

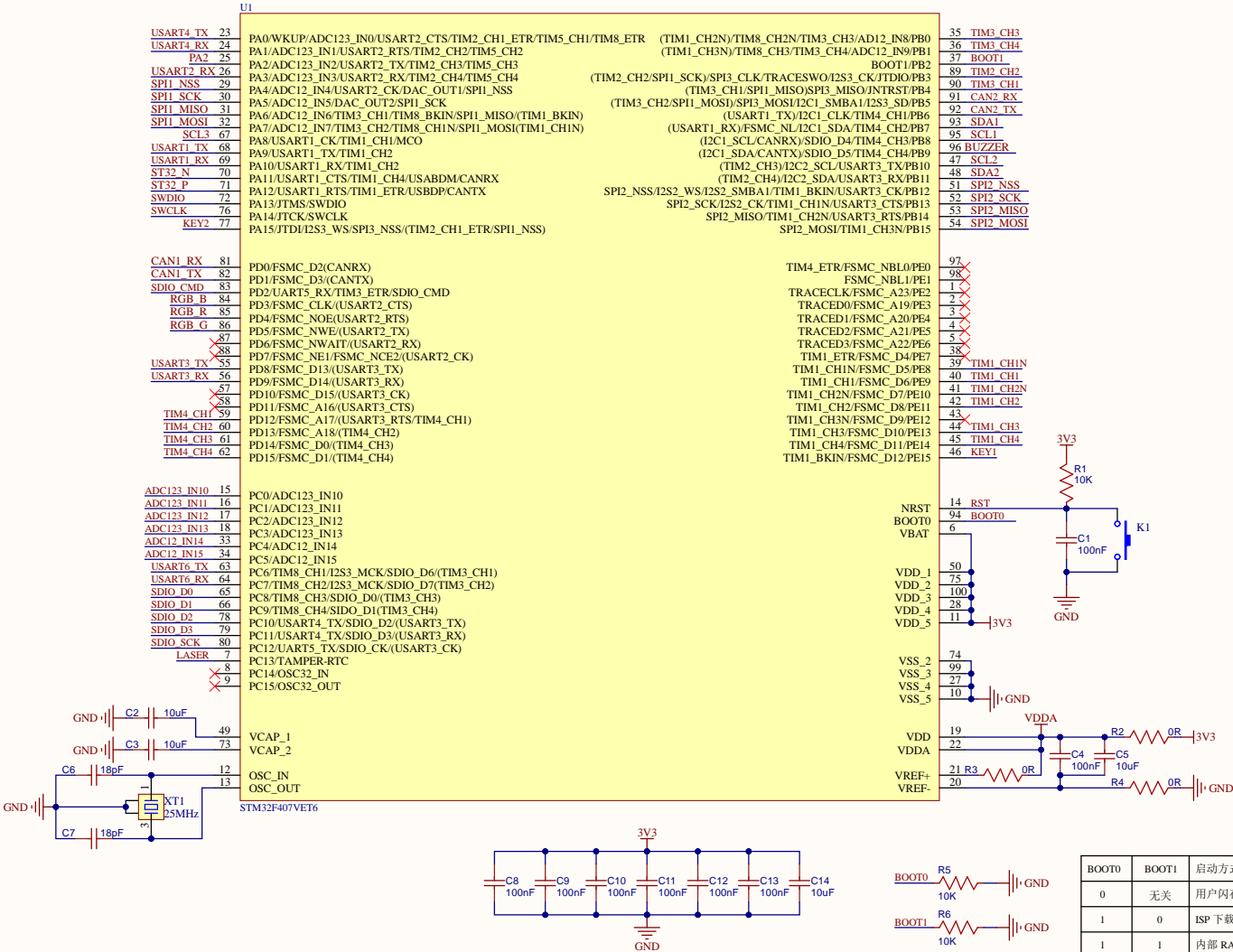
CPU 简介

STM32F407VET6

RAM :192K FLASH :12K

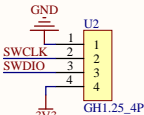
内核:ARM 32位的Cortex-M4 CPU

最高 168MHz 工作频率

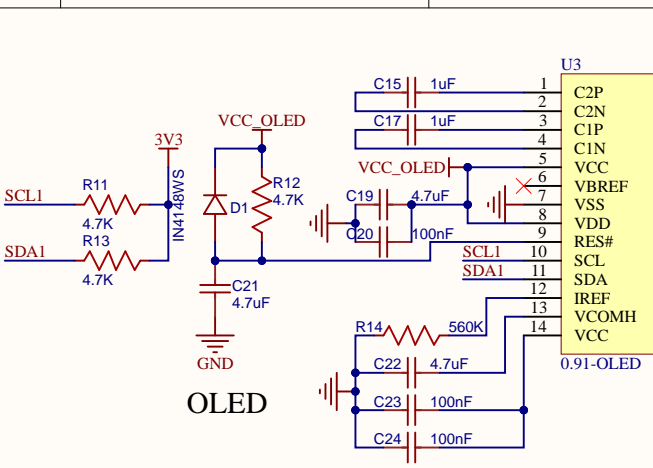
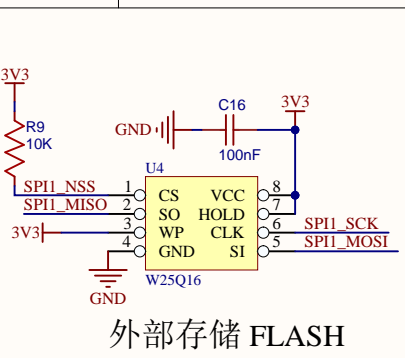
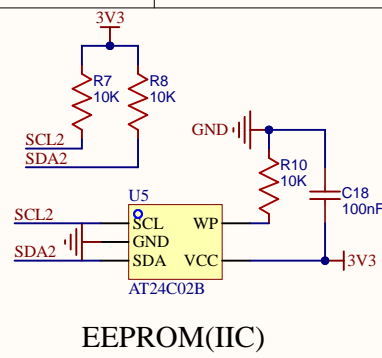
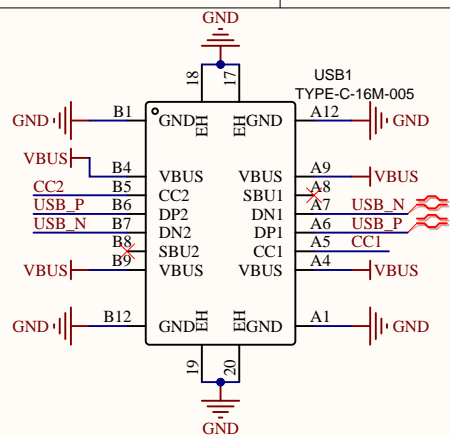


STM32 工作模式选择

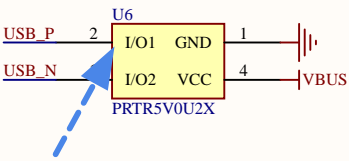
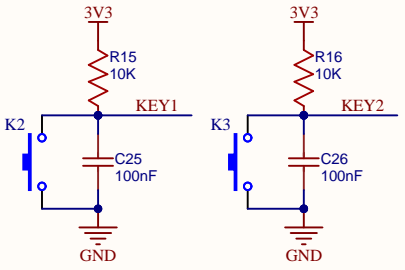
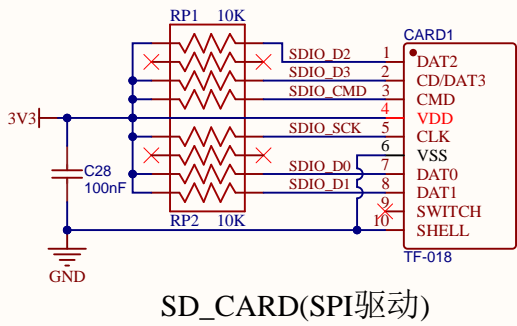
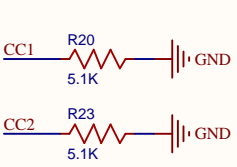
BOOT0	BOOT1	启动方式
0	无关	用户闪存
1	0	ISP 下载模式
1	1	内部 RAM



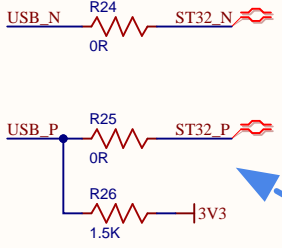
SWD



用电器端，CC1和CC2各自独立下拉一个5.1k电阻到地

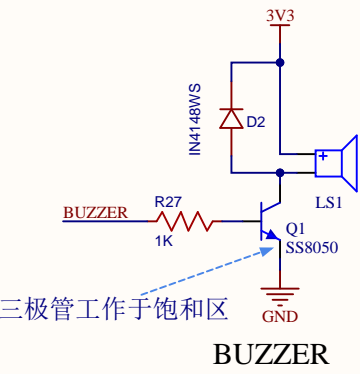


差分数据线静电保护

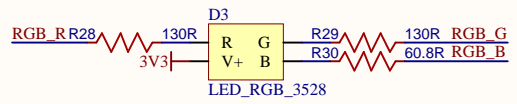


根据USB1.0/1.1/2.0协议：

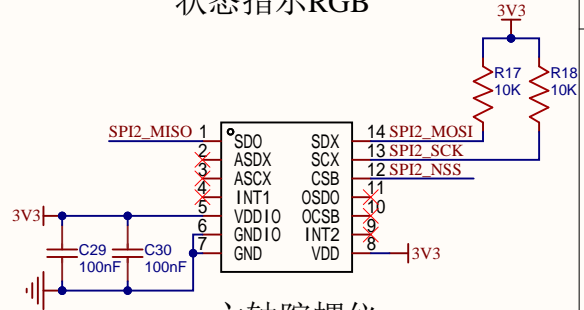
高速设备：USB_D+接一个1.5kohm的上拉电阻，USB_D-不接
低速设备：USB_D-接一个1.5kohm的上拉电阻，USB_D+不接



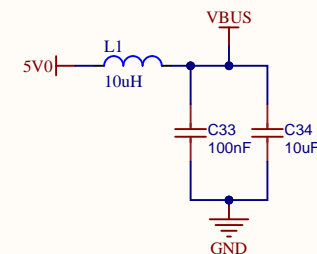
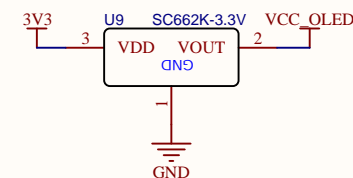
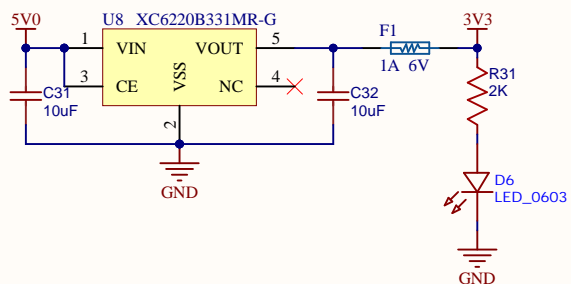
三极管工作于饱和区



状态指示RGB



六轴陀螺仪



Power Introduction

- > 输入电压范围: **Vss-0.3~6.5V**
- > 输出电压: **3.3V \pm 1%**
- > 输出电流: 1000mA
- > **PSRR/纹波抑制:55dB ~ 60dB(100Hz ~ 100kHz)**
- > 热过载保护和短路保护
- > 结温范围:**-40°C到85°C**
- > 具备红色电源指示灯

Title		
Size	Number	Revision
A4		
Date:	6/21/2023	Sheet of
File:	D:\AD\新主控\Core_Board_M.2\Power_Schema	Drawn By:

Comment	Description	Designator	Footprint	LibRef	Quantity
100nF	Capacitor	C1, C4, C8, C9, C10, C11, C12, C13, C16, C18, C20, C23, C24, C25, C26, C28, C29, C30, C33	C_0603	C_0603	19
10uF	Capacitor	C2, C3, C5, C14, C31, C32, C34	C_0603	C_0603	7
18pF	Capacitor	C6, C7	C_0603	C_0603	2
1uF	Capacitor	C15, C17	C_0603	C_0603	2
4.7uF	Capacitor	C19, C21, C22	C_0603	C_0603	3
TF-018		CARD1	TF-SMD_TF-018	TF-018	1
IN4148WS	Diode	D1, D2	SOD323	IN4148WS	2
LED_RGB_3528	3528 RGB LED	D3	LED-SMD_4P_3528	LED_RGB_3528	1
LED_0603	0603 LED	D6	LED_0603_BLUE	LED_0603	1
1A 6V	自恢复保险丝 C516069	F1	FUSE_0603	Fuse_1	1
KH-2435-CAJ	2x4x3.5侧按90°轻触 按键开关	K1	SW-SMD_KH-2435-CAJ	Key	1
SKRPADE010	KEY	K2, K3	SKRPADE010	SKRPADE010	2
10uH	Inductor	L1	IND_0603	L_0603	1
Buzzer	Buzzer	LS1	BUZZDET402	Buzzer	1
M.2_M_key		P1	M.2_M_key	M.2_M_key	1
SS8050	Transistor	Q1	SOT23-3	BJT_NPN	1
10K	Resistor	R1, R5, R6, R7, R8, R9, R10, R15, R16, R17, R18	R_0603	R_0603	11
0R	Resistor	R2, R3, R4, R24, R25	R_0603	R_0603	5
4.7K	Resistor	R11, R12, R13	R_0603	R_0603	3
560K	Resistor	R14	R_0603	R_0603	1
5.1K	Resistor	R20, R23	R_0603	R_0603	2
1.5K	Resistor	R26	R_0603	R_0603	1
1K	Resistor	R27	R_0603	R_0603	1
130R	Resistor	R28, R29	R_0603	R_0603	2
60.8R	Resistor	R30	R_0603	R_0603	1
2K	Resistor	R31	R_0603	R_0603	1
10K		RP1, RP2	RES0603*4	RP-4	2
STM32F407VET6		U1	LQFP-100_L14.0-W14.0-P0.50-LS16.0-BL	STM32F407VET6	1
GH1.25_4P		U2	GH1.25-WS-4P	GH1.25_4P	1
0.91-OLED	0.91寸OLED	U3	OLED0.91_I2C	0.91-OLED	1
W25Q16		U4	SOIC_8	W25Q16	1
AT24C02B	IC EEPROM	U5	SOT23-5	AT24C02B-SOT23-5	1
PRTR5V0U2X	PRTR5V0U2X,SOT-143B,NXP,RoHS	U6	SOT_143	1.05.10.0153	1
BMI270	IC 六轴传感器	U7	LGA-14	BMI270	1
XC6220B331MR-G	3.3V LDO	U8	SOT23-5	XC6220B331MR-G	1
SC662K-3.3V		U9	SOT23-3	SC662K-3.3V	1
TYPE-C-16M-005	USB	USB1	USB-C-SMD_KH-TYPE-C-16P	TYPE-C-16M-005	1
25MHz	Crystal Oscillator	XT1	XTAL_3225_4P	XTAL_3225_4P	1