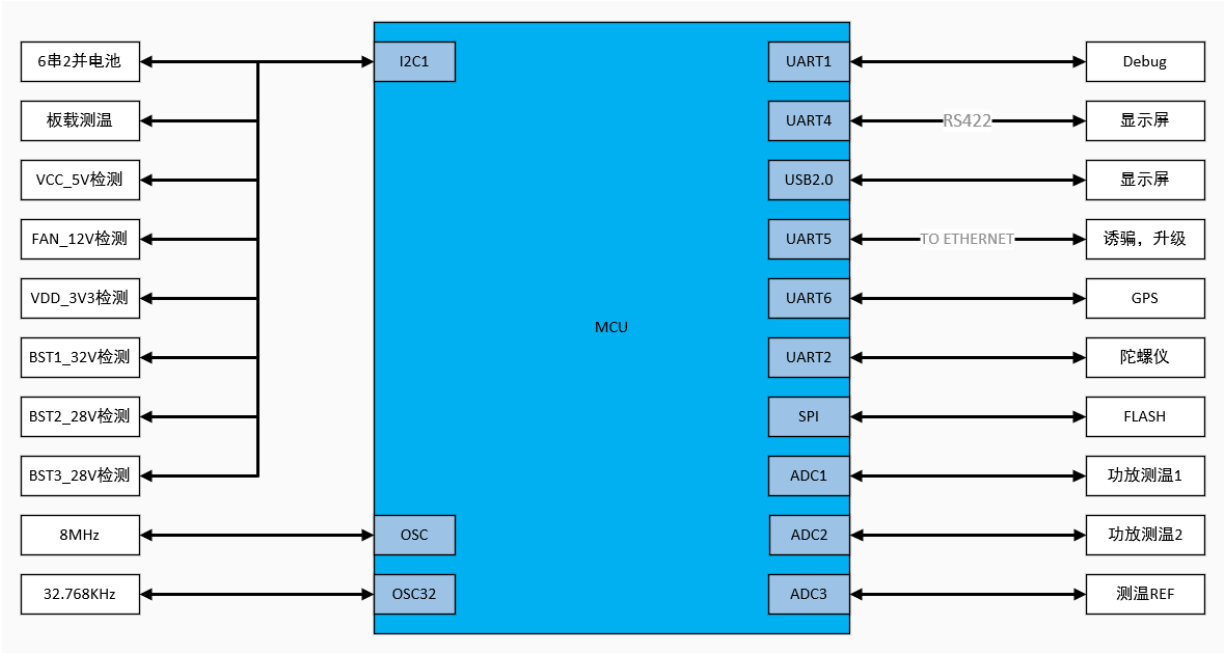

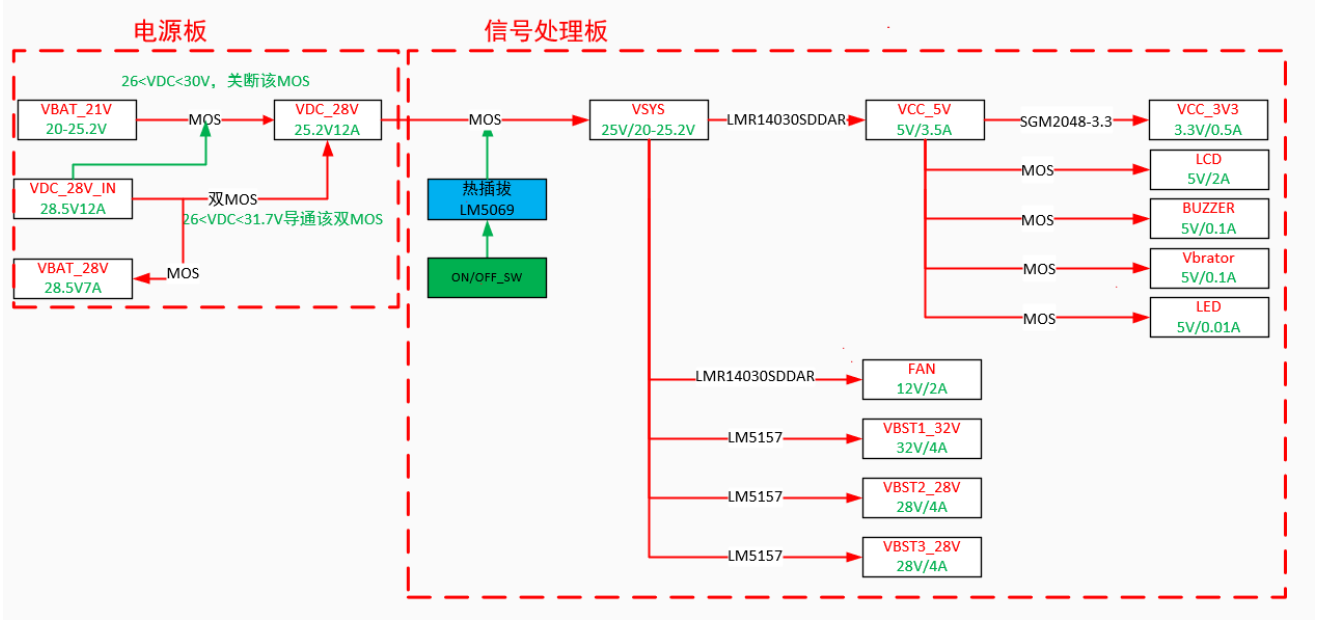

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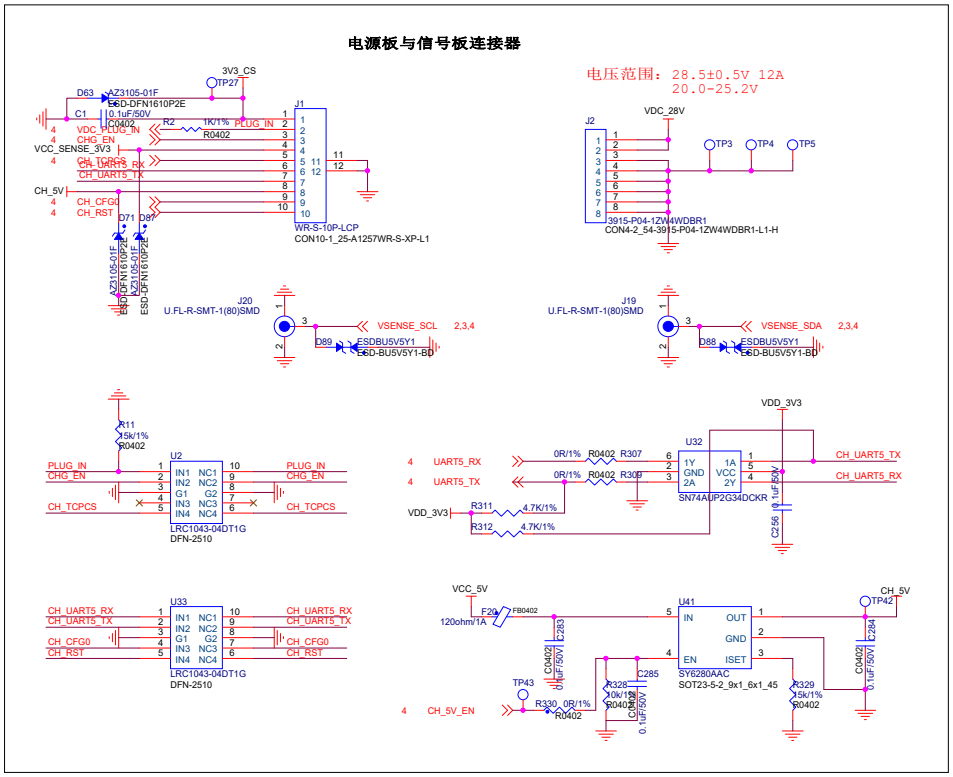
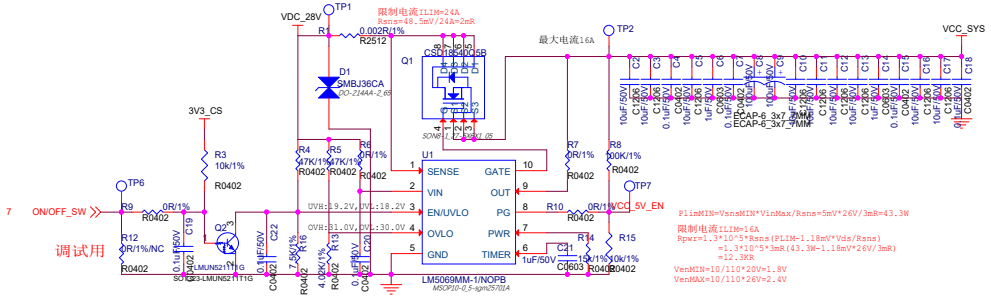
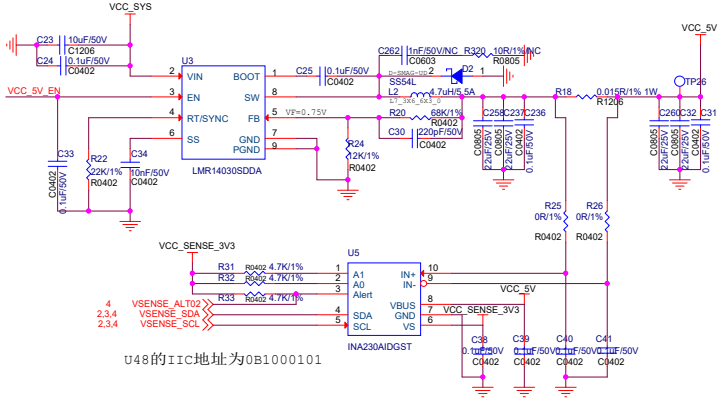
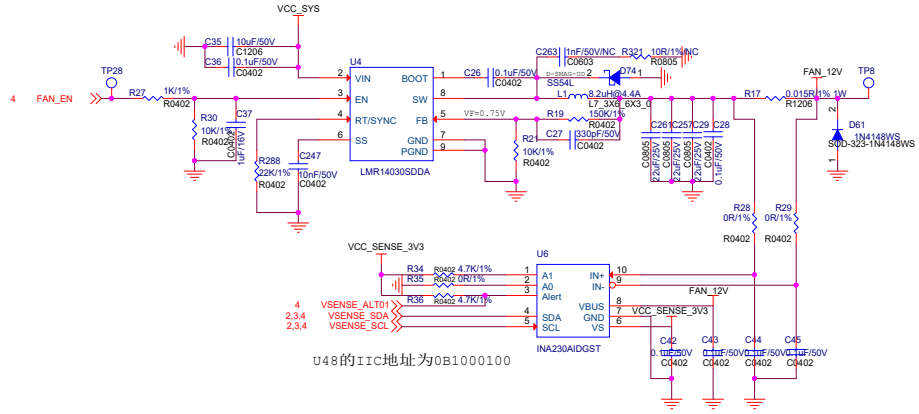
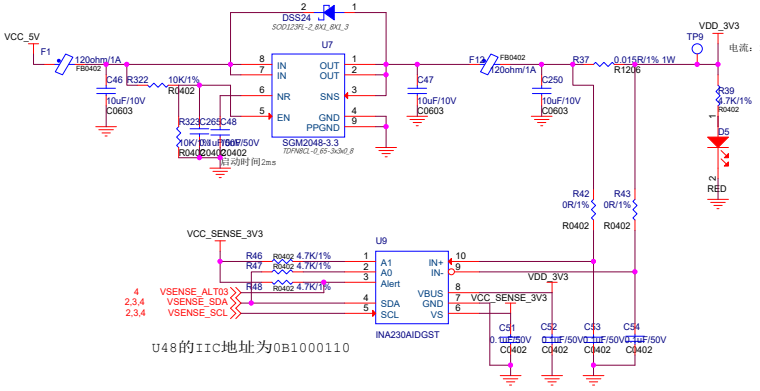
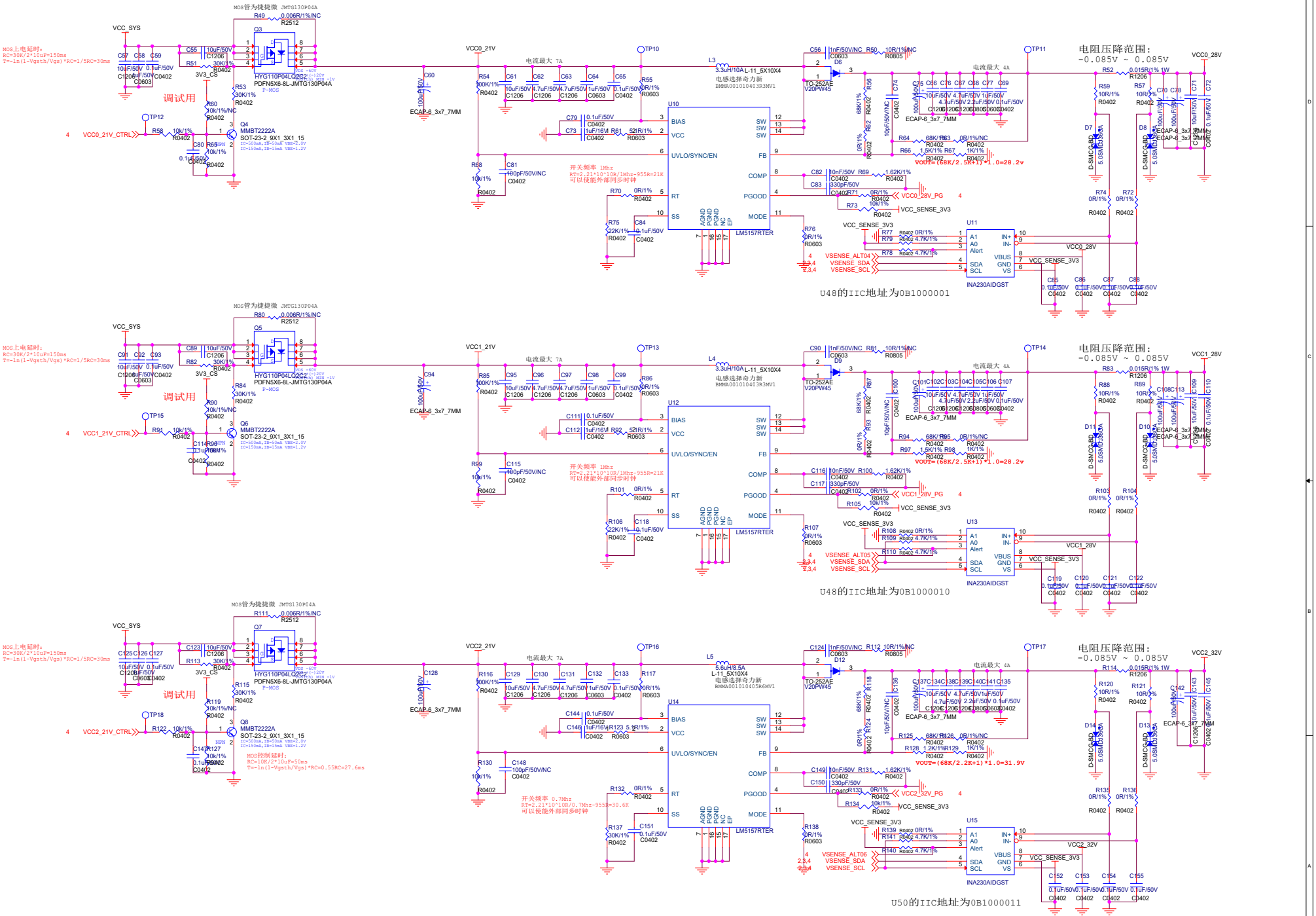

电源板与信号板连接器
电压范围：28.5±0.5V 12A
20.0-25.2V
3V3_CS
VDC_PLUG_IN
CHG_EN
VCC_SENSE_3V3
CH_UART5_RX
CH_UART5_TX
CH_5V
CH_CFG0
CH_RST
VDC_28V
VSENSE_SCL
VSENSE_SDA
2,3,4
VDD_3V3
UART5_RX
UART5_TX
PLUG_IN
CH_TCPCS
CH_UART5_RX
CH_UART5_TX
CH_CFG0
CH_RST
VCC_5V
CH_5V_EN
120ohm/1A
SY6280AAC
SOT23-5-2_9x1_6x1_45
SN74AUP2G34DCKR
LRC1043-04DT1G
DFN-2510
WR-S-10P-LCP
CON10-1_25-A1257WR-S-XP-L1
3915-P04-12W4WDBR1
CON4-2_54-3915-P04-12W4WDBR1-L1-H
U.FL-R-SMT-1(80)SMD
ESDBU5V5Y1
ESD-BU5V5Y1-BD
AZ3105-01F
ESD-DFN1610P2E


VDC_28V
限制电流ILIM=24A
Rsns=48.5mV/24A=2mR
最大电流16A
VCC_SYS
3V3_CS
ON/OFF_SW
调试用
VCC_5V_EN
UVH:19.2V,UVL:18.2V
OVH:31.0V,OVL:30.0V
LM5069MM-1/NOPB
CSD18540Q5B
SMBJ36CA
PlimMIN=VsnsMIN*VinMax/Rsns=5mV*26V/3mR=43.3W
限制电流ILIM=16A
Rpwr=1.3*10^5*Rsns(PLIM-1.18mV*Vds/Rsns)
=1.3*10^5*3mR(43.3W-1.18mV*26V/3mR)
=12.3KR
VenMIN=10/110*20V=1.8V
VenMAX=10/110*26V=2.4V


VCC_SYS
VCC_5V_EN
VCC_5V
LMR14030SDDA
SS54L
L2 4.7uH/5.5A
VCC_SENSE_3V3
INA230AIDGST
U48的IIC地址为0B1000101


VCC_SYS
FAN_EN
FAN_12V
VCC_SENSE_3V3
VSENSE_ALT01
VSENSE_SDA
VSENSE_SCL
LMR14030SDDA
INA230AIDGST
U48的IIC地址为0B1000100


VCC_5V
VDD_3V3
电流：1A max
SGM2048-3.3
VCC_SENSE_3V3
VSENSE_ALT03
VSENSE_SDA
VSENSE_SCL
INA230AIDGST
U48的IIC地址为0B1000110


MOS管为捷捷微 JMTG130P04A
VCC_SYS
MOS上电延时:
RC=30K/2*10uF=150ms
T=-ln(1-Vgsth/Vgs)*RC=1/5RC=30ms
调试用
3V3_CS
VCC0_21V_CTRL
VCC0_21V
电流最大 7A
VCC0_28V
电阻压降范围:
-0.085V ~ 0.085V
U48的IIC地址为0B1000001
VCC1_21V_CTRL
VCC1_21V
VCC1_28V
U48的IIC地址为0B1000010
VCC2_21V_CTRL
VCC2_21V
VCC2_32V
U50的IIC地址为0B1000011
HYG110P04LQ2C2
PDFN5X6-8L-JMTG130P04A
P-MOS
MMBT2222A
SOT-23-2_9X1_3X1_15
LM5157RTER
INA230AIDGST
L-11_5X10X4
TO-252AE
V20PW45
D-SMC-ABD
5.0SMDJ36CA
ECAP-6_3x7_7MM
开关频率 1Mhz
RT=2.21*10^10R/1Mhz-955R=21K
可以使能外部同步时钟
开关频率 0.7Mhz
RT=2.21*10^10R/0.7Mhz-955R=30.6K
MOS控制延时:
RC=10K/2*10uF=50ms
T=-ln(1-Vgsth/Vgs)*RC=0.55RC=27.6ms
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<Doc>
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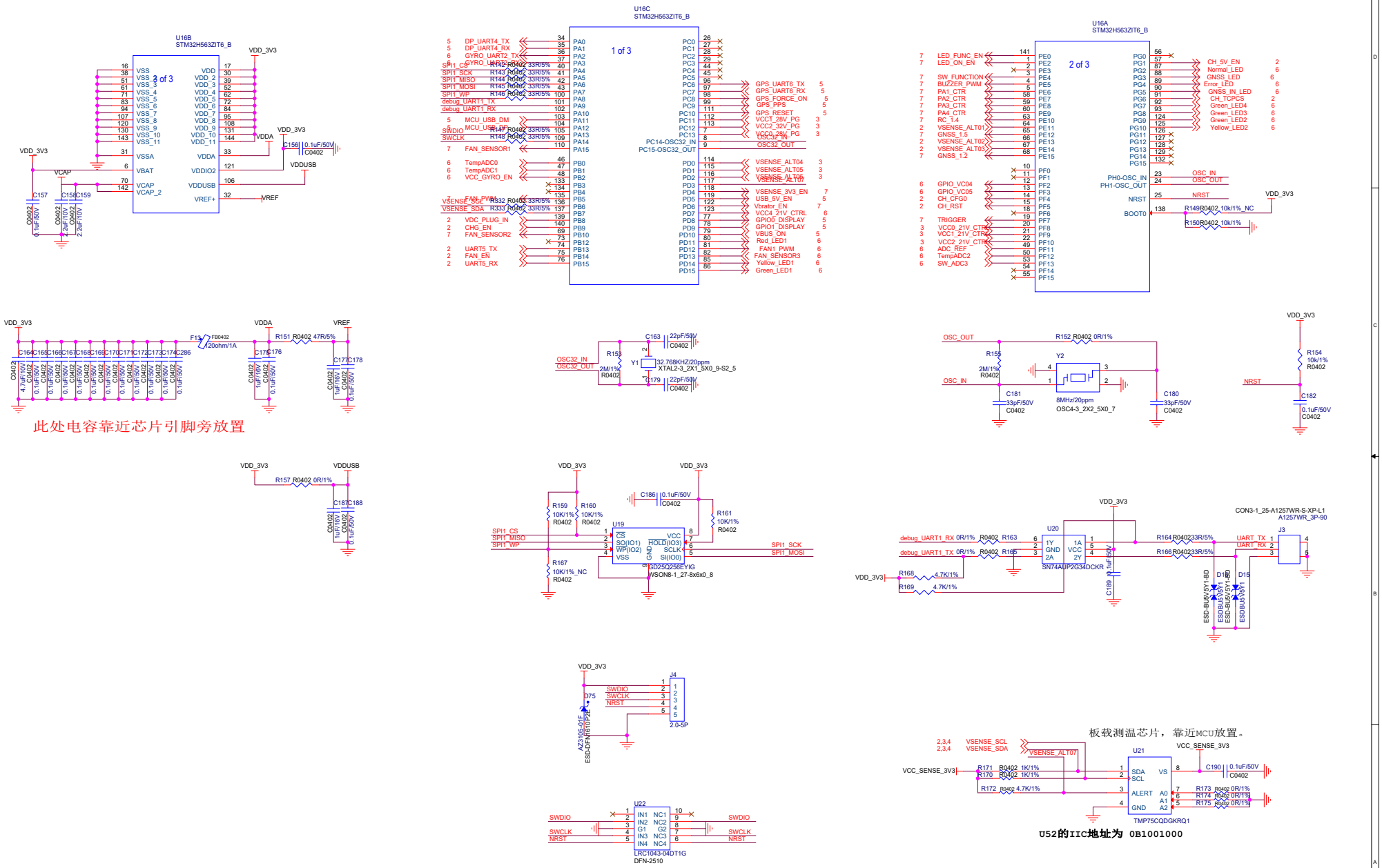

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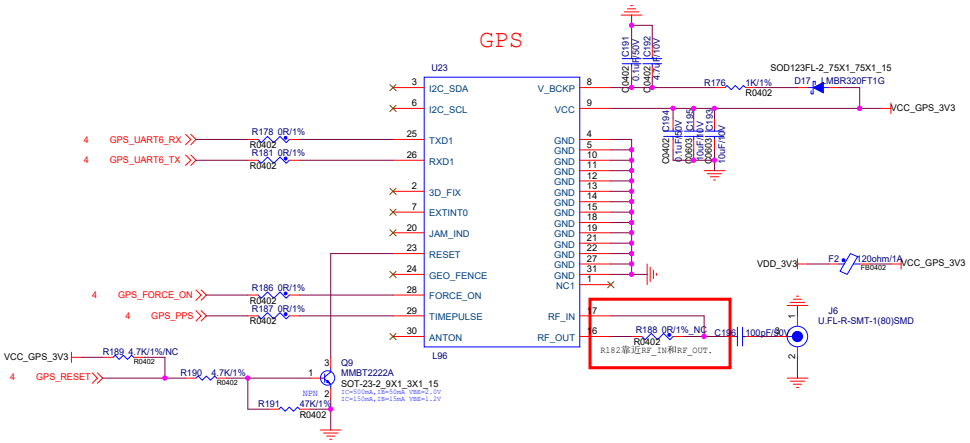
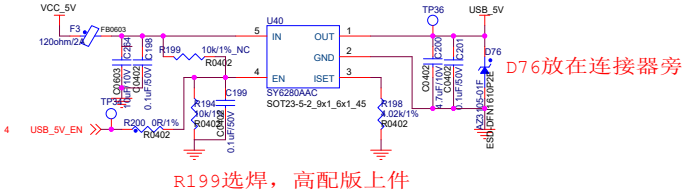
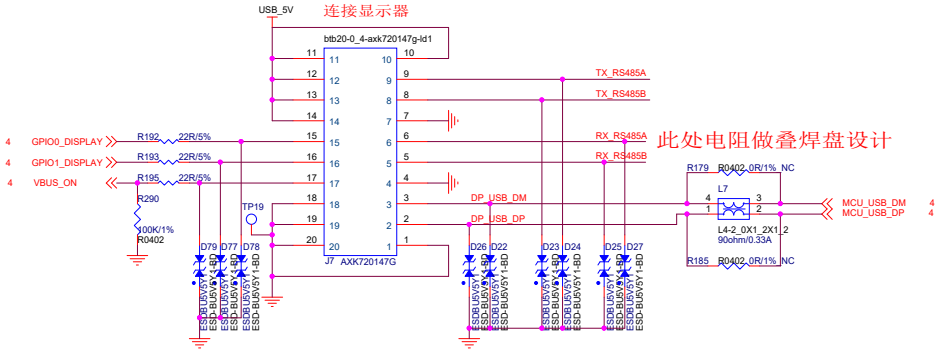
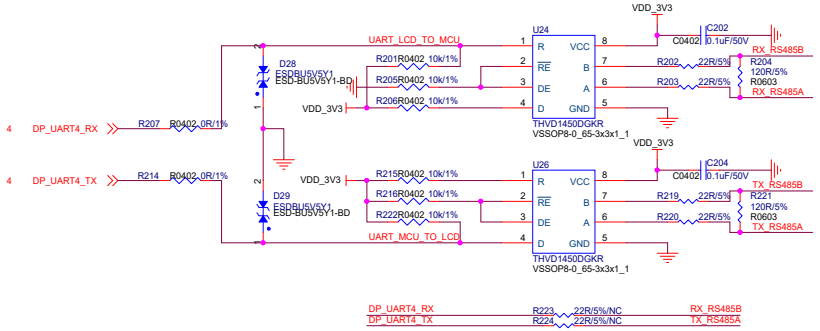
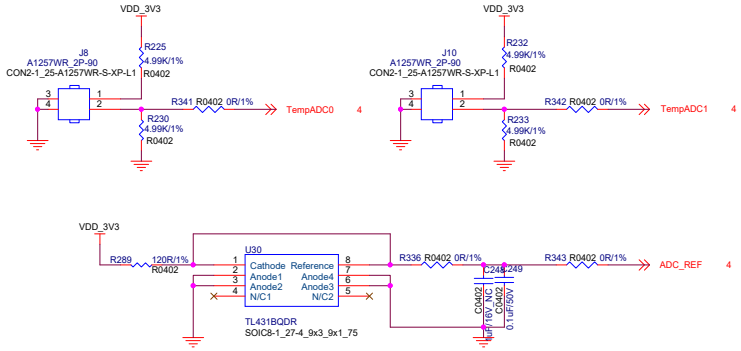

GPS
U23
I2C_SDA
I2C_SCL
TXD1
RXD1
3D_FIX
EXTINT0
JAM_IND
RESET
GEO_FENCE
FORCE_ON
TIMEPULSE
ANTON
L96
V_BCKP
VCC
GND
RF_IN
RF_OUT
SOD123FL-2_75X1_75X1_15
D17
MBR320FT1G
VCC_GPS_3V3
VDD_3V3
F2
120ohm/1A
FB0402
J6
U.FL-R-SMT-1(80)SMD
GPS_UART6_RX
GPS_UART6_TX
GPS_FORCE_ON
GPS_PPS
GPS_RESET
Q9
MMBT2222A
SOT-23-2_9X1_3X1_15
R182取近RF_IN和RF_OUT.


VCC_5V
120ohm/2A
U40
SY6280AAC
SOT23-5-2_9x1_6x1_45
IN
OUT
GND
EN
ISET
TP36
USB_5V
D76
USB_5V_EN
D76放在连接器旁
R199选焊，高配版上件


USB_5V
连接显示器
btb20-0_4-axk720147g-ld1
J7 AXK720147G
TX_RS485A
TX_RS485B
RX_RS485A
RX_RS485B
GPIO0_DISPLAY
GPIO1_DISPLAY
VBUS_ON
DP_USB_DM
DP_USB_DP
TP19
MCU_USB_DM
MCU_USB_DP
L7
L4-2_0X1_2X1_2
90ohm/0.33A
此处电阻做叠焊盘设计

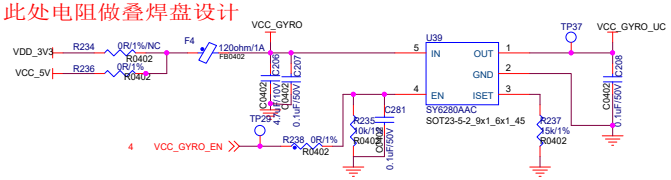

VDD_3V3
U24
U26
THVD1450DGKR
VSSOP8-0_65-3x3x1_1
UART_LCD_TO_MCU
UART_MCU_TO_LCD
D28
D29
ESDBLU5V5Y1
ESD-BU5V5Y1-BD
DP_UART4_RX
DP_UART4_TX
RX_RS485B
RX_RS485A
TX_RS485B
TX_RS485A

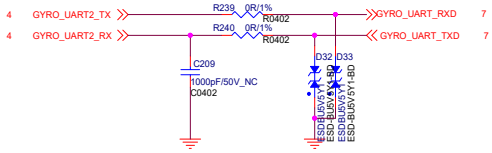
外接5K阻值的温敏电阻，
如：TDK的B57867S0502+140



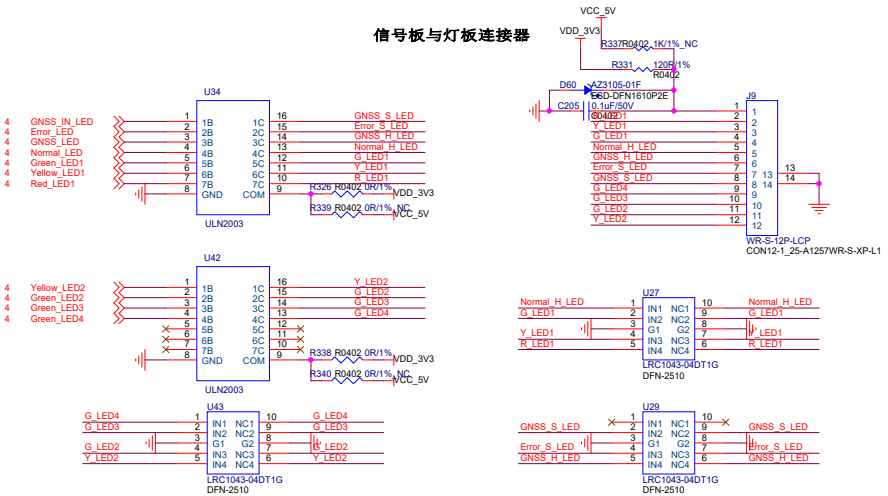
电子罗盘+陀螺仪

此处电阻做叠焊盘设计

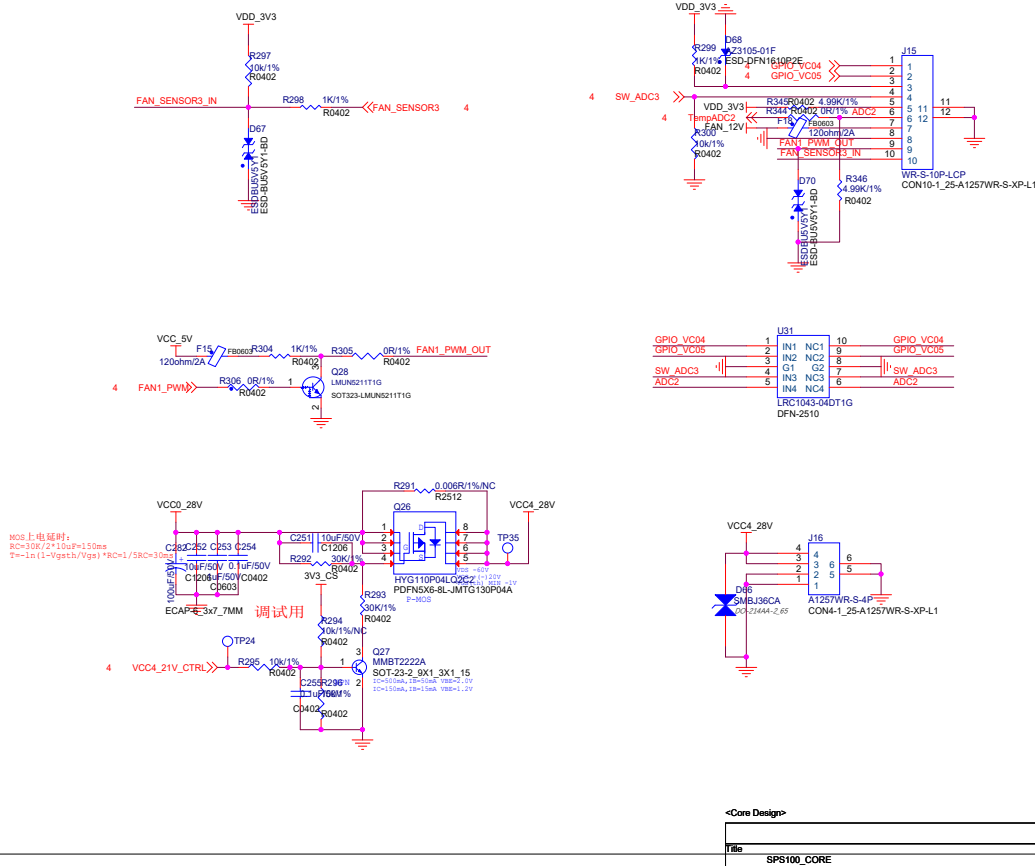


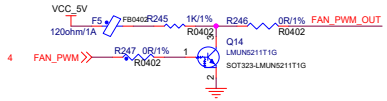


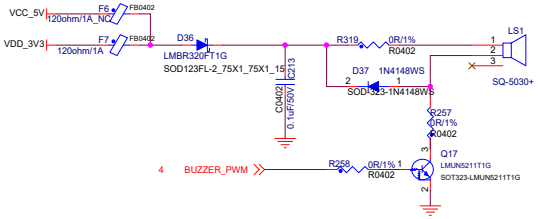
信号板与灯板连接器

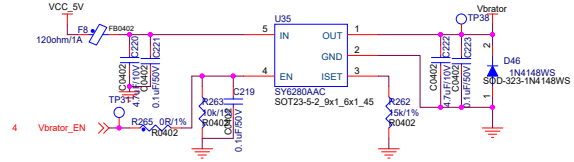


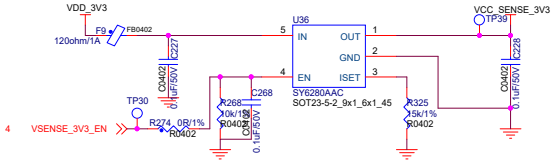
信号板与外设功放连接器

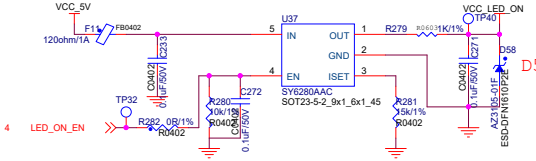




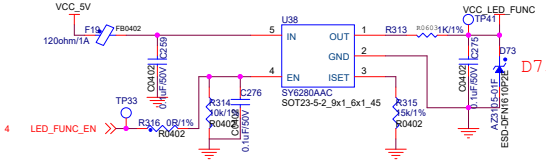




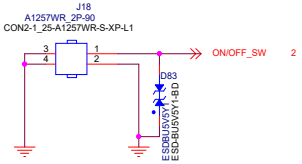


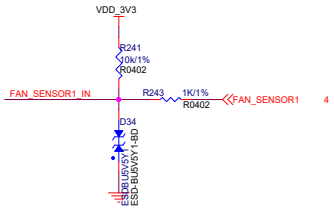


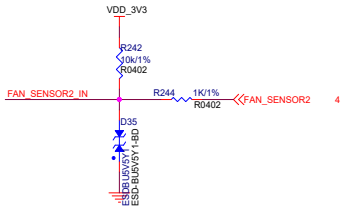
D58放在连接器旁

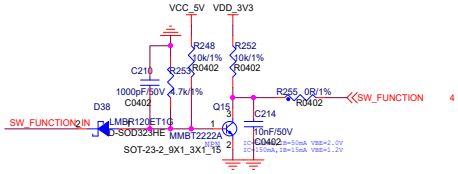


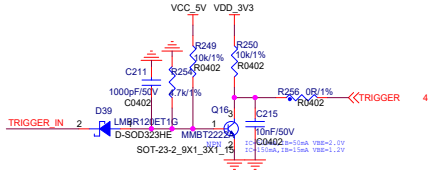
D73放在连接器旁

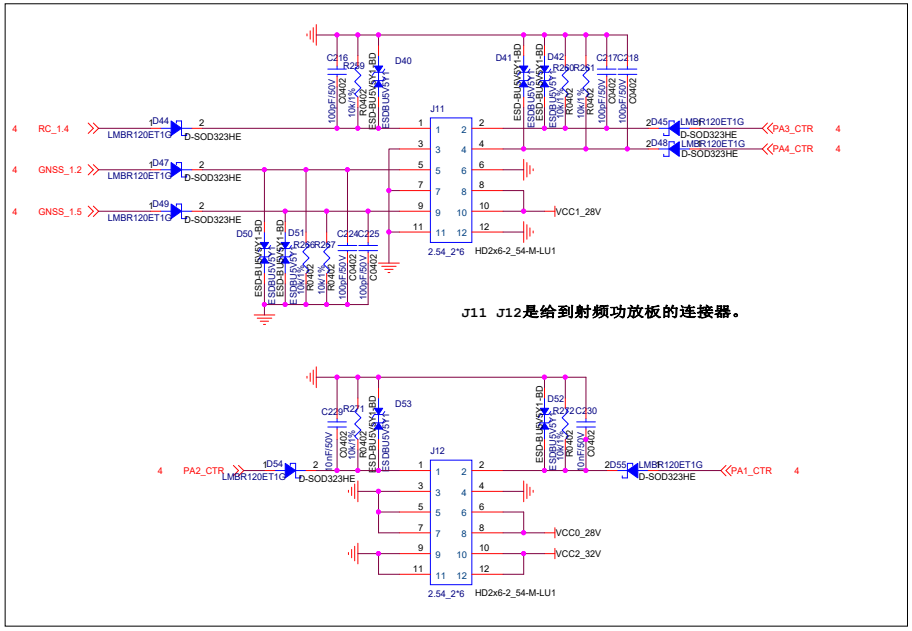






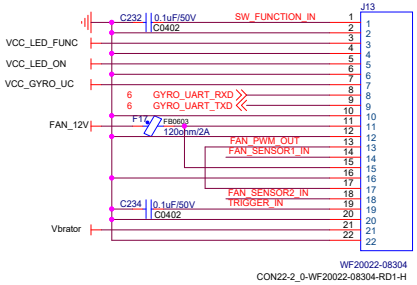


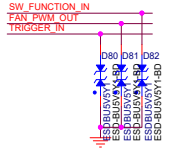


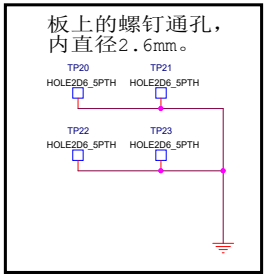


J11 J12是给到射频功放板的连接器。

板子对外的接口，用来接外设的，采用线束设计。







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