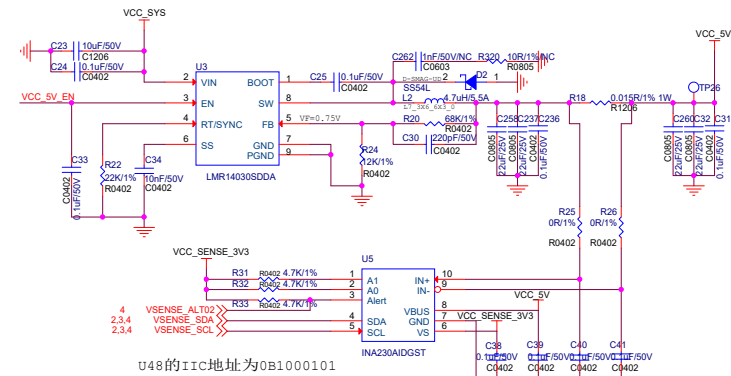
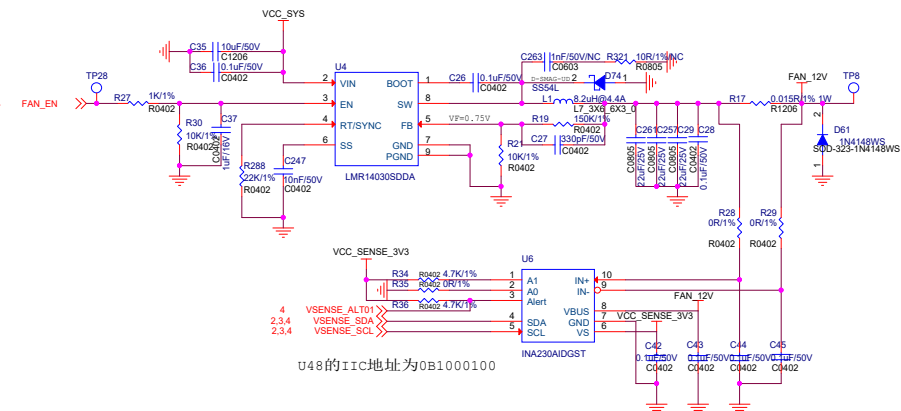
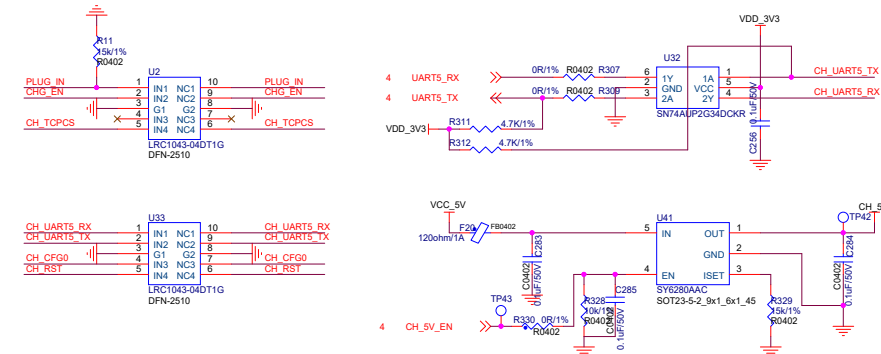
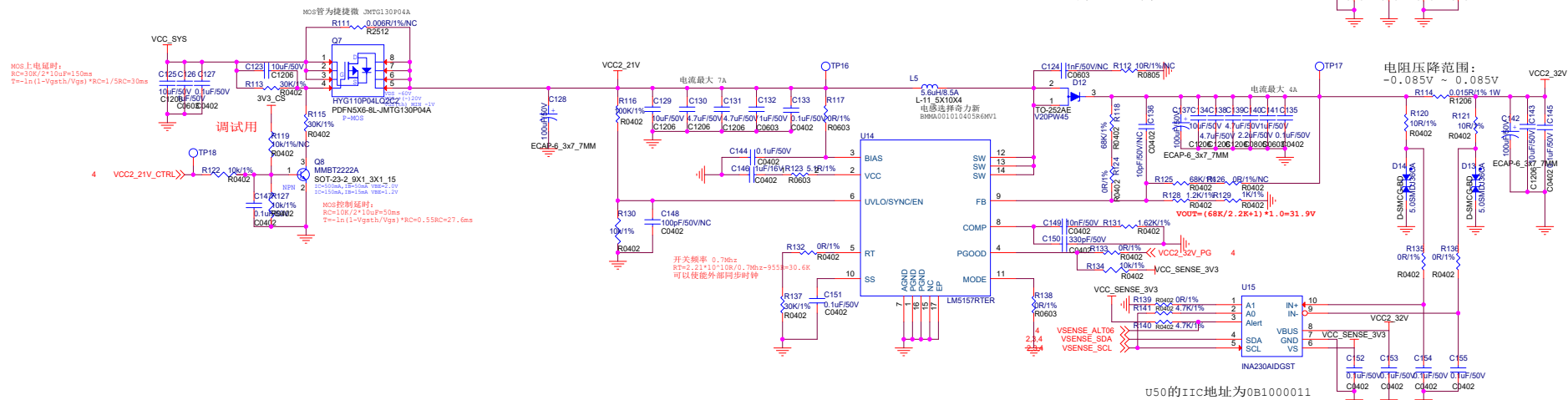
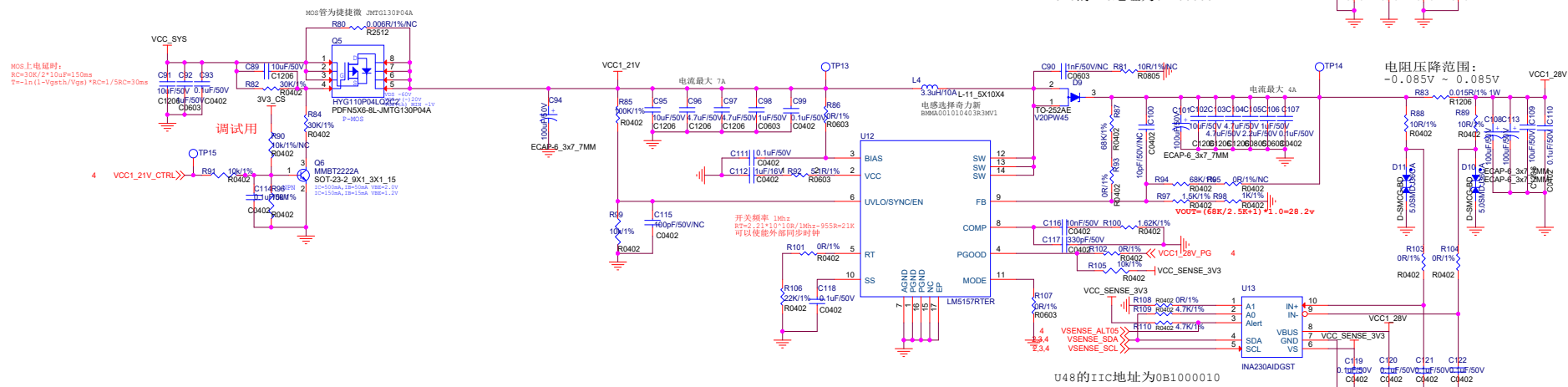
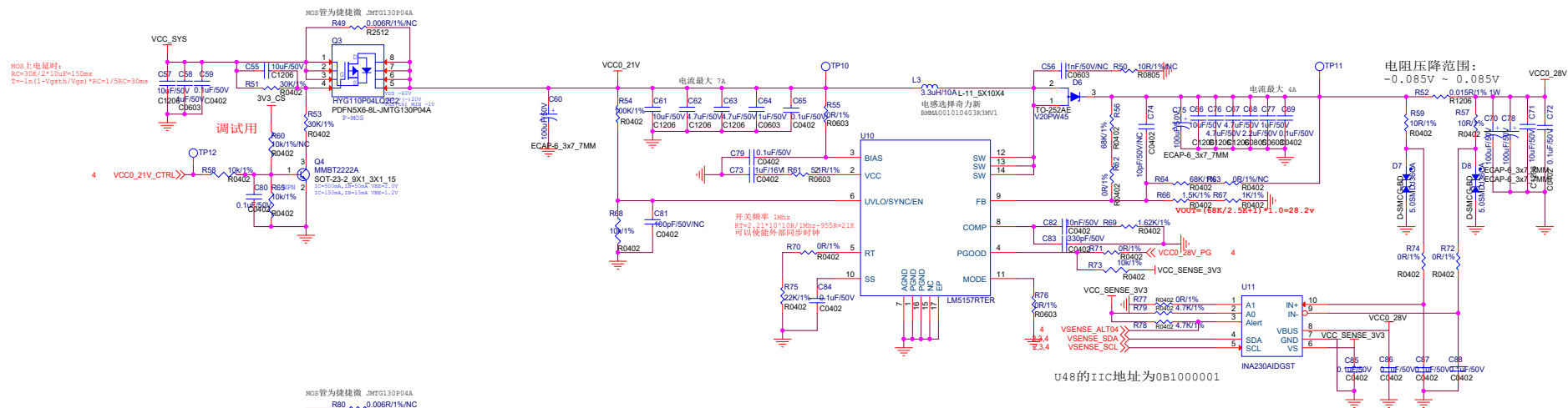
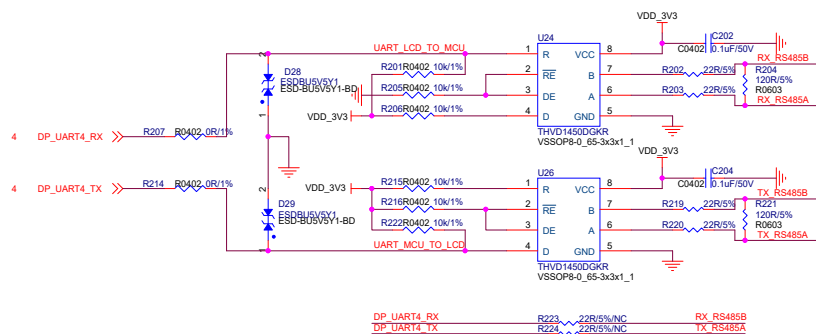
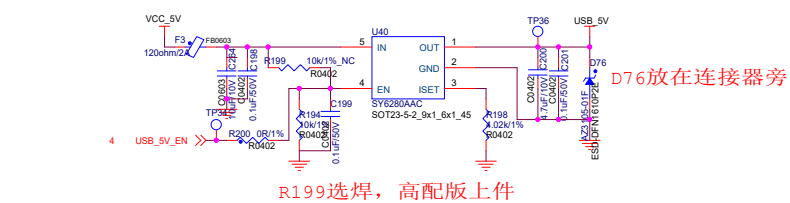


电压范围: 28.5±0.5V 12A  
20.0-25.2V

[illegible]







The schematic diagram illustrates the temperature sensor circuit. It consists of three main parts:

- Top Left:** A temperature sensor (J8, A1257WR-SP-80) is connected to VDD\_3V3 and ground. The output is labeled TempADC0.
- Top Right:** A temperature sensor (J10, A1257WR-SP-80) is connected to VDD\_3V3 and ground. The output is labeled TempADC1.
- Bottom:** A temperature sensor (U30, TL431BQDR) is connected to VDD\_3V3 and ground. The output is labeled ADC\_REF.

此处电阻做叠焊盘设计

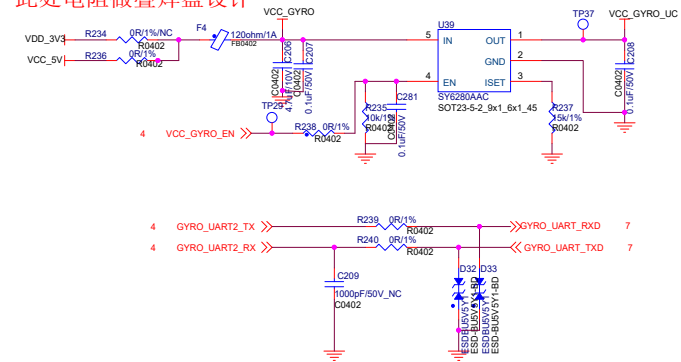


Figure 10 shows the pin connections for the WS12-1P-LCP module. The diagram is divided into two main sections, each representing a module with its own pin headers and internal connections.

**Left Module (WS12-1P-LCP):**

- Pin Header 1 (Left):** 1 (GNSS\_IN\_LED), 2 (Error\_LED), 3 (GNSS\_LED), 4 (Normal\_LED), 5 (GNSS\_LED), 6 (GNSS\_LED), 7 (GNSS\_LED), 8 (Red\_LED1), 9 (GND), 10 (COM), 11 (VDD\_3V3), 12 (VCC\_5V), 13 (GND), 14 (GND).
- Pin Header 2 (Right):** 1 (GNSS\_S\_LED), 2 (Error\_S\_LED), 3 (GNSS\_H\_LED), 4 (Normal\_H\_LED), 5 (GNSS\_H\_LED), 6 (GNSS\_H\_LED), 7 (GNSS\_H\_LED), 8 (Red\_S\_LED), 9 (GND), 10 (COM), 11 (VDD\_3V3), 12 (VCC\_5V), 13 (GND), 14 (GND).
- Internal Connections:**
  - Pin 1 (GNSS\_IN\_LED) to Pin 1 (GNSS\_S\_LED)
  - Pin 2 (Error\_LED) to Pin 2 (Error\_S\_LED)
  - Pin 3 (GNSS\_LED) to Pin 3 (GNSS\_H\_LED)
  - Pin 4 (Normal\_LED) to Pin 4 (Normal\_H\_LED)
  - Pin 5 (GNSS\_LED) to Pin 5 (GNSS\_H\_LED)
  - Pin 6 (GNSS\_LED) to Pin 6 (GNSS\_H\_LED)
  - Pin 7 (GNSS\_LED) to Pin 7 (GNSS\_H\_LED)
  - Pin 8 (Red\_LED1) to Pin 8 (Red\_S\_LED)
  - Pin 9 (GND) to Pin 9 (GND)
  - Pin 10 (COM) to Pin 10 (COM)
  - Pin 11 (VDD\_3V3) to Pin 11 (VDD\_3V3)
  - Pin 12 (VCC\_5V) to Pin 12 (VCC\_5V)
  - Pin 13 (GND) to Pin 13 (GND)
  - Pin 14 (GND) to Pin 14 (GND)

**Right Module (WS12-1P-LCP):**

- Pin Header 1 (Left):** 1 (GNSS\_IN\_LED), 2 (Error\_LED), 3 (GNSS\_LED), 4 (Normal\_LED), 5 (GNSS\_LED), 6 (GNSS\_LED), 7 (GNSS\_LED), 8 (Red\_LED1), 9 (GND), 10 (COM), 11 (VDD\_3V3), 12 (VCC\_5V), 13 (GND), 14 (GND).
- Pin Header 2 (Right):** 1 (GNSS\_S\_LED), 2 (Error\_S\_LED), 3 (GNSS\_H\_LED), 4 (Normal\_H\_LED), 5 (GNSS\_H\_LED), 6 (GNSS\_H\_LED), 7 (GNSS\_H\_LED), 8 (Red\_S\_LED), 9 (GND), 10 (COM), 11 (VDD\_3V3), 12 (VCC\_5V), 13 (GND), 14 (GND).
- Internal Connections:**
  - Pin 1 (GNSS\_IN\_LED) to Pin 1 (GNSS\_S\_LED)
  - Pin 2 (Error\_LED) to Pin 2 (Error\_S\_LED)
  - Pin 3 (GNSS\_LED) to Pin 3 (GNSS\_H\_LED)
  - Pin 4 (Normal\_LED) to Pin 4 (Normal\_H\_LED)
  - Pin 5 (GNSS\_LED) to Pin 5 (GNSS\_H\_LED)
  - Pin 6 (GNSS\_LED) to Pin 6 (GNSS\_H\_LED)
  - Pin 7 (GNSS\_LED) to Pin 7 (GNSS\_H\_LED)
  - Pin 8 (Red\_LED1) to Pin 8 (Red\_S\_LED)
  - Pin 9 (GND) to Pin 9 (GND)
  - Pin 10 (COM) to Pin 10 (COM)
  - Pin 11 (VDD\_3V3) to Pin 11 (VDD\_3V3)
  - Pin 12 (VCC\_5V) to Pin 12 (VCC\_5V)
  - Pin 13 (GND) to Pin 13 (GND)
  - Pin 14 (GND) to Pin 14 (GND)

The diagram illustrates the wiring for the WS12-1P-LCP module, showing the connection of various LEDs and power pins. The module is connected to a common power supply, and the connections are as follows:

- Pin 1 (GNSS\_IN\_LED) to Pin 1 (GNSS\_S\_LED)
- Pin 2 (Error\_LED) to Pin 2 (Error\_S\_LED)
- Pin 3 (GNSS\_LED) to Pin 3 (GNSS\_H\_LED)
- Pin 4 (Normal\_LED) to Pin 4 (Normal\_H\_LED)
- Pin 5 (GNSS\_LED) to Pin 5 (GNSS\_H\_LED)
- Pin 6 (GNSS\_LED) to Pin 6 (GNSS\_H\_LED)
- Pin 7 (GNSS\_LED) to Pin 7 (GNSS\_H\_LED)
- Pin 8 (Red\_LED1) to Pin 8 (Red\_S\_LED)
- Pin 9 (GND) to Pin 9 (GND)
- Pin 10 (COM) to Pin 10 (COM)
- Pin 11 (VDD\_3V3) to Pin 11 (VDD\_3V3)
- Pin 12 (VCC\_5V) to Pin 12 (VCC\_5V)
- Pin 13 (GND) to Pin 13 (GND)
- Pin 14 (GND) to Pin 14 (GND)

VDD\_3V3

R297 1K1% R402

FAN\_SENSORS3\_IN

R298 1K1% R402

FAN\_SENSORS3

D57 ESD-BUSVSY-BD

VDD\_3V3

R299 2310S-01F 1K1% R402

SW\_ADC3

VDD\_3V3

R349 R402 4.99K/1% R344 R402 100K/1% AD2

F15 F16 F6803

TempADC2

R300 120ohm/2A R301 120ohm/2A

70K/1% FAN1\_PWM\_IN

FAN1\_PWM\_OUT

D70 ESD-BUSVSY-BD

R346 4.99K/1% R402

WR-S10P-LCP CON10-1\_25-A1257WR-S-XP-L1

VCC\_5V

F15 F8003 R304 1K1% R305 0R/1% FAN1\_PWM\_OUT

120ohm/2A

R306 0R/1% R402

FAN1\_PWM

Q28 LMUN5211T1G

SOT323-LMUN5211T1G

U31

GPIO_VCM4	1	IN1	NC1	10	GPIO_VCM4
GPIO_VCM5	2	IN2	NC2	9	GPIO_VCM5
SW_ADC3	3	Q1	GS	8	SW_ADC3
AD2	4	IN3	NC3	7	AD2
	5	IN4	NC4	6	

LRC1043 DMT1G

DFN-2510

MOS 上电延时:  
RC=10K\*2\*100p=10ms  
R=1K(1~Vgs(th)/Vgs)\*RC=1/SRC=300K

TP35

C252 252 C253 C254  
10uF/50V 0.1uF/50V 0.1uF/50V  
C1206 300K 1%  
C255  
10uF/50V C0402  
C2603

EOAF E-3K7\_7MM 调试用

TP24

TP35

HY110G10PQZC2  
FDS8650L-JMTO130P04A  
VDS=40V  
VGS=10V  
RDS(on)=1.3V  
P=80W

R233  
50K/1%  
R0402

C294  
10u/1%N/C  
R0402

TP25

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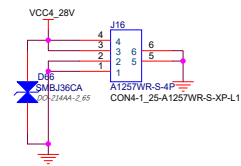
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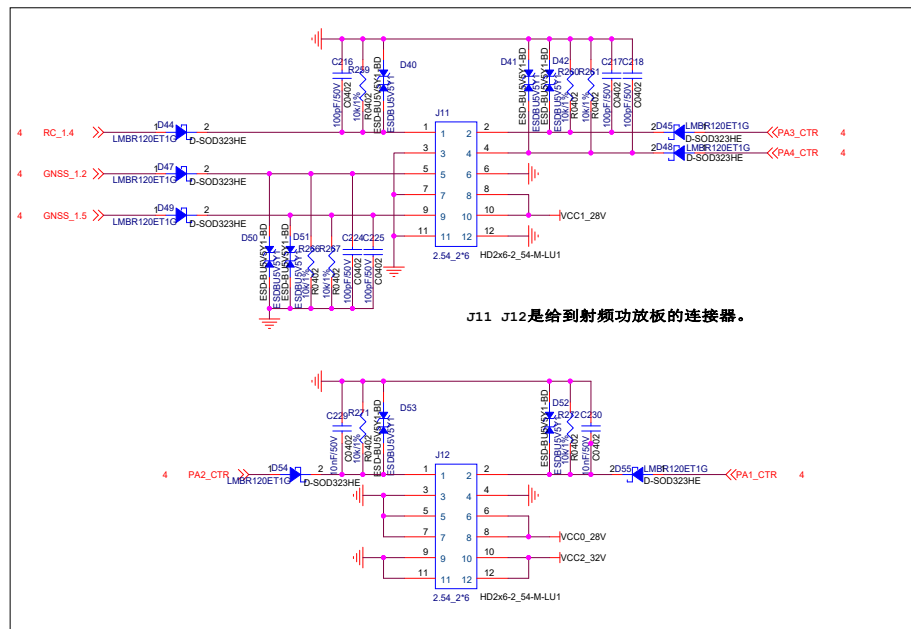
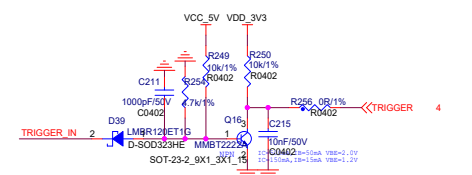
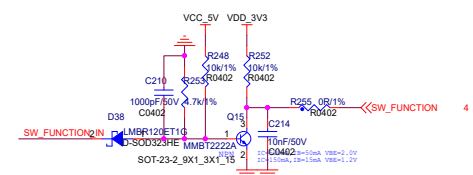
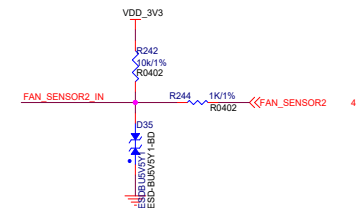
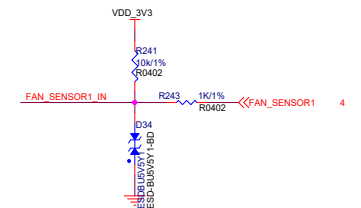
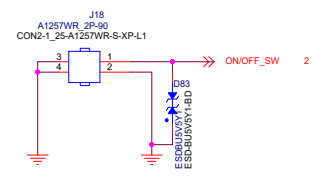
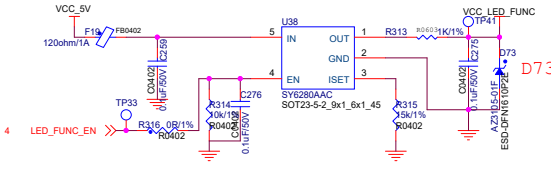
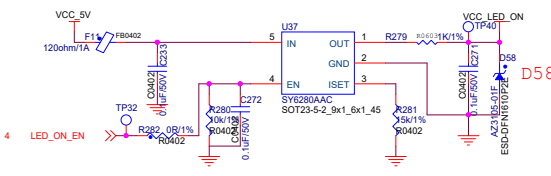
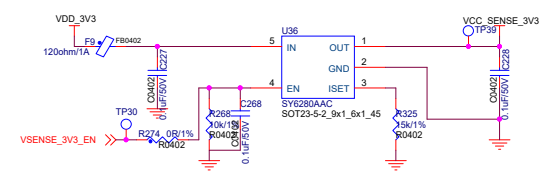
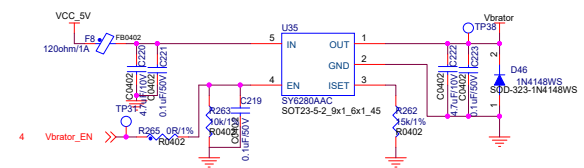
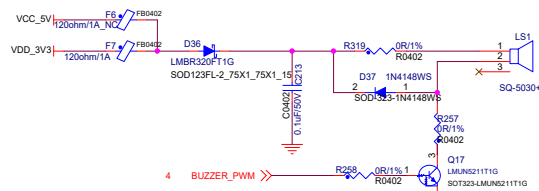
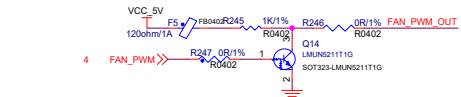
TP450

TP451

TP452

TP453



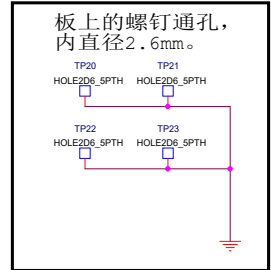
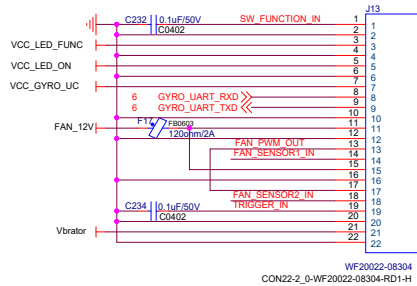


J11 J12是给到射频功放板的连接器。

D58放在连接器旁

D73放在连接器旁

板子对外的接口，用来接外设的，采用线束设计。



<Core Design>			
File	SPS100_CORE		
Size	Document Number	Rev	T1
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Date:	Tuesday, August 01, 2023	Sheet	7 of 8





