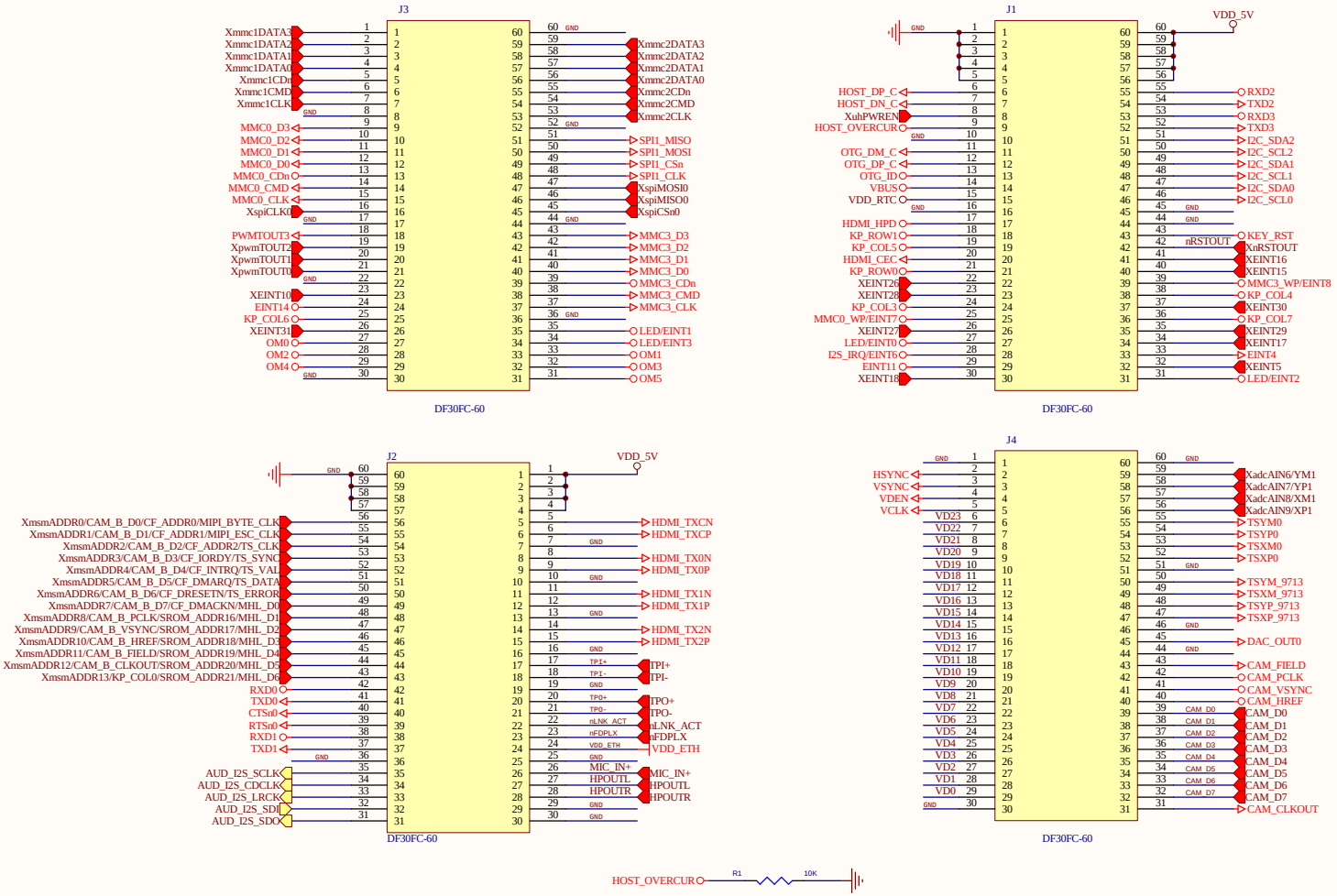
10) ETHERNET.sch
10) ETHERNET.sch

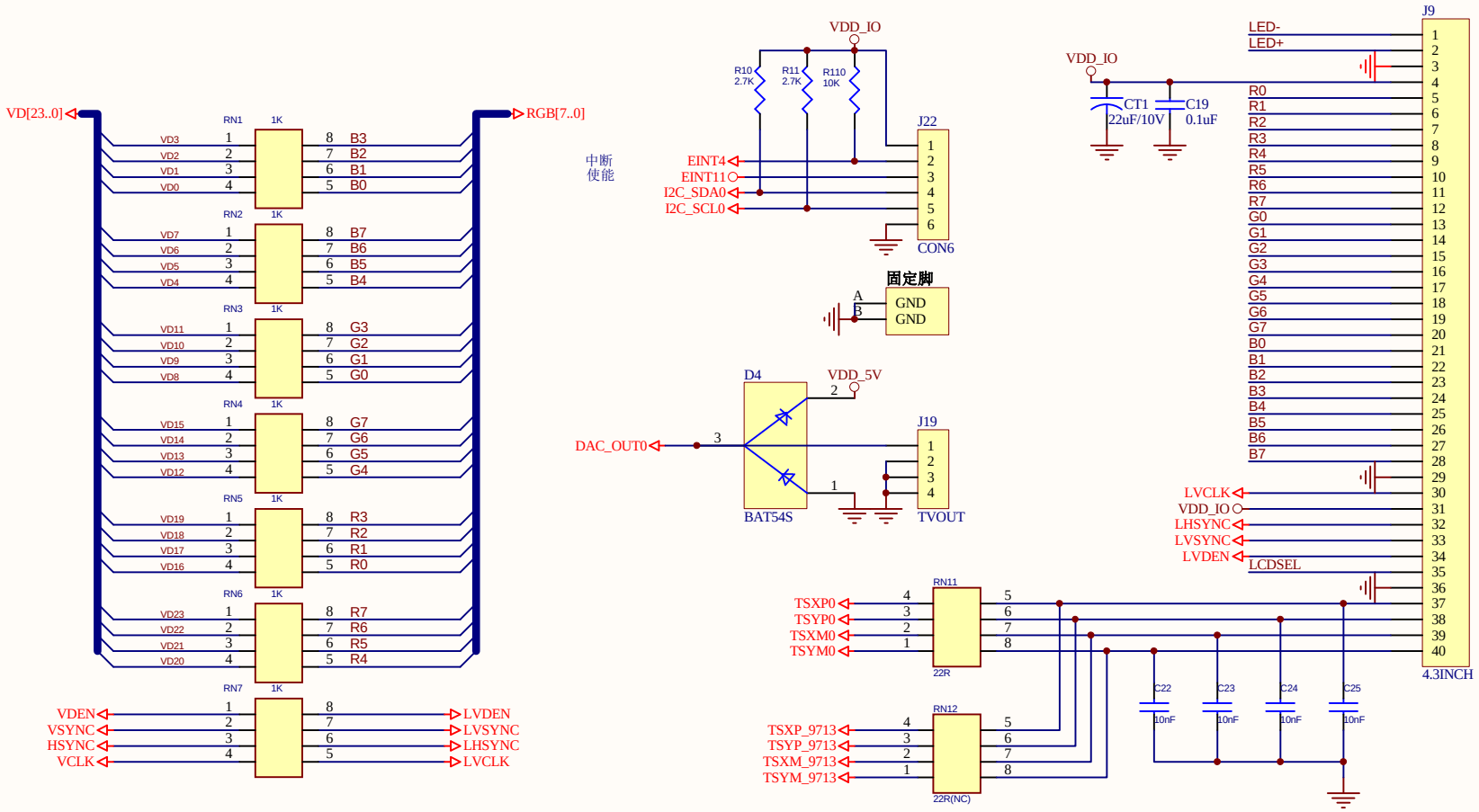


12) CAM_KEY.sch
11) CAM_KEY.sch

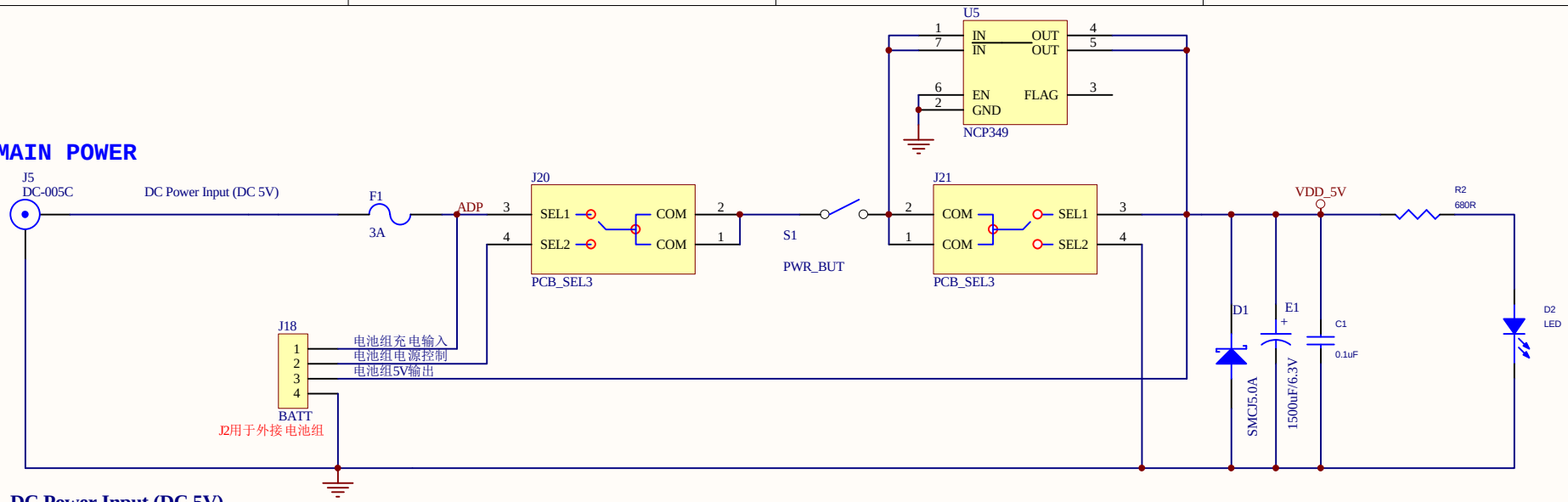


12) GPIO.sch
12) GPIO.sch

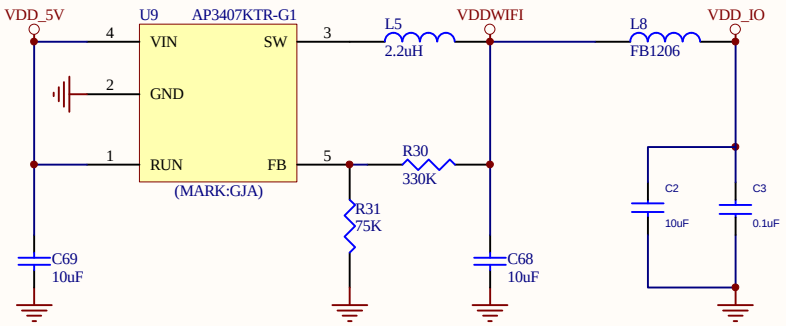

J3
Xmmc1DATA3
Xmmc1DATA2
Xmmc1DATA1
Xmmc1DATA0
Xmmc1CDn
Xmmc1CMD
Xmmc1CLK
MMC0_D3
MMC0_D2
MMC0_D1
MMC0_D0
MMC0_CDn
MMC0_CMD
MMC0_CLK
XspiCLK0
PWMTOUT3
XpwmTOUT2
XpwmTOUT1
XpwmTOUT0
XEINT10
EINT14
KP_COL6
XEINT31
OM0
OM2
OM4
Xmmc2DATA3
Xmmc2DATA2
Xmmc2DATA1
Xmmc2DATA0
Xmmc2CDn
Xmmc2CMD
Xmmc2CLK
SPI1_MISO
SPI1_MOSI
SPI1_CSn
SPI1_CLK
XspiMOSI0
XspiMISO0
XspiCSn0
MMC3_D3
MMC3_D2
MMC3_D1
MMC3_D0
MMC3_CDn
MMC3_CMD
MMC3_CLK
LED/EINT1
LED/EINT3
OM1
OM3
OM5
DF30FC-60
J1
VDD_5V
HOST_DP_C
HOST_DN_C
XuhPWREN
HOST_OVERCUR
OTG_DM_C
OTG_DP_C
OTG_ID
VBUS
VDD_RTC
HDMI_HPD
KP_ROW1
KP_COL5
HDMI_CEC
KP_ROW0
XEINT26
XEINT28
KP_COL3
MMC0_WP/EINT7
XEINT27
LED/EINT0
I2S_IRQ/EINT6
EINT11
XEINT18
RXD2
TXD2
RXD3
TXD3
I2C_SDA2
I2C_SCL2
I2C_SDA1
I2C_SCL1
I2C_SDA0
I2C_SCL0
KEY_RST
nRSTOUT
XnRSTOUT
XEINT16
XEINT15
MMC3_WP/EINT8
KP_COL4
XEINT30
KP_COL7
XEINT29
XEINT17
EINT4
XEINT5
LED/EINT2
DF30FC-60
J2
VDD_5V
XmsmADDR0/CAM_B_D0/CF_ADDR0/MIPI_BYTE_CLK
XmsmADDR1/CAM_B_D1/CF_ADDR1/MIPI_ESC_CLK
XmsmADDR2/CAM_B_D2/CF_ADDR2/TS_CLK
XmsmADDR3/CAM_B_D3/CF_IORDY/TS_SYNC
XmsmADDR4/CAM_B_D4/CF_INTRQ/TS_VAL
XmsmADDR5/CAM_B_D5/CF_DMARQ/TS_DATA
XmsmADDR6/CAM_B_D6/CF_DRESETN/TS_ERROR
XmsmADDR7/CAM_B_D7/CF_DMACKN/MHL_D0
XmsmADDR8/CAM_B_PCLK/SROM_ADDR16/MHL_D1
XmsmADDR9/CAM_B_VSYNC/SROM_ADDR17/MHL_D2
XmsmADDR10/CAM_B_HREF/SROM_ADDR18/MHL_D3
XmsmADDR11/CAM_B_FIELD/SROM_ADDR19/MHL_D4
XmsmADDR12/CAM_B_CLKOUT/SROM_ADDR20/MHL_D5
XmsmADDR13/KP_COL0/SROM_ADDR21/MHL_D6
RXD0
TXD0
CTSn0
RTSn0
RXD1
TXD1
AUD_I2S_SCLK
AUD_I2S_CDCLK
AUD_I2S_LRCK
AUD_I2S_SDI
AUD_I2S_SDO
HDMI_TXCN
HDMI_TXCP
HDMI_TX0N
HDMI_TX0P
HDMI_TX1N
HDMI_TX1P
HDMI_TX2N
HDMI_TX2P
TPI+
TPI-
TPO+
TPO-
nLNK_ACT
nFDPLX
VDD_ETH
MIC_IN+
HPOUTL
HPOUTR
DF30FC-60
J4
HSYNC
VSYNC
VDEN
VCLK
VD23
VD22
VD21
VD20
VD19
VD18
VD17
VD16
VD15
VD14
VD13
VD12
VD11
VD10
VD9
VD8
VD7
VD6
VD5
VD4
VD3
VD2
VD1
VD0
XadcAIN6/YM1
XadcAIN7/YP1
XadcAIN8/XM1
XadcAIN9/XP1
TSYM0
TSYP0
TSXM0
TSXP0
TSYM_9713
TSXM_9713
TSYP_9713
TSXP_9713
DAC_OUT0
CAM_FIELD
CAM_PCLK
CAM_VSYNC
CAM_HREF
CAM_D0
CAM_D1
CAM_D2
CAM_D3
CAM_D4
CAM_D5
CAM_D6
CAM_D7
CAM_CLKOUT
DF30FC-60
HOST_OVERCUR
R1
10K

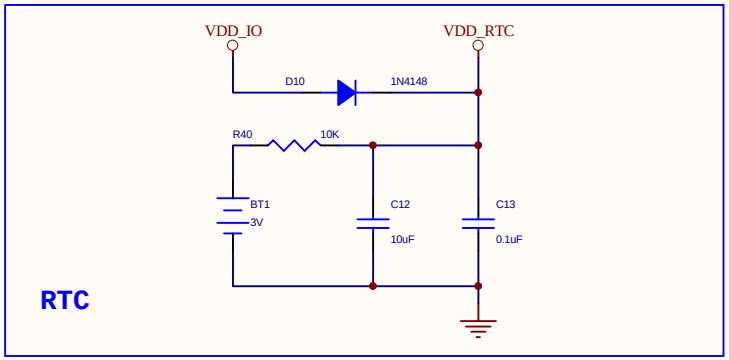

VD[23..0]
RGB[7..0]
RN1
RN2
RN3
RN4
RN5
RN6
RN7
1K
VD3 VD2 VD1 VD0
B3 B2 B1 B0
VD7 VD6 VD5 VD4
B7 B6 B5 B4
VD11 VD10 VD9 VD8
G3 G2 G1 G0
VD15 VD14 VD13 VD12
G7 G6 G5 G4
VD19 VD18 VD17 VD16
R3 R2 R1 R0
VD23 VD22 VD21 VD20
R7 R6 R5 R4
VDEN VSYNC HSYNC VCLK
LVDEN LVSYNC LHSYNC LVCLK
中断
使能
VDD_IO
R10 2.7K
R11 2.7K
R110 10K
J22
EINT4
EINT11
I2C_SDA0
I2C_SCL0
CON6
固定脚
GND
GND
D4
VDD_5V
DAC_OUT0
J19
BAT54S
TVOUT
J9
LED-
LED+
R0 R1 R2 R3 R4 R5 R6 R7
G0 G1 G2 G3 G4 G5 G6 G7
B0 B1 B2 B3 B4 B5 B6 B7
LVCLK
VDD_IO
LHSYNC
LVSYNC
LVDEN
LCDSEL
4.3INCH
CT1 22uF/10V
C19 0.1uF
RN11
TSXP0 TSYP0 TSXM0 TSYM0
22R
RN12
TSXP_9713 TSYP_9713 TSXM_9713 TSYM_9713
22R(NC)
C22 C23 C24 C25
10nF

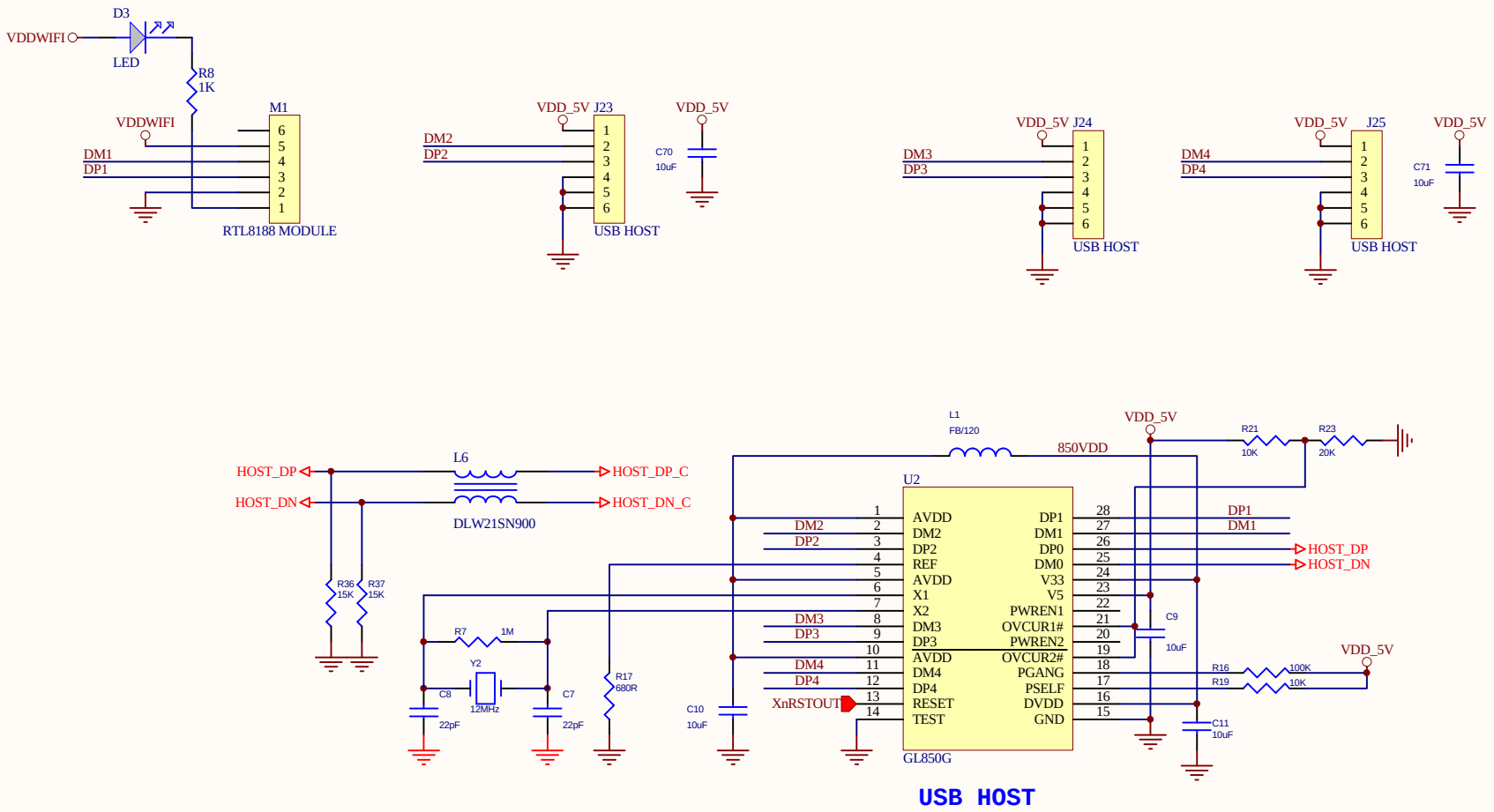
MAIN POWER

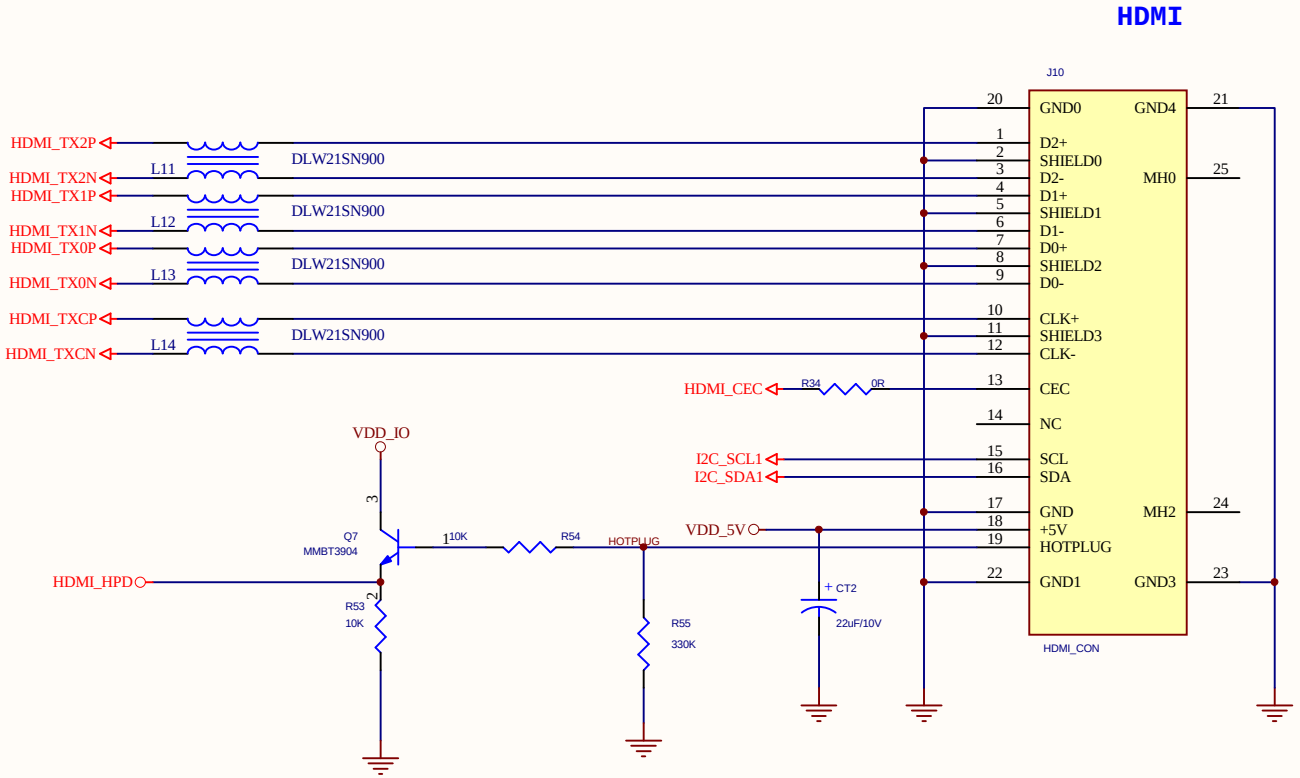


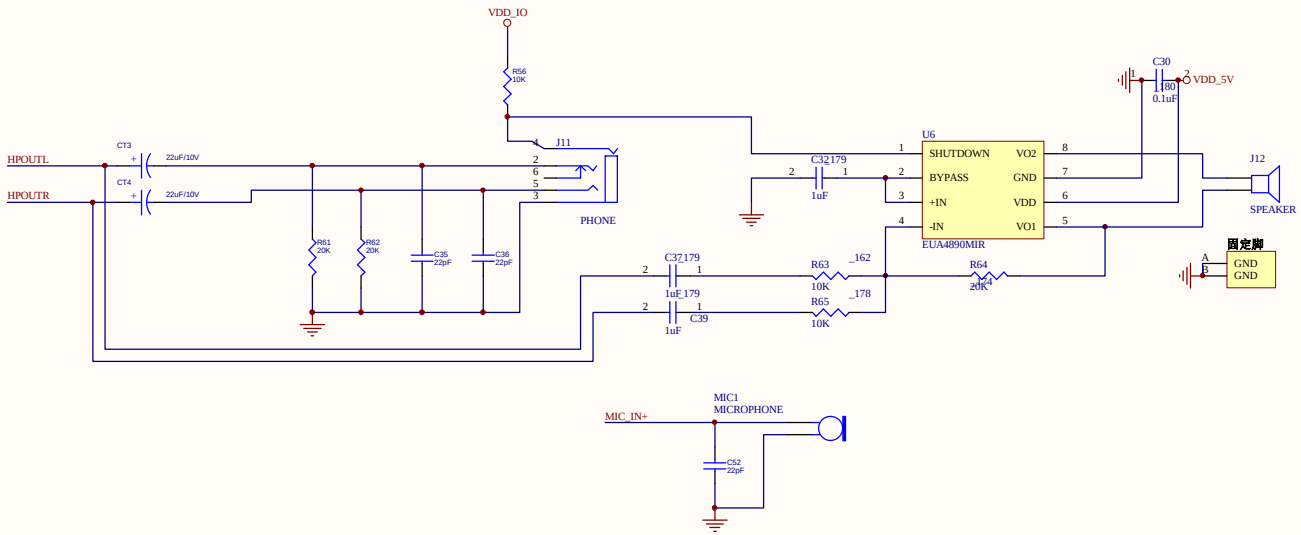
DC Power Input (DC 5V)

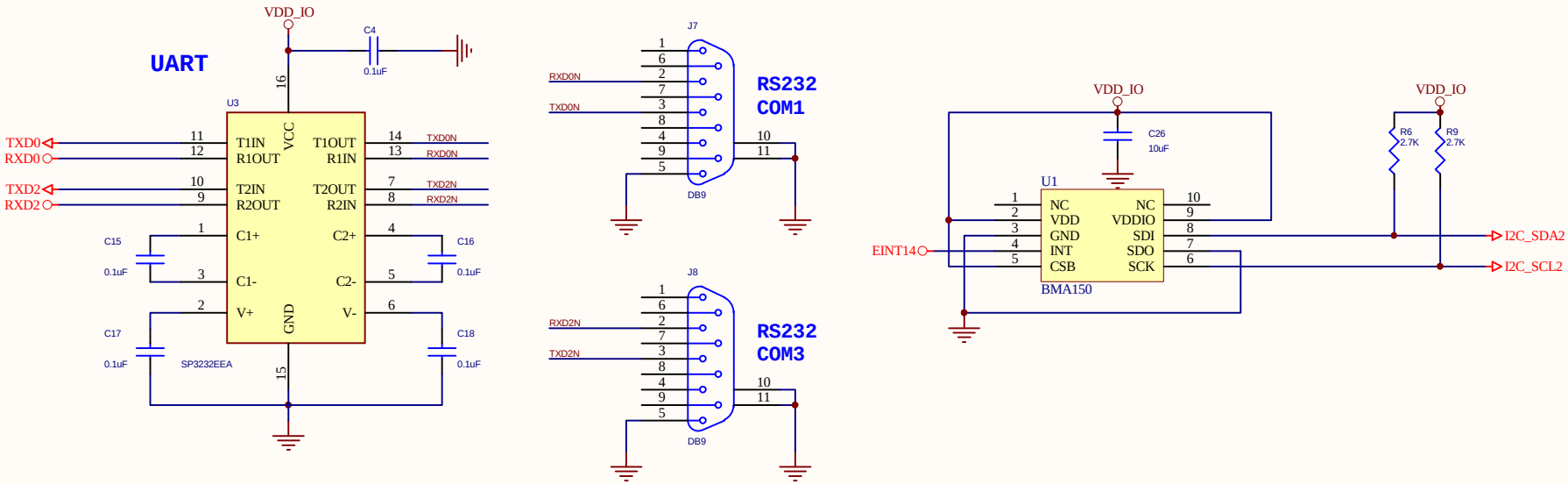


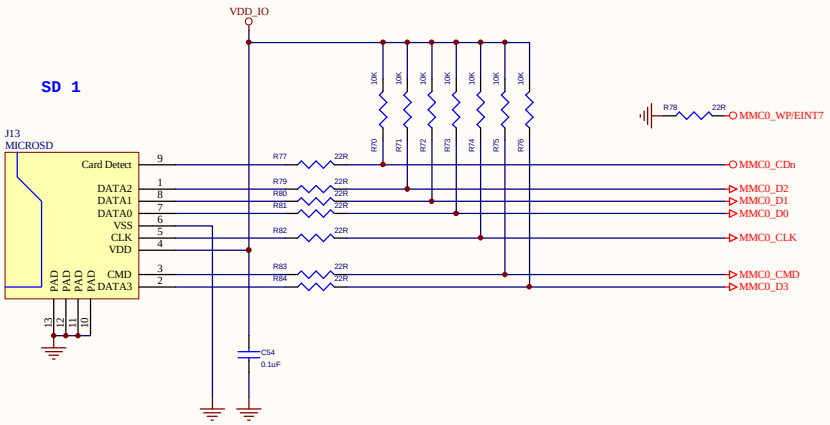


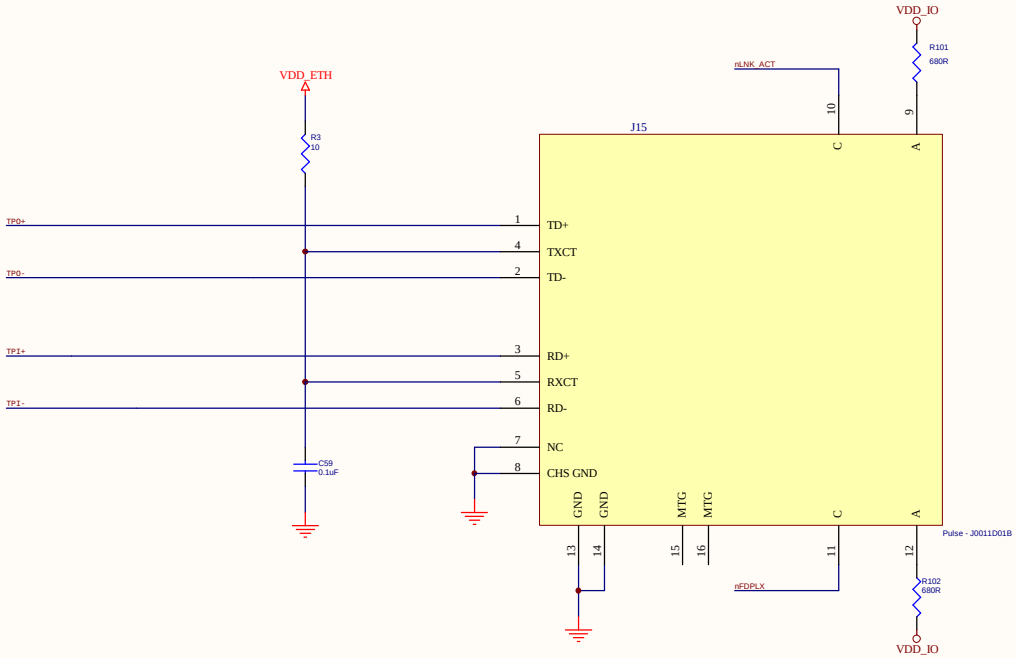

D3
VDDWIFI
LED
R8
1K
VDDWIFI
M1
DM1
DP1
6
5
4
3
2
1
RTL8188 MODULE
VDD_5V J23
DM2
DP2
1
2
3
4
5
6
USB HOST
C70
10uF
VDD_5V
VDD_5V J24
DM3
DP3
USB HOST
VDD_5V J25
DM4
DP4
USB HOST
C71
10uF
VDD_5V
HOST_DP
HOST_DN
L6
DLW21SN900
HOST_DP_C
HOST_DN_C
R36
15K
R37
15K
L1
FB/120
850VDD
VDD_5V
R21
10K
R23
20K
U2
AVDD
DM2
DP2
REF
AVDD
X1
X2
DM3
DP3
AVDD
DM4
DP4
RESET
TEST
DP1
DM1
DP0
DM0
V33
V5
PWREN1
OVCUR1#
PWREN2
OVCUR2#
PGANG
PSELF
DVDD
GND
GL850G
DP1
DM1
HOST_DP
HOST_DN
C9
10uF
VDD_5V
R16
100K
R19
10K
C11
10uF
R7
1M
Y2
12MHz
C8
22pF
C7
22pF
R17
680R
C10
10uF
XnRSTOUT
USB HOST

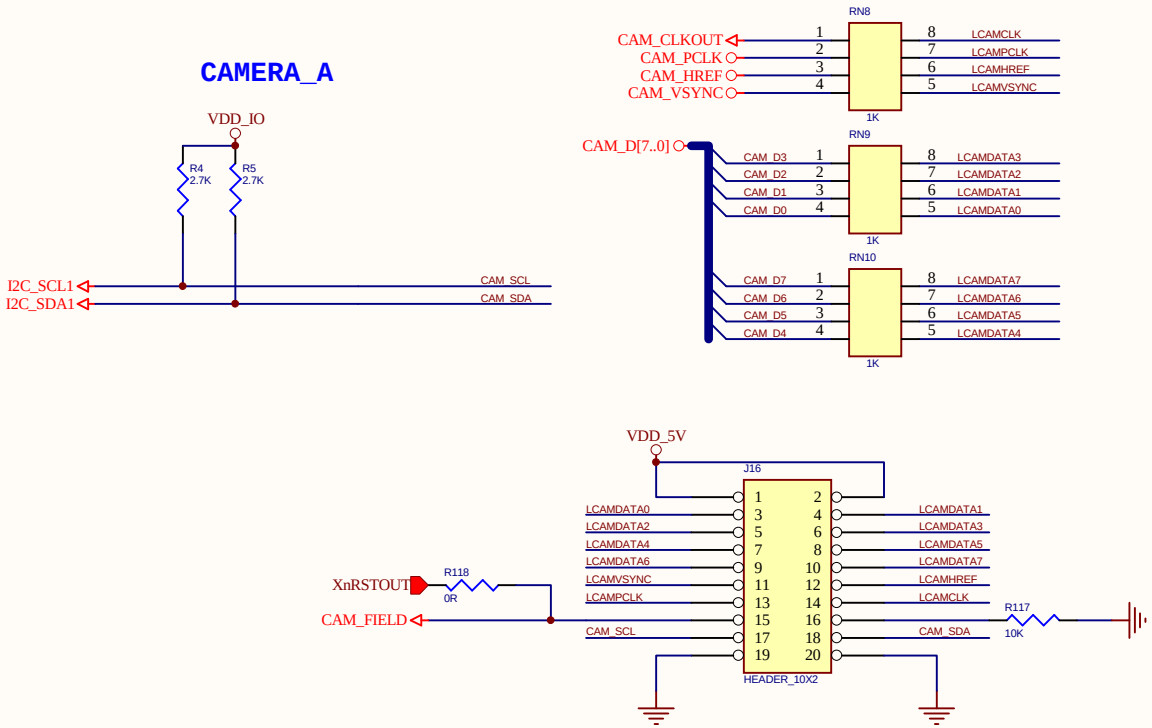

HDMI
J10
HDMI_TX2P
HDMI_TX2N
HDMI_TX1P
HDMI_TX1N
HDMI_TX0P
HDMI_TX0N
HDMI_TXCP
HDMI_TXCN
L11
L12
L13
L14
DLW21SN900
DLW21SN900
DLW21SN900
DLW21SN900
HDMI_CEC
R34
0R
VDD_IO
I2C_SCL1
I2C_SDA1
VDD_5V
HDMI_HPD
Q7
MMBT3904
10K
R54
HOTPLUG
R53
10K
R55
330K
CT2
22uF/10V
20 GND0
1 D2+
2 SHIELD0
3 D2-
4 D1+
5 SHIELD1
6 D1-
7 D0+
8 SHIELD2
9 D0-
10 CLK+
11 SHIELD3
12 CLK-
13 CEC
14 NC
15 SCL
16 SDA
17 GND
18 +5V
19 HOTPLUG
22 GND1
21 GND4
25 MH0
24 MH2
23 GND3
HDMI_CON

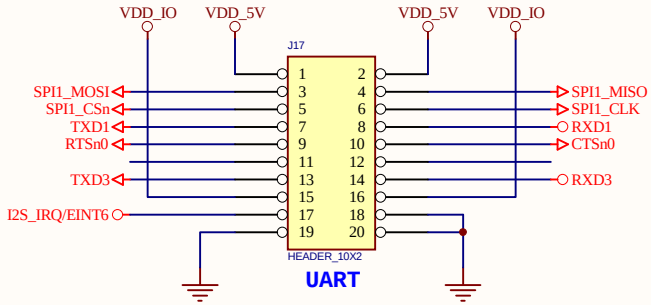

VDD_IO
R56
10K
J11
PHONE
HPOUTL
HPOUTR
CT3
CT4
22uF/10V
22uF/10V
R61
20K
R62
20K
C35
22pF
C36
22pF
C32179
1uF
U6
SHUTDOWN
BYPASS
+IN
-IN
VO2
GND
VDD
VO1
EUA4890MIR
C30
0.1uF
VDD_5V
J12
SPEAKER
固定脚
GND
GND
C37179
1uF_179
C39
1uF
R63
10K
_162
R65
10K
_178
R64
20K
MIC1
MICROPHONE
MIC_IN+
C52
22pF

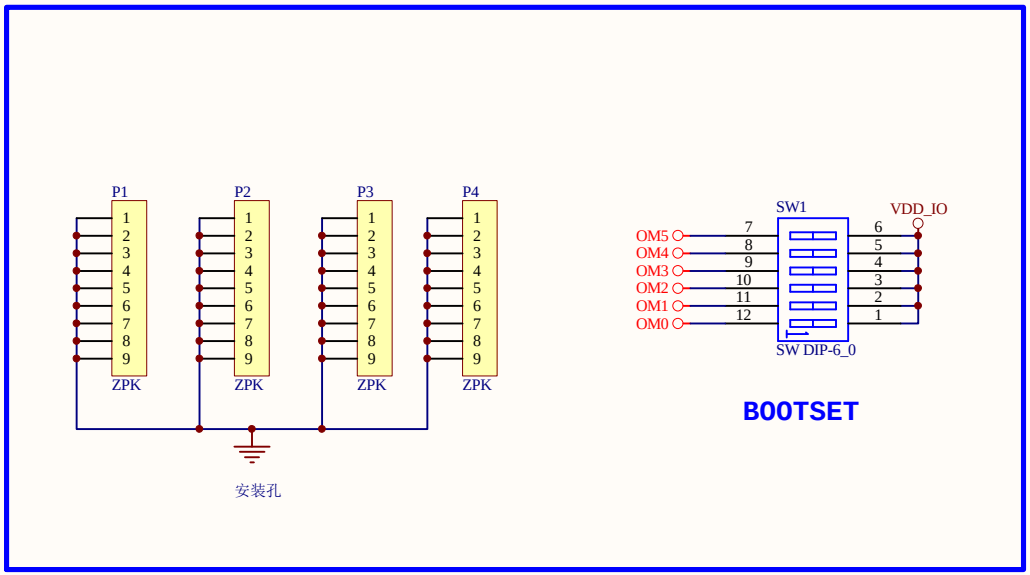

UART
VDD_IO
C4
0.1uF
16
U3
VCC
T1IN
R1OUT
T1OUT
R1IN
T2IN
R2OUT
T2OUT
R2IN
C1+
C2+
C1-
C2-
V+
V-
GND
15
SP3232EEA
TXD0
RXD0
TXD2
RXD2
TXD0N
RXD0N
TXD2N
RXD2N
C15
C16
C17
C18
0.1uF
J7
RXD0N
TXD0N
DB9
RS232
COM1
J8
RXD2N
TXD2N
DB9
RS232
COM3
VDD_IO
C26
10uF
U1
NC
VDD
GND
INT
CSB
NC
VDDIO
SDI
SDO
SCK
BMA150
EINT14
VDD_IO
R6
2.7K
R9
2.7K
I2C_SDA2
I2C_SCL2

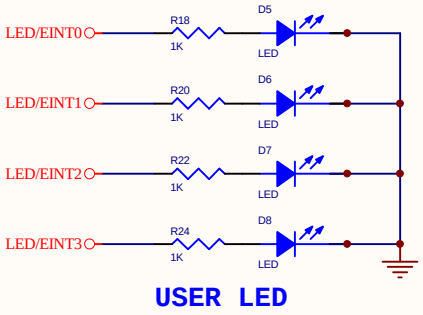

SD 1
J13
MICROSD
Card Detect
DATA2
DATA1
DATA0
VSS
CLK
VDD
CMD
DATA3
PAD
PAD
PAD
PAD
9
1
8
7
6
5
4
3
2
13
12
11
10
VDD_IO
10K
R70
R71
R72
R73
R74
R75
R76
R77
R78
R79
R80
R81
R82
R83
R84
22R
C54
0.1uF
MMC0_WP/EINT7
MMC0_CDn
MMC0_D2
MMC0_D1
MMC0_D0
MMC0_CLK
MMC0_CMD
MMC0_D3

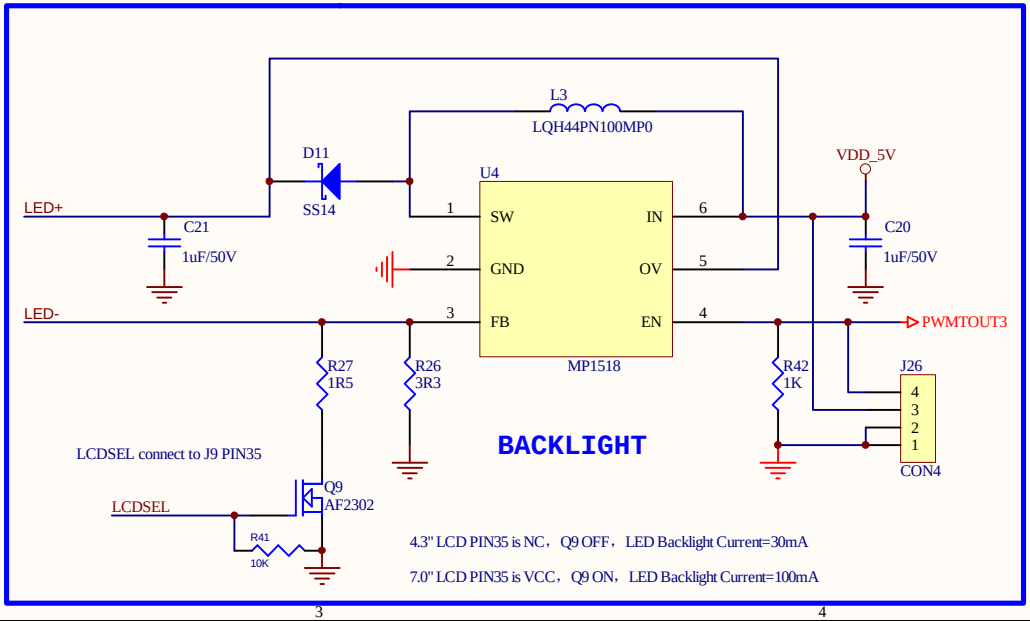

VDD_IO
R101
680R
nLNK_ACT
VDD_ETH
R3
10
J15
10
C
9
A
TPO+
1
TD+
4
TXCT
TPO-
2
TD-
TPI+
3
RD+
5
RXCT
TPI-
6
RD-
7
NC
8
CHS GND
C59
0.1uF
GND
GND
MTG
MTG
C
A
Pulse - J0011D01B
13
14
15
16
11
12
nFDPLX
R102
680R
VDD_IO

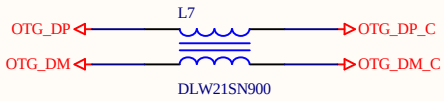

CAMERA_A
VDD_IO
R4
2.7K
R5
2.7K
I2C_SCL1
I2C_SDA1
CAM_SCL
CAM_SDA
RN8
CAM_CLKOUT
CAM_PCLK
CAM_HREF
CAM_VSYNC
LCAMCLK
LCAMPCLK
LCAMHREF
LCAMVSYNC
1K
CAM_D[7..0]
RN9
CAM_D3
CAM_D2
CAM_D1
CAM_D0
LCAMDATA3
LCAMDATA2
LCAMDATA1
LCAMDATA0
RN10
CAM_D7
CAM_D6
CAM_D5
CAM_D4
LCAMDATA7
LCAMDATA6
LCAMDATA5
LCAMDATA4
VDD_5V
J16
HEADER_10X2
XnRSTOUT
R118
0R
CAM_FIELD
R117
10K
KP_ROW0
KP_ROW1
KP_COL3
KP_COL4
KP_COL5
KP_COL6
KP_COL7
K2
K3
K4
K5
K6
K8
K9
K10
K11
KEYB
VDD_IO
R115
100K
RESET
KEY_RST
K1


VDD_IO
VDD_5V
VDD_5V
VDD_IO
J17
SPI1_MOSI
SPI1_CSn
TXD1
RTSn0
TXD3
I2S_IRQ/EINT6
SPI1_MISO
SPI1_CLK
RXD1
CTSn0
RXD3
HEADER_10X2
UART

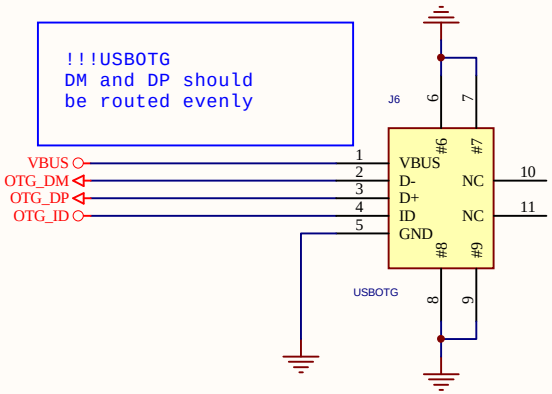

P1
P2
P3
P4
ZPK
安装孔
SW1
VDD_IO
OM5
OM4
OM3
OM2
OM1
OM0
SW DIP-6_0
BOOTSET

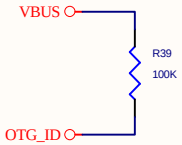

LED/EINT0
LED/EINT1
LED/EINT2
LED/EINT3
R18
R20
R22
R24
1K
D5
D6
D7
D8
LED
USER LED


L3
LQH44PN100MP0
D11
SS14
U4
LED+
LED-
C21
1uF/50V
SW
GND
FB
IN
OV
EN
MP1518
VDD_5V
C20
1uF/50V
PWMTOUT3
R27
1R5
R26
3R3
R42
1K
J26
CON4
LCDSEL connect to J9 PIN35
LCDSEL
Q9
AF2302
R41
10K
BACKLIGHT
4.3" LCD PIN35 is NC，Q9 OFF，LED Backlight Current=30mA
7.0" LCD PIN35 is VCC，Q9 ON，LED Backlight Current=100mA



!!!USBOTG
DM and DP should
be routed evenly





USB OTG