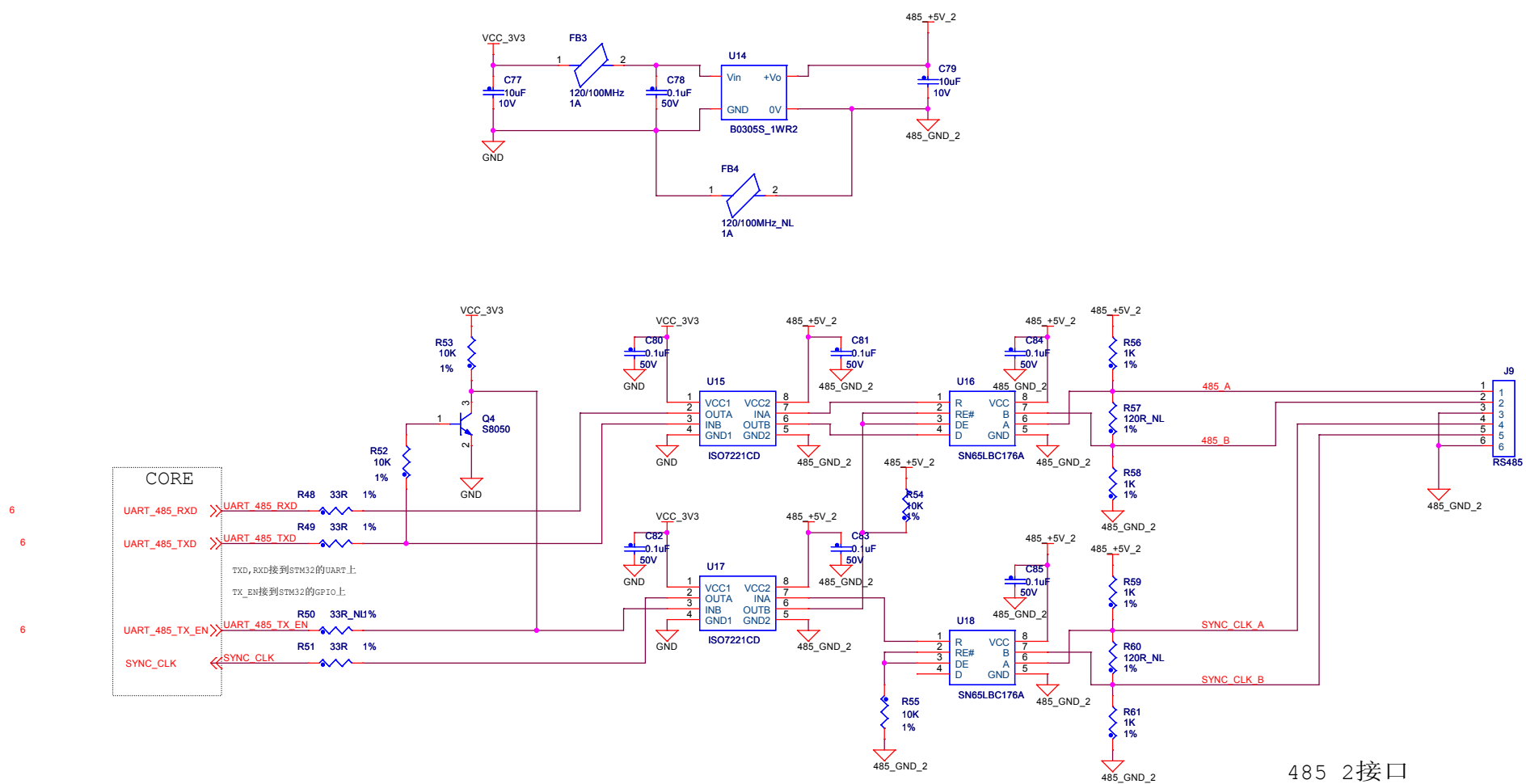


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RS232			
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RS485		
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Beijing Time Winner Tech., Co., Ltd.

时差法超声波流量仪水下主控模块

Version: 1.0

Designer: Zheng

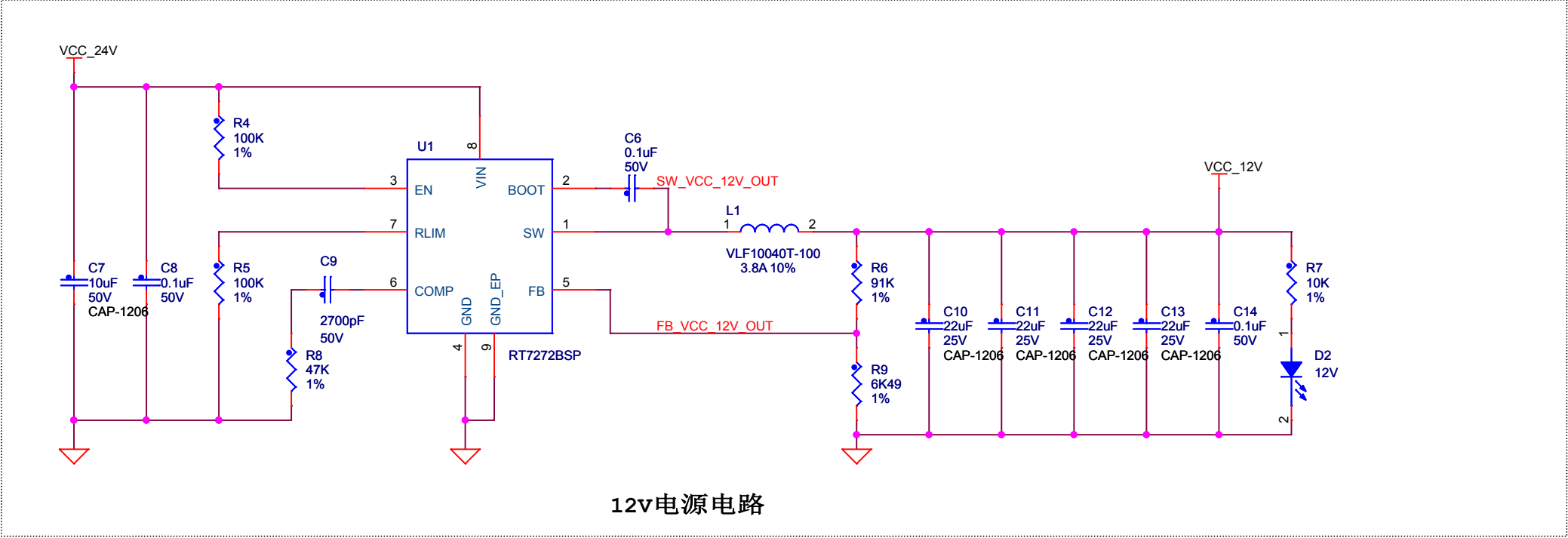
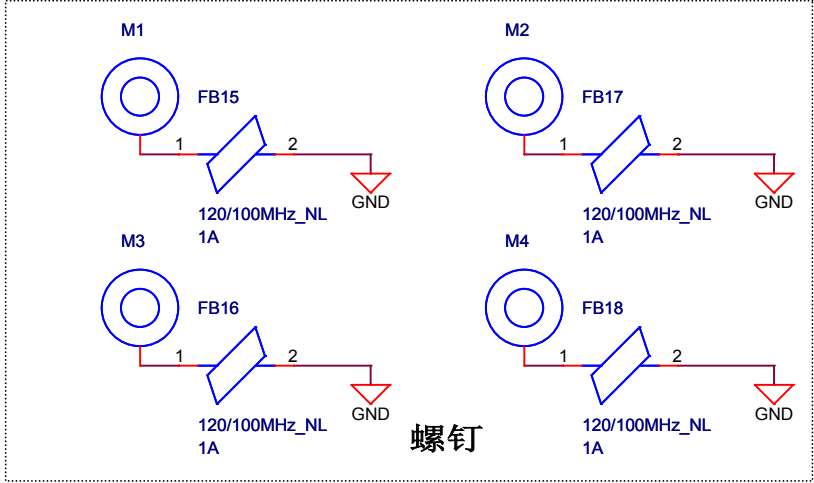
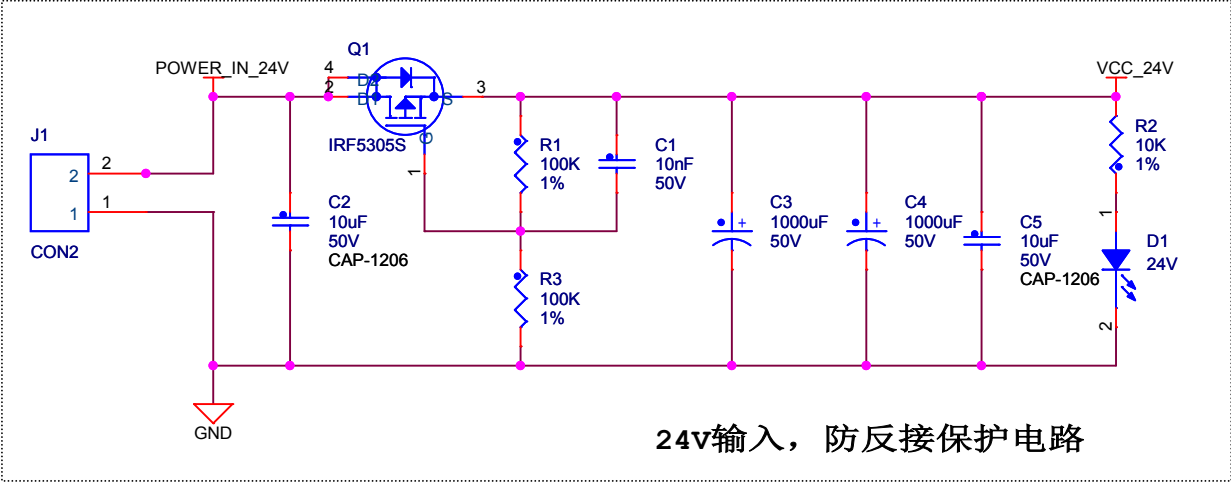
2017.01.22

Revision History

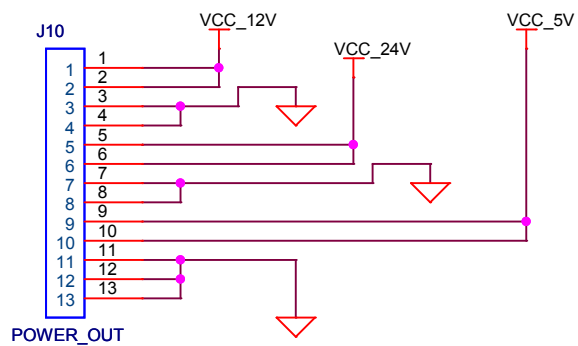
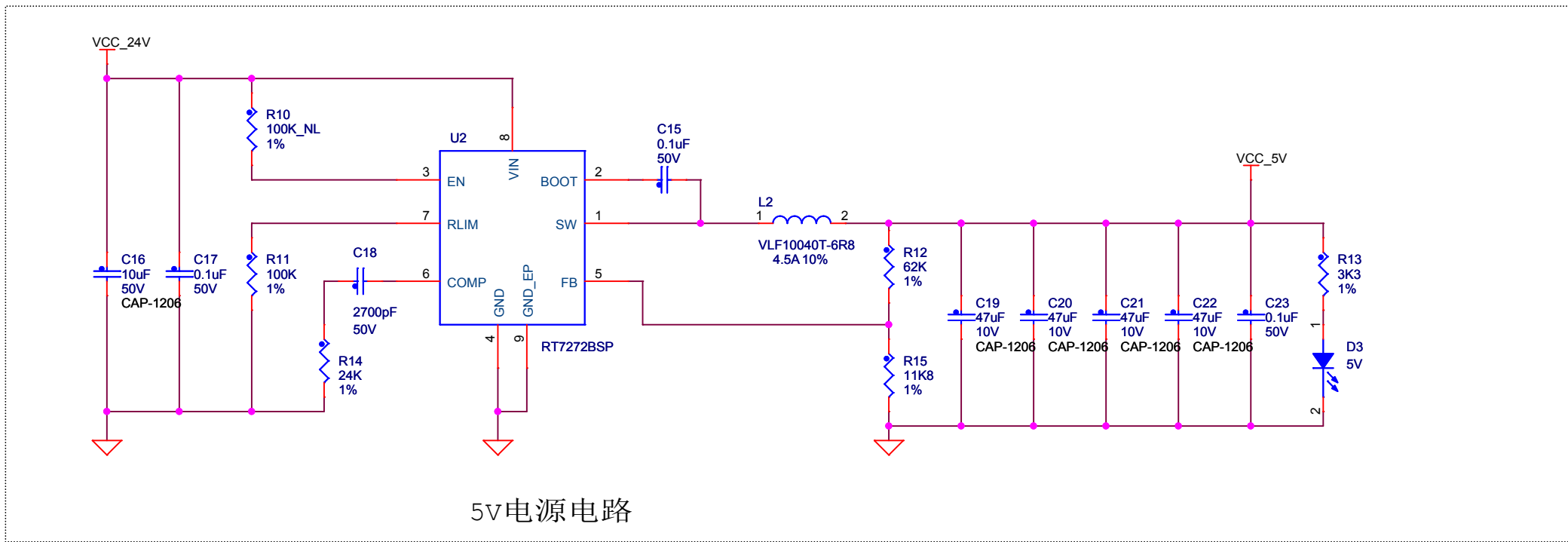
Revision No	Description of Change	Author(s)	Date
1.0	Designed the Basic Circuit Function Base on Requirement of Fudao	Zheng	2017.01.22

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07	CPLD_SPI
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09	SENSOR_9AXIS_TEMP_LEAK
10	RS232
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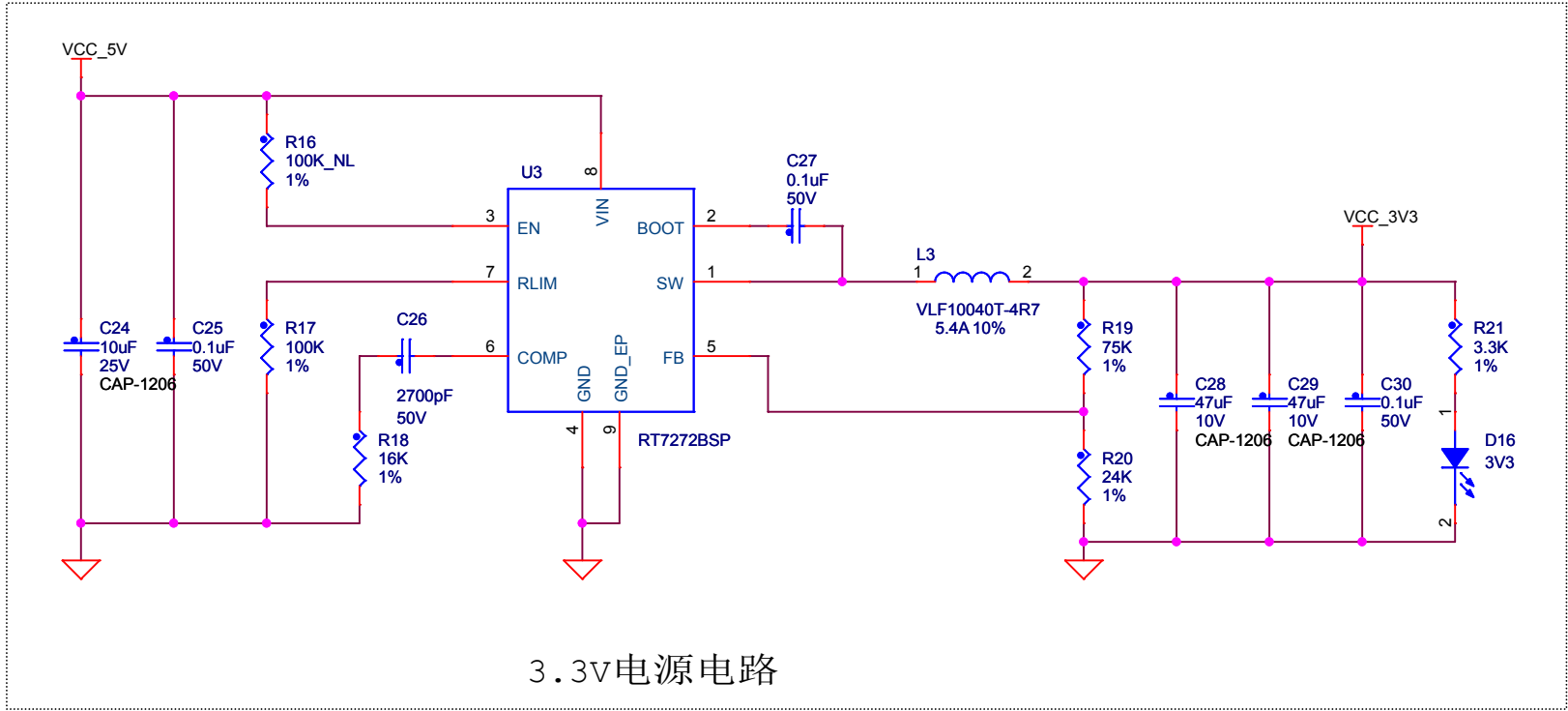
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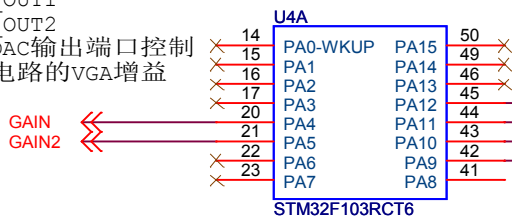


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POWER_5V_OUT		
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20/PA4/DAC\_OUT1  
21/PA5/DAC\_OUT2  
STM32的2个DAC输出端口控制  
超声波接收电路的VGA增益



45/PA12  
STM32的GPIO连接温度  
传感器DS18B20的数据线

TEMP\_DATA

UART\_485\_TX\_EN

UART\_232\_RXD  
UART\_232\_TXD

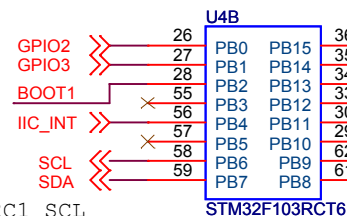
42/USART1\_TX  
43/USART1\_RX  
STM32的串口1, 232接口

34/PB13/SPI2\_SCK  
35/PB14/SPI2\_MISO  
36/PB15/SPI1\_MOSI  
STM32的SPI2和CPLD通信

MOSI  
MISO  
SCLK

TP3  
TP2  
TP1

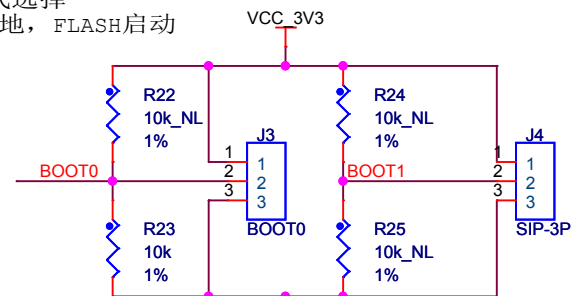
29/TP1  
30/TP2  
33/TP3



58/PB6/I2C1\_SCL  
59/PB7/I2C1\_SDA  
56/PB4/INT  
I2C1连接6轴传感器的串口

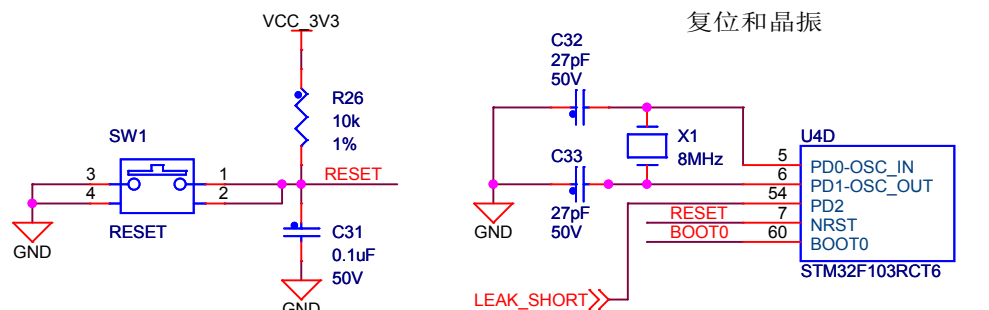
启动模式选择

BOOT0接地, FLASH启动

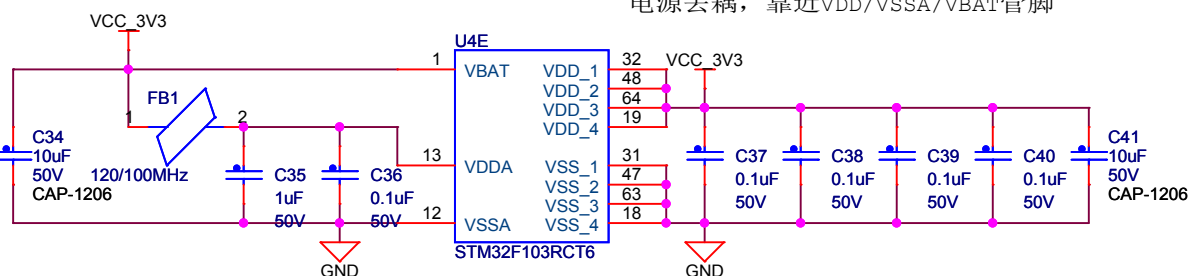


J10/J11跳线帽, 用于下载代码  
调试时R31/R32/R33/R34不焊

复位和晶振



电源去耦, 靠近VDD/VSSA/VBAT管脚



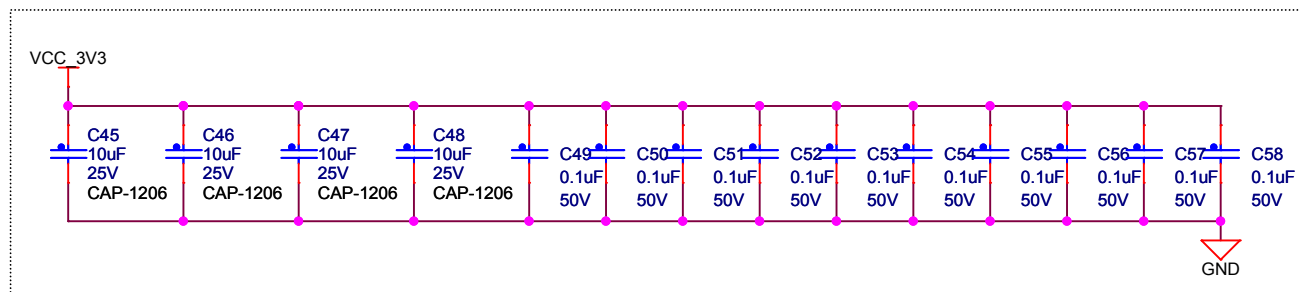
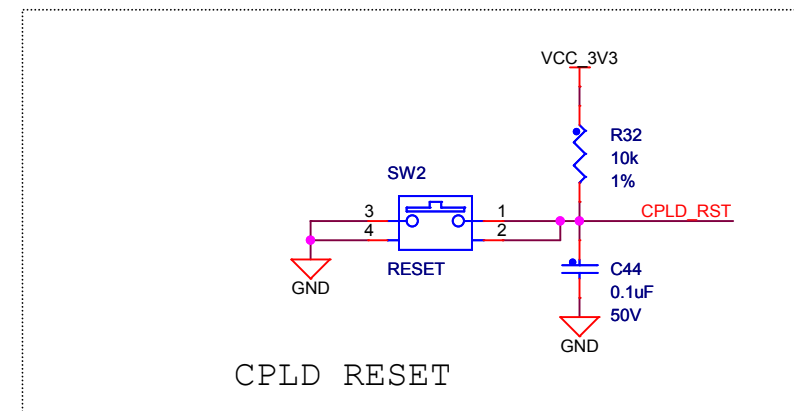
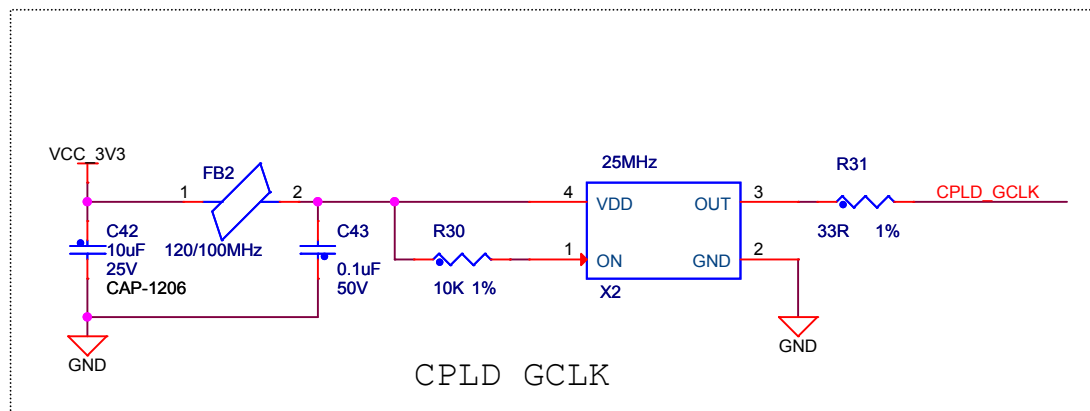
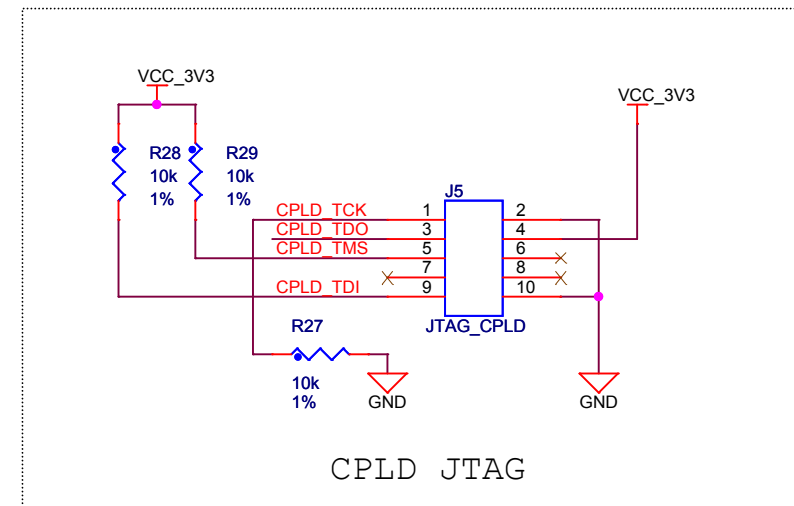
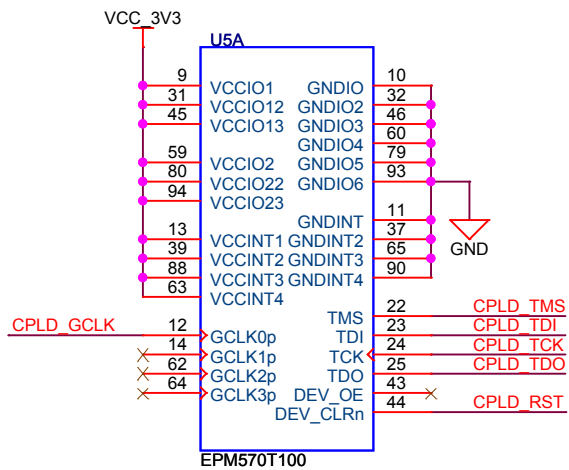
53/PC12-开路检测  
54/PD2-短路检测  
STM32的GPIO连接漏水  
传感器的开路和短路测试点

LEAK\_OPEN

UART\_485\_RXD  
UART\_485\_TXD

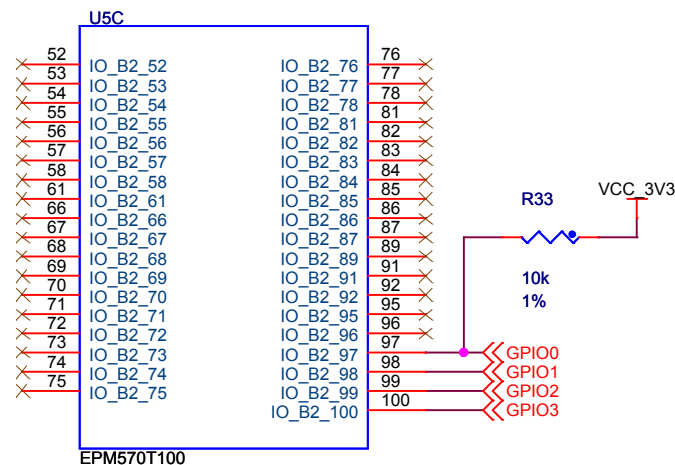
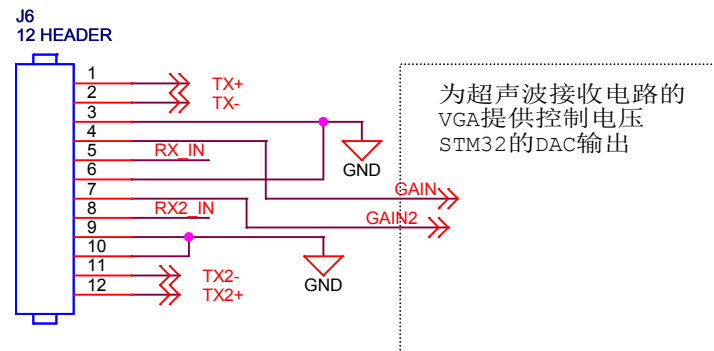
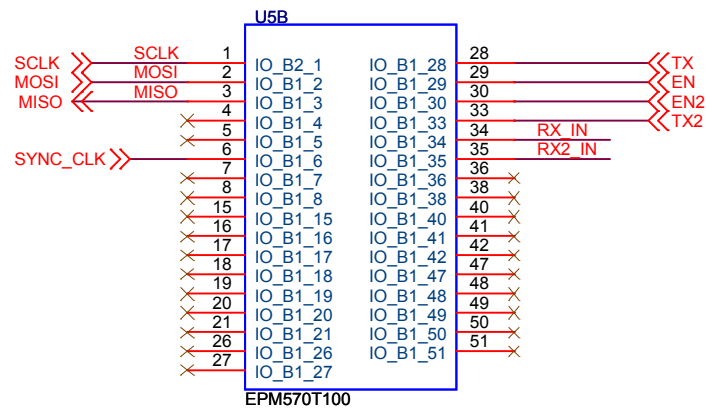
51/PC10/USART4\_TX  
52/PC11/USART4\_RX  
44/PA11, 用作发送使能信号  
STM32的串口4和水上RS485接口通信

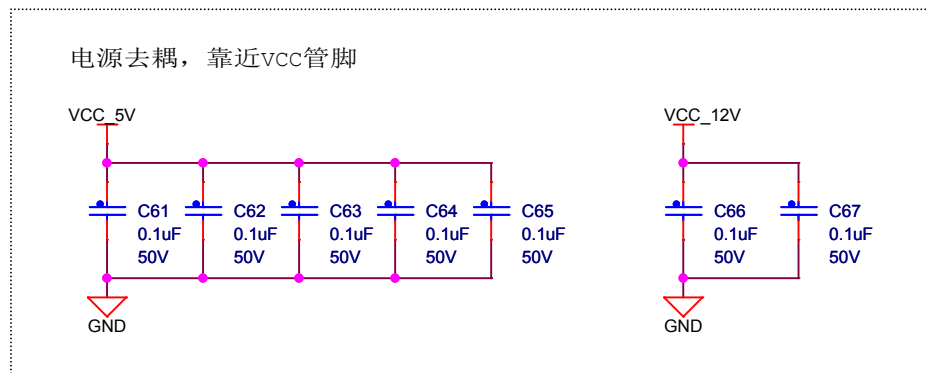
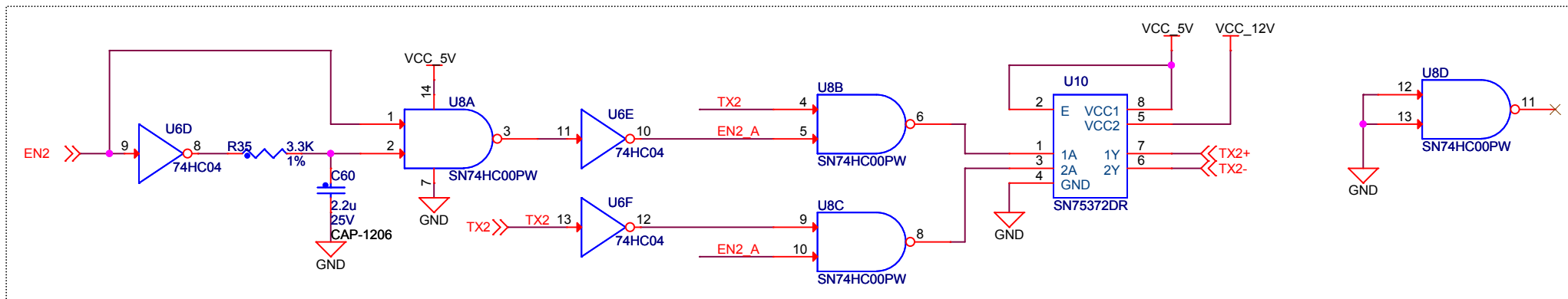
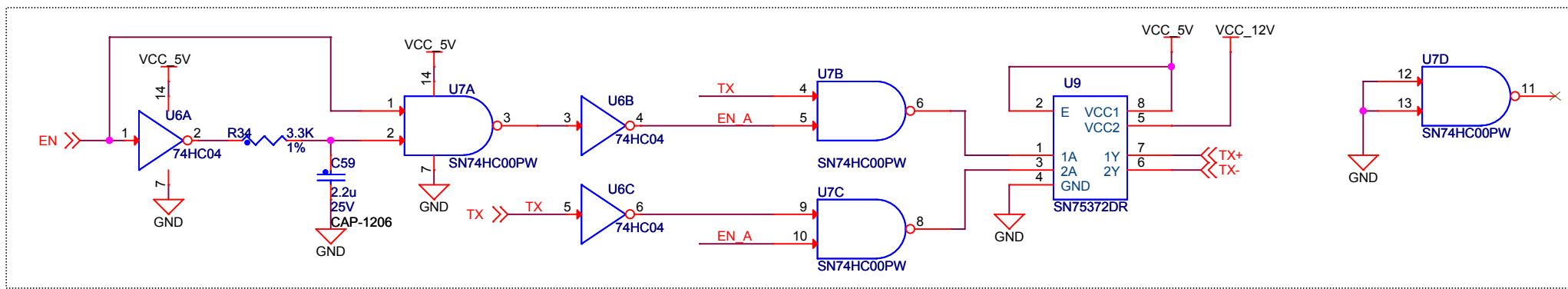
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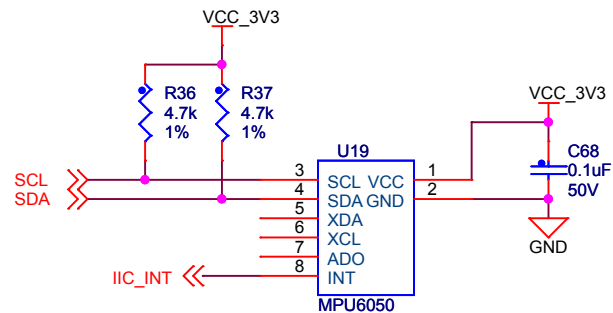
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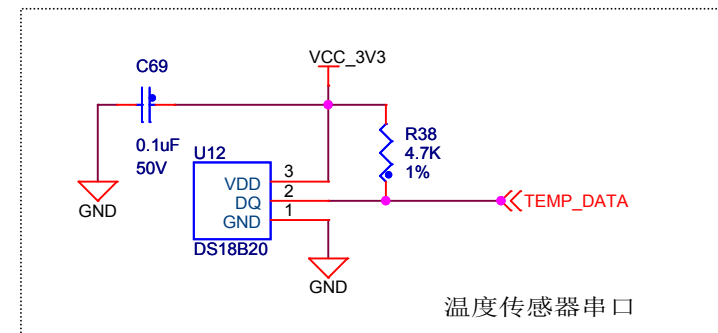




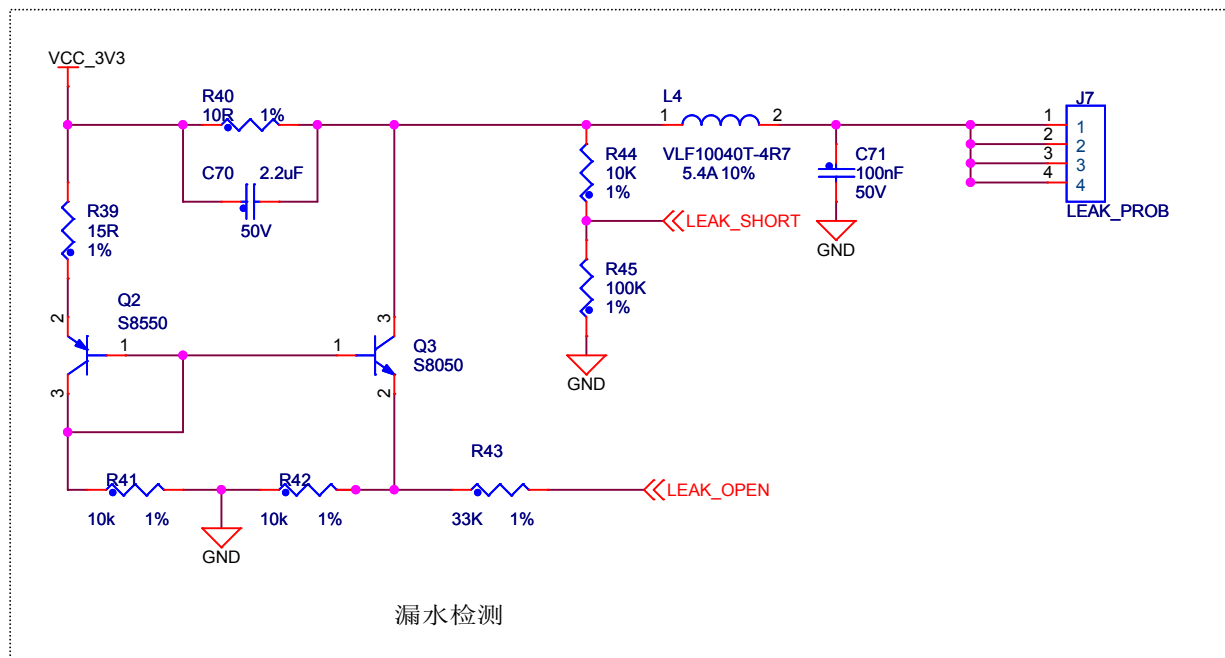
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6轴传感器串口



温度传感器串口



漏水检测

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SENSOR_9AXIS_TEMP_LEAK		
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