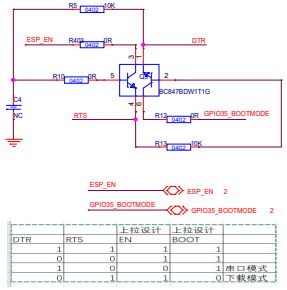
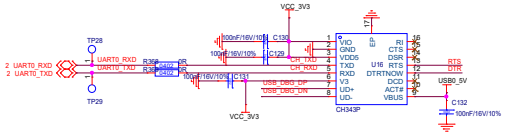
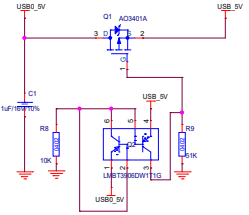
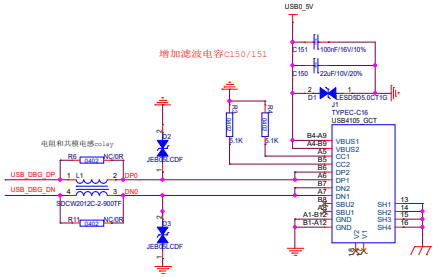
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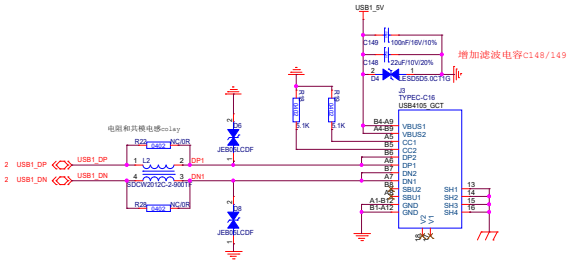
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上拉设计		上拉设计		
1	1	1	1	
0	0	1	1	
1	0	0	1	串口模式
0	1	1	0	下载模式

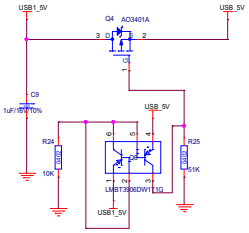




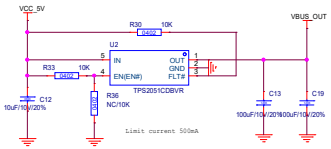


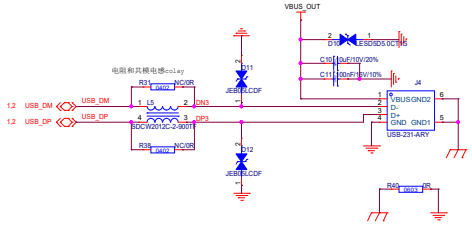
USB Full Speed Type-C & Power in:



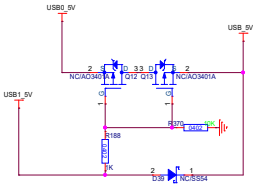


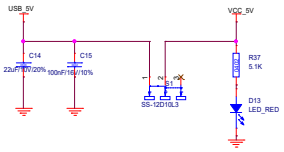
USB High Speed Type-A



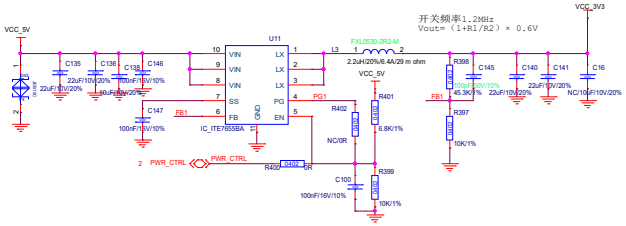


ON-OFF

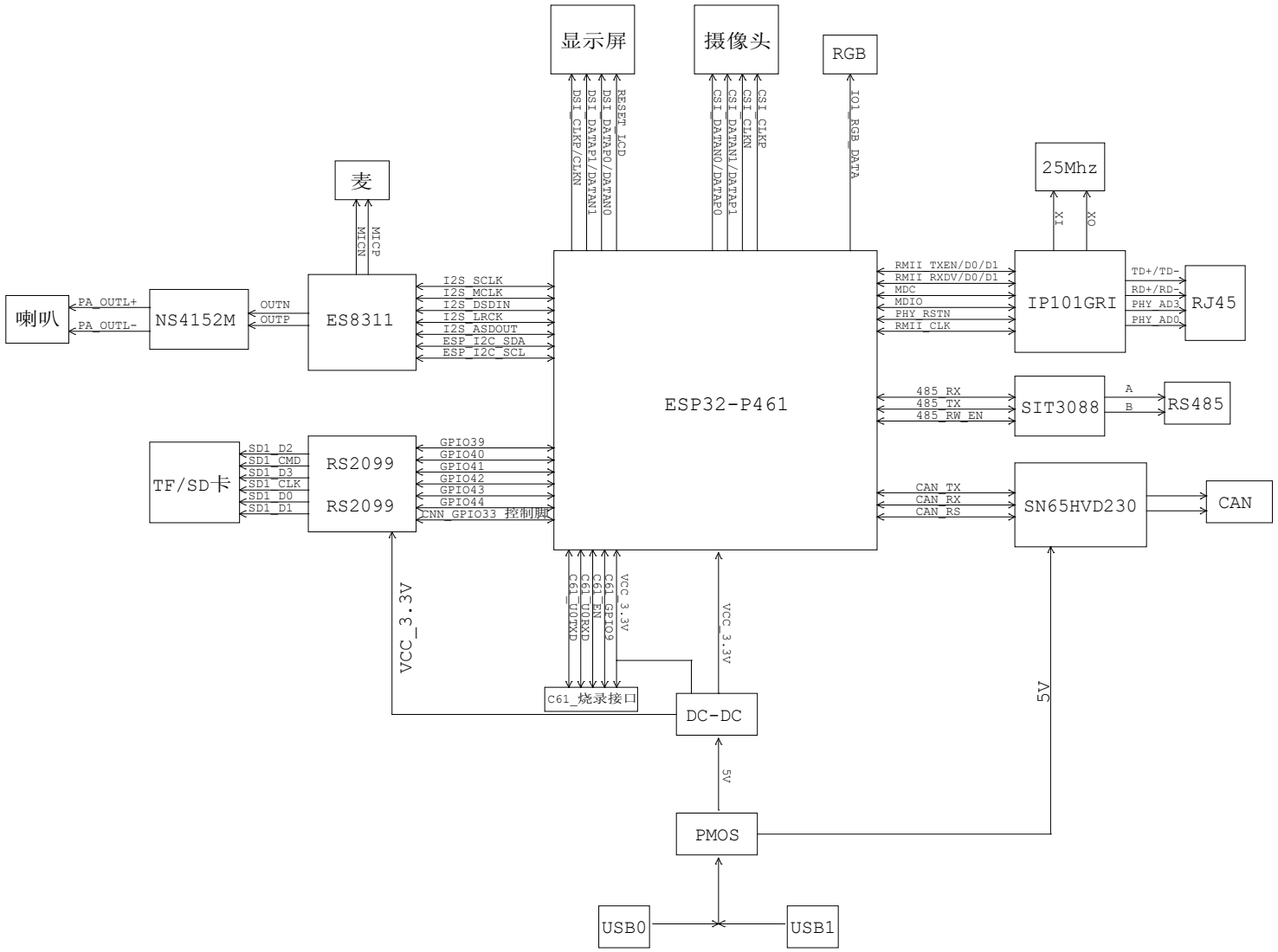


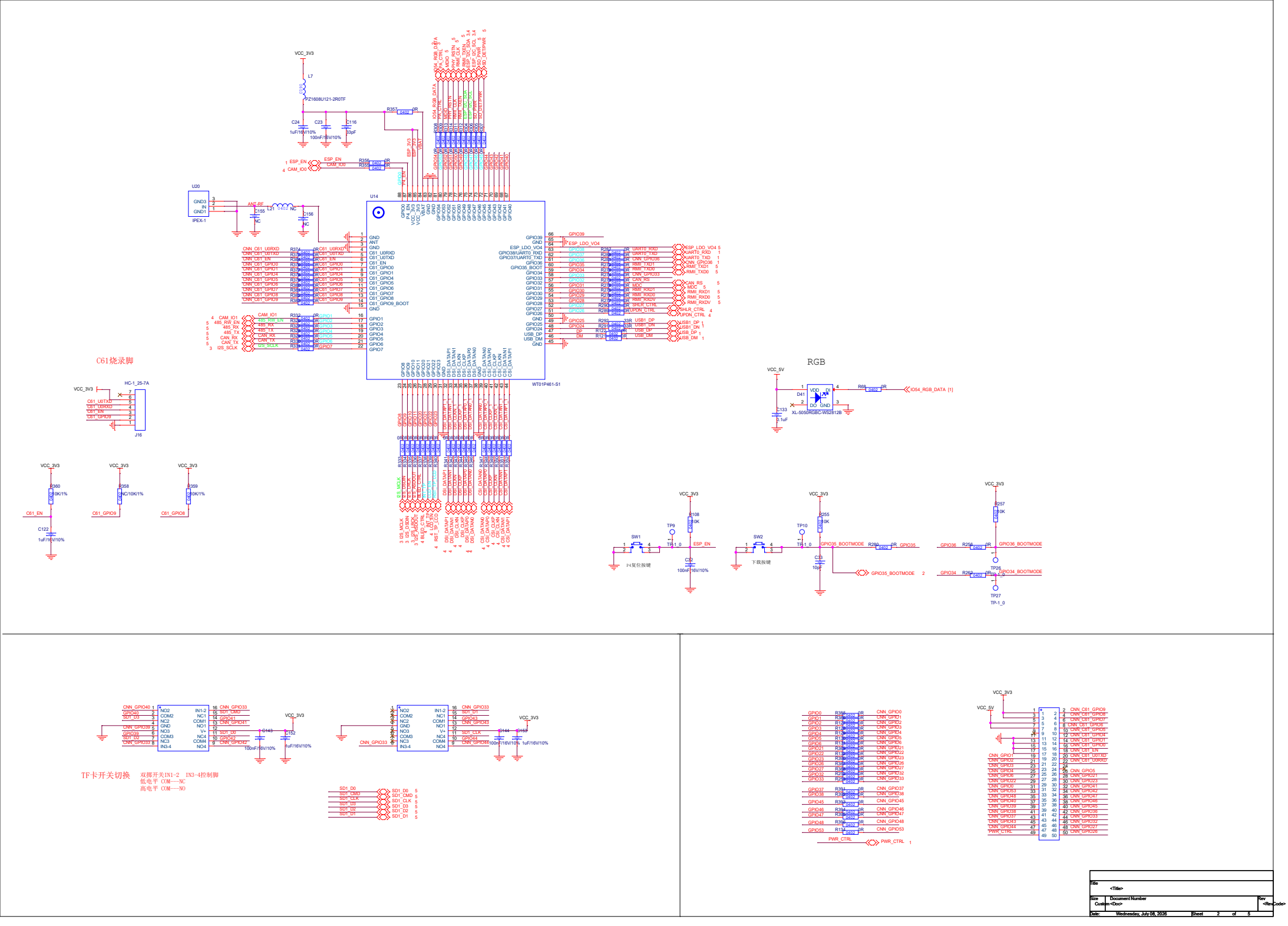


POWER DC-DC 3.3V

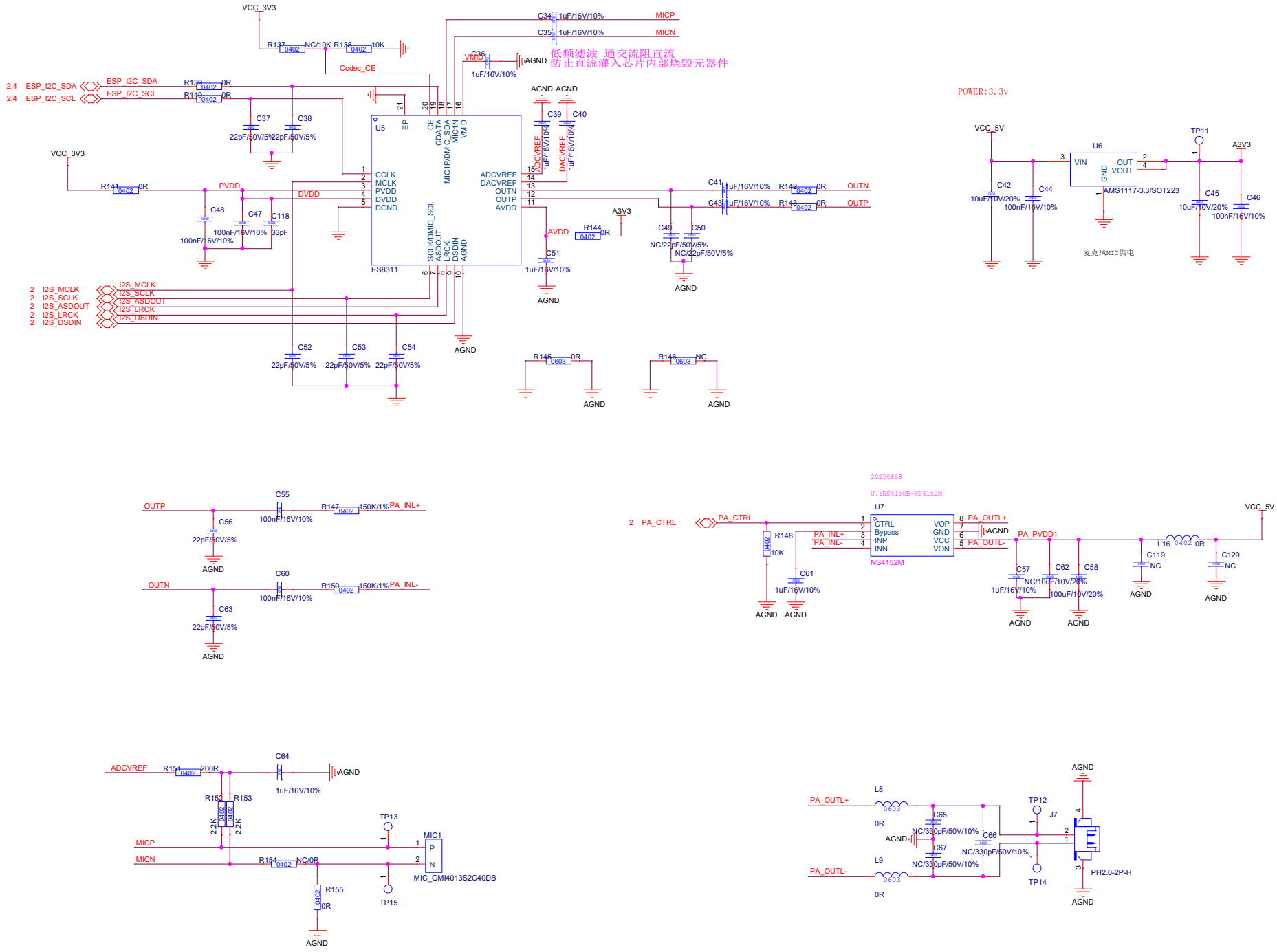


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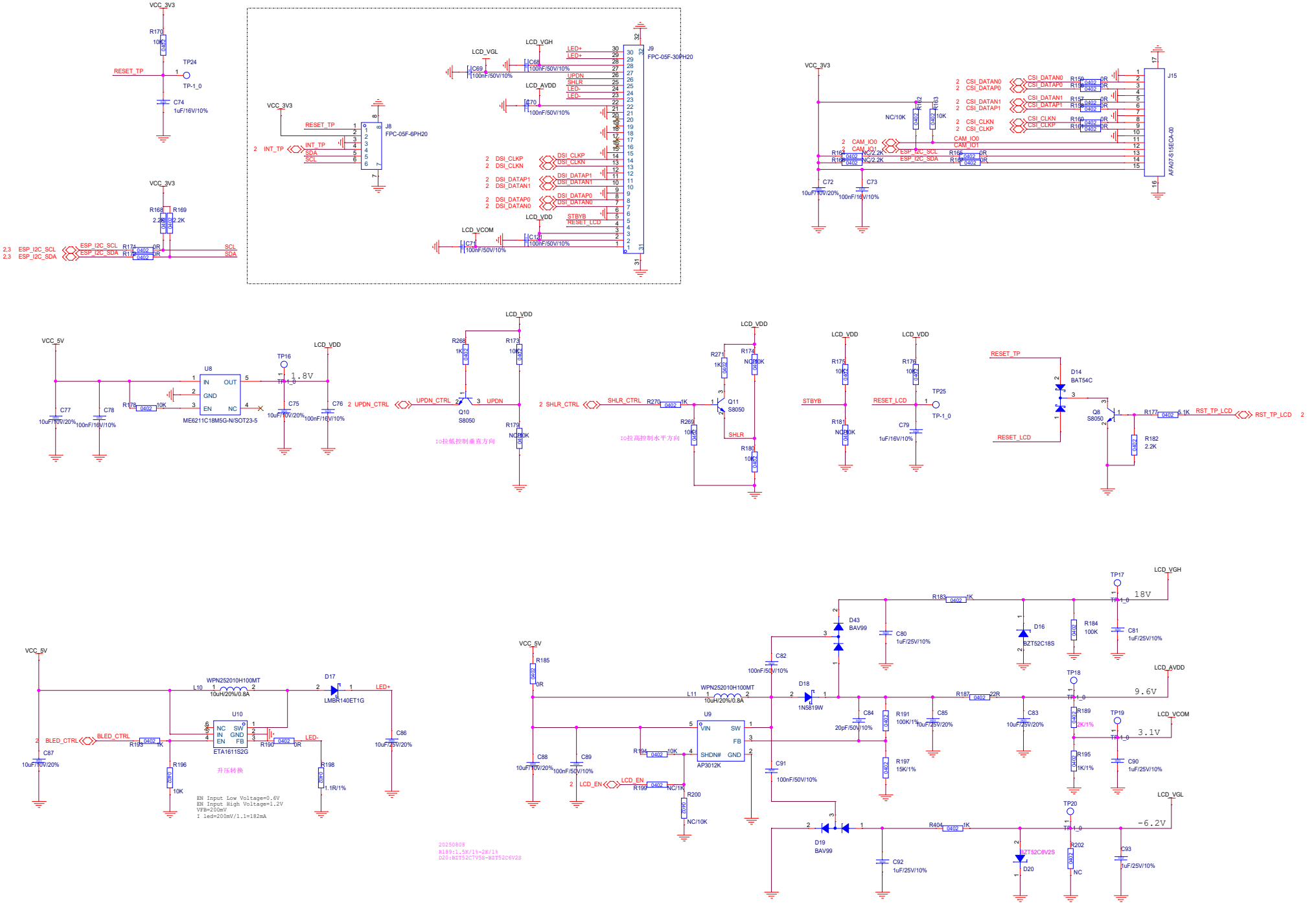

显示屏
摄像头
RGB
麦
25Mhz
喇叭
NS4152M
ES8311
ESP32-P461
IP101GRI
RJ45
SIT3088
RS485
TF/SD卡
RS2099
RS2099
SN65HVD230
CAN
C61_烧录接口
DC-DC
PMOS
USB0
USB1
DSI_CLKP/CLKN
DSI_DATAP1/DATAN1
DSI_DATAP0/DATAN0
RESET_LCD
CSI_DATAN0/DATAP0
CSI_DATAN1/DATAP1
CSI_CLKN
CSI_CLKP
IO1_RGB_DATA
MICN
MICP
PA_OUTL+
PA_OUTL-
OUTN
OUTP
I2S_SCLK
I2S_MCLK
I2S_DSDIN
I2S_LRCK
I2S_ASDOUT
ESP_I2C_SDA
ESP_I2C_SCL
RMII_TXEN/D0/D1
RMII_RXDV/D0/D1
MDC
MDIO
PHY_RSTN
RMII_CLK
XI
XO
TD+/TD-
RD+/RD-
PHY_AD3
PHY_AD0
485_RX
485_TX
485_RW_EN
A
B
CAN_TX
CAN_RX
CAN_RS
SD1_D2
SD1_CMD
SD1_D3
SD1_CLK
SD1_D0
SD1_D1
GPIO39
GPIO40
GPIO41
GPIO42
GPIO43
GPIO44
CNN_GPIO33_控制脚
C61_U0TXD
C61_U0RXD
C61_EN
C61_GPIO9
VCC_3.3V
VCC_3.3V
VCC_3.3V
5V
5V



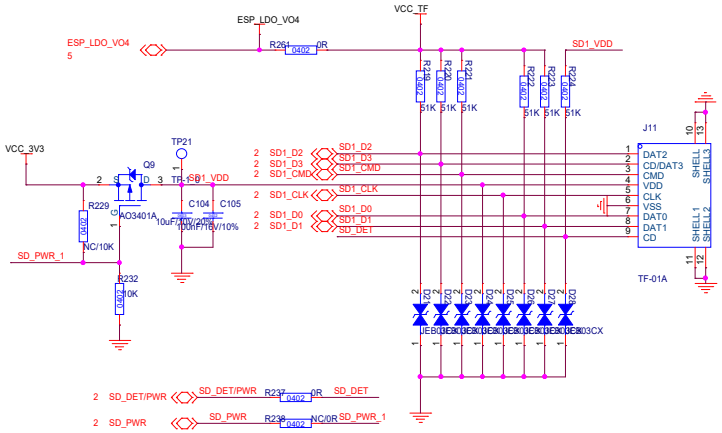
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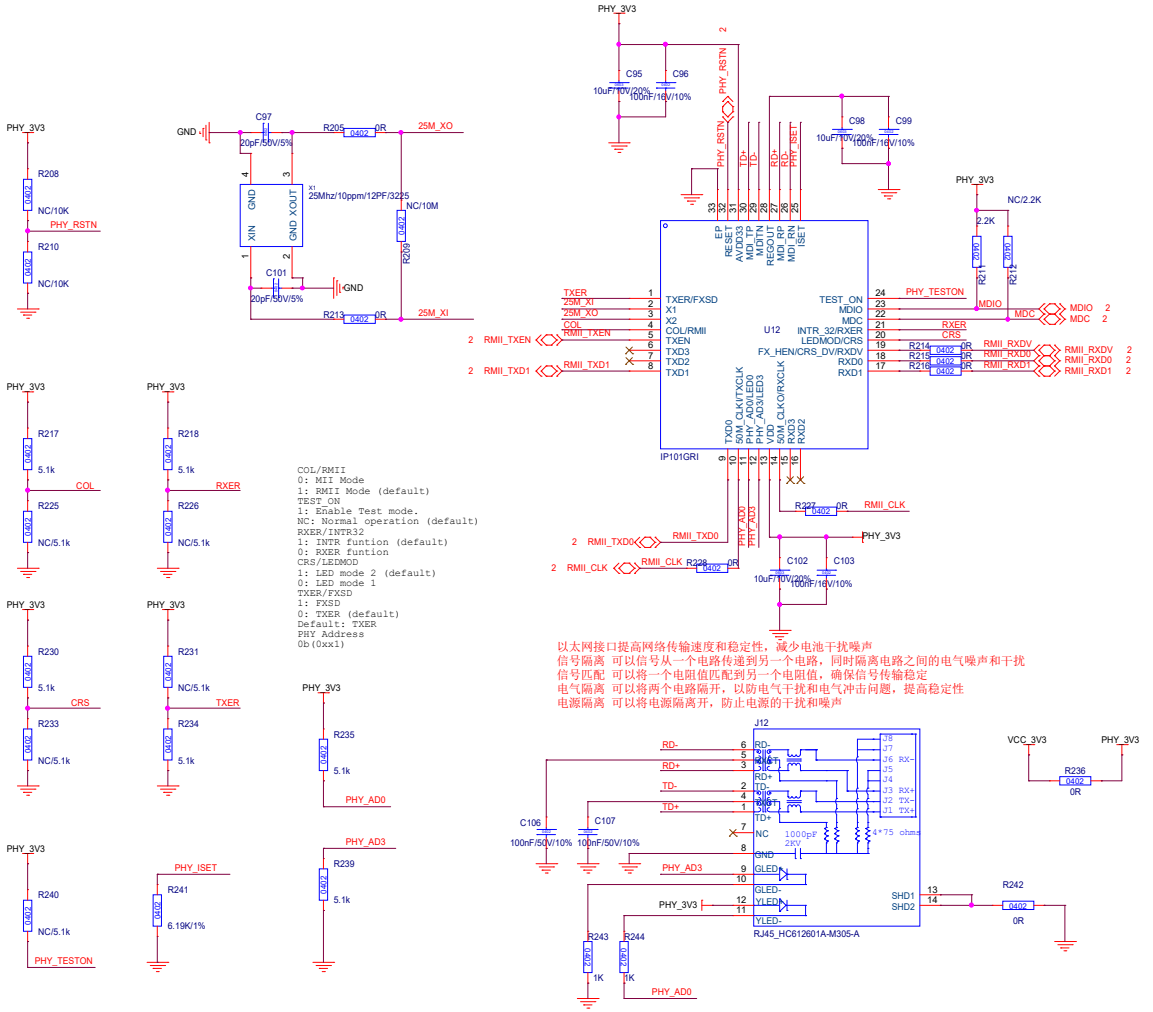
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VCC_3V3
R170
10K
RESET_TP
TP24
TP-1_0
C74
1uF/16V/10%
R168
2.2K
R169
2.2K
2,3 ESP_I2C_SCL
2,3 ESP_I2C_SDA
ESP_I2C_SCL
ESP_I2C_SDA
R171
R172
SCL
SDA
J8
FPC-05F-6PH20
2 INT_TP
INT_TP
SDA
SCL
LCD_VGH
LCD_VGL
LCD_AVDD
LCD_VDD
LCD_VCOM
C68
C69
C70
C71
C120
100nF/50V/10%
LED+
UPDN
SHLR
LED-
2 DSI_CLKP
2 DSI_CLKN
2 DSI_DATAP1
2 DSI_DATAN1
2 DSI_DATAP0
2 DSI_DATAN0
STBYB
RESET_LCD
J9
FPC-05F-30PH20
NC/10K
R152
R153
2 CSI_DATAN0
2 CSI_DATAP0
2 CSI_DATAN1
2 CSI_DATAP1
2 CSI_CLKN
2 CSI_CLKP
CSI_DATAN0
CSI_DATAP0
CSI_DATAN1
CSI_DATAP1
CSI_CLKN
CSI_CLKP
R159
R160
R157
R158
R155
R156
0R
2 CAM_IO0
2 CAM_IO1
CAM_IO0
CAM_IO1
R162
R163
NC/2.2K
ESP_I2C_SCL
ESP_I2C_SDA
R165
R166
J15
AFA07-S15ECA-00
C72
10uF/10V/20%
C73
100nF/16V/10%
VCC_5V
U8
IN
OUT
GND
EN
NC
ME6211C18M5G-N/SOT23-5
C77
10uF/10V/20%
C78
100nF/16V/10%
R178
10K
TP16
1.8V
TP-1_0
C75
10uF/10V/20%
C76
100nF/16V/10%
2 UPDN_CTRL
UPDN_CTRL
UPDN
Q10
S8050
R268
1K
R173
10K
R179
NC/10K
io拉低控制垂直方向
2 SHLR_CTRL
SHLR_CTRL
R270
Q11
S8050
R271
R174
NC/10K
R269
10K
SHLR
R180
10K
io拉高控制水平方向
R175
10K
STBYB
R181
NC/10K
R176
10K
RESET_LCD
TP25
C79
1uF/16V/10%
RESET_TP
D14
BAT54C
Q8
S8050
R177
5.1K
RST_TP_LCD
R182
2.2K
VCC_5V
WPN252010H100MT
L10
10uH/20%/0.8A
D17
LMBR140ET1G
LED+
U10
NC
SW
IN
GND
EN
FB
ETA1611S2G
2 BLED_CTRL
BLED_CTRL
R193
1K
LED-
R190
0R
C87
10uF/10V/20%
R196
10K
升压转换
R198
1.1R/1%
C86
10uF/25V/20%
EN Input Low Voltage=0.6V
EN Input High Voltage=1.2V
VFB=200mV
I led=200mV/1.1=182mA
R185
0R
WPN252010H100MT
L11
10uH/20%/0.8A
D18
1N5819W
C82
100nF/50V/10%
C84
20pF/50V/10%
C88
10uF/10V/20%
C89
100nF/50V/10%
U9
VIN
SW
FB
SHDN#
GND
AP3012K
R194
10K
LCD_EN
R199
NC/1K
R200
NC/10K
C91
100nF/50V/10%
D43
BAV99
C80
1uF/25V/10%
R183
1K
D16
BZT52C18S
R184
100K
C81
1uF/25V/10%
TP17
18V
TP18
9.6V
R187
22R
R191
100K/1%
C85
10uF/25V/20%
C83
10uF/25V/20%
R189
2K/1%
TP19
3.1V
R197
15K/1%
R195
1K/1%
C90
1uF/25V/10%
D19
BAV99
R404
1K
TP20
-6.2V
C92
1uF/25V/10%
BZT52C6V2S
D20
R202
NC
C93
1uF/25V/10%
20250808
R189:1.5K/1%-2K/1%
D20:BZT52C7V5B-BZT52C6V2B
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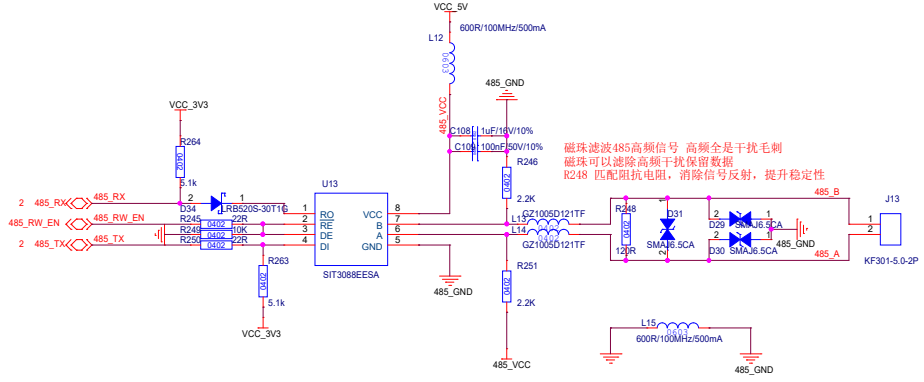
RJ45



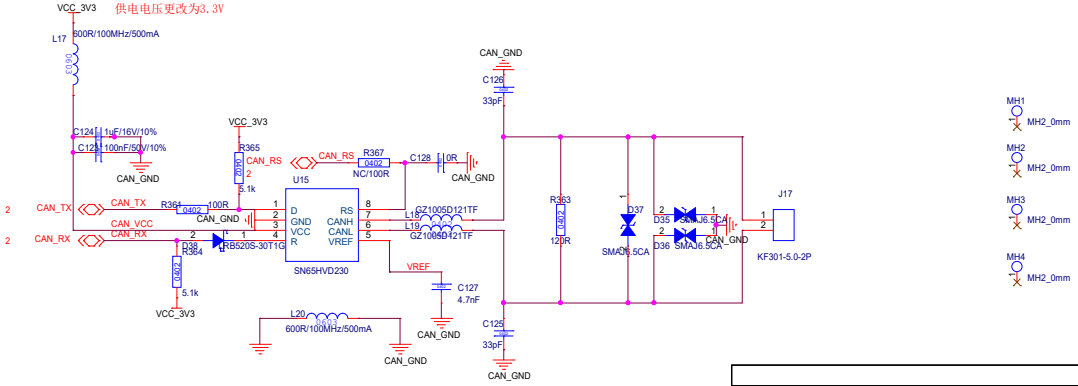
COL/RMII
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1: RMII Mode (default)
TEST_ON
1: Enable Test mode.
NC: Normal operation (default)
RXER/INTR32
1: INTR funtion (default)
0: RXER funtion
CRS/LEDMOD
1: LED mode 2 (default)
0: LED mode 1
TXER/FXSD
1: FXSD
0: TXER (default)
Default: TXER
PHY Address
0b(0xx1)

以太网接口提高网络传输速度和稳定性，减少电池干扰噪声
信号隔离 可以信号从一个电路传递到另一个电路，同时隔离电路之间的电气噪声和干扰
信号匹配 可以将一个电阻值匹配到另一个电阻值，确保信号传输稳定
电气隔离 可以将两个电路隔开，以防电气干扰和电气冲击问题，提高稳定性
电源隔离 可以将电源隔离开，防止电源的干扰和噪声

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CAN



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