1,Led:f1

RCC\_APB2PeriphClockCmd( RCC\_APB2Periph\_GPIOC, ENABLE);

先开时钟

GPIO\_InitTypeDef GPIO\_InitStructure

对这个结构体填入初始化参数：

GPIO\_InitStructure.GPIO\_Pin 初始化引脚设定

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_Out\_PP;

引脚设置为推挽输出

GPIO\_InitStructure.GPIO\_Speed = GPIO\_Speed\_50MHz;

速率设置为50mhz

GPIO\_Init(GPIOC, &GPIO\_InitStructure);

使用结构体初始化

根据电路图使用GPIO\_SetBits或GPIO\_ResetBits点亮与熄灭

F4

void LED\_Configration(void)

{

GPIO\_InitTypeDef gpio;

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOA|RCC\_AHB1Periph\_GPIOB,ENABLE);

gpio.GPIO\_Pin = GPIO\_Pin\_4;

gpio.GPIO\_Mode = GPIO\_Mode\_OUT;

gpio.GPIO\_OType = GPIO\_OType\_PP;

gpio.GPIO\_Speed = GPIO\_Speed\_100MHz;

GPIO\_Init(GPIOA,&gpio);

gpio.GPIO\_Pin = GPIO\_Pin\_2;

gpio.GPIO\_Mode = GPIO\_Mode\_OUT;

gpio.GPIO\_OType = GPIO\_OType\_PP;

gpio.GPIO\_Speed = GPIO\_Speed\_100MHz;

GPIO\_Init(GPIOB,&gpio);

GPIO\_ResetBits(GPIOB,GPIO\_Pin\_2);

GPIO\_ResetBits(GPIOA,GPIO\_Pin\_4);

}

2，串口：f1

开启串口与相应gpio口时钟

发送口tx设置为复用推挽输出模式，并设置相应输出速度。

接受口rx设置为浮空模式，使用结构体初始化。

void USART1\_gpioConfig(void)

{

GPIO\_InitTypeDef GPIO\_InitStructure;

USART\_InitTypeDef USART\_InitStructure;

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_USART1|RCC\_APB2Periph\_GPIO A, ENABLE);

GPIO\_InitStructure.GPIO\_Pin=GPIO\_Pin\_9; GPIO\_InitStructure.GPIO\_Mode=GPIO\_Mode\_AF\_PP; GPIO\_InitStructure.GPIO\_Speed=GPIO\_Speed\_50MHz; GPIO\_Init(GPIOA, &GPIO\_InitStructure);

GPIO\_InitStructure.GPIO\_Pin=GPIO\_Pin\_10; GPIO\_InitStructure.GPIO\_Mode=GPIO\_Mode\_IN\_FLOATING; GPIO\_Init(GPIOA, &GPIO\_InitStructure);

}

F4

GPIO\_InitTypeDef gpio;

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOC,ENABLE);

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_USART6,ENABLE);

GPIO\_PinAFConfig(GPIOC,GPIO\_PinSource6,GPIO\_AF\_USART6);

GPIO\_PinAFConfig(GPIOC,GPIO\_PinSource7,GPIO\_AF\_USART6);

gpio.GPIO\_Pin = GPIO\_Pin\_6 | GPIO\_Pin\_7;

gpio.GPIO\_Mode = GPIO\_Mode\_AF;

gpio.GPIO\_OType = GPIO\_OType\_PP;

gpio.GPIO\_Speed = GPIO\_Speed\_50MHz;

gpio.GPIO\_PuPd = GPIO\_PuPd\_NOPULL;

GPIO\_Init(GPIOC,&gpio);

3，can(f4)

GPIO\_InitTypeDef gpio;

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOC,ENABLE);

GPIO\_PinAFConfig(GPIOC,GPIO\_PinSource6,GPIO\_AF\_USART6);

GPIO\_PinAFConfig(GPIOC,GPIO\_PinSource7,GPIO\_AF\_USART6);

gpio.GPIO\_Pin = GPIO\_Pin\_6 | GPIO\_Pin\_7;

gpio.GPIO\_Mode = GPIO\_Mode\_AF;//使用复用模式

gpio.GPIO\_OType = GPIO\_OType\_PP;//推挽模式

gpio.GPIO\_Speed = GPIO\_Speed\_50MHz;

gpio.GPIO\_PuPd = GPIO\_PuPd\_NOPULL;//不上拉

GPIO\_Init(GPIOC,&gpio);

4，spi（f1）

GPIO\_InitTypeDef GPIO\_InitStructure;

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_GPIOA | RCC\_APB2Periph\_GPIOD, ENABLE);

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_SPI1, ENABLE);

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_AFIO, ENABLE);

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_5|;

GPIO\_InitStructure.GPIO\_Speed = GPIO\_Speed\_50MHz;

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_AF\_PP;

GPIO\_Init(GPIOA, &GPIO\_InitStructure);

F4:

GPIO\_InitTypeDef GPIO\_InitStructure;

GPIO\_InitStructure.GPIO\_Pin =GPIO\_Pin\_3|GPIO\_Pin\_4|GPIO\_Pin\_5;//PB3~5

RCC\_APB2PeriphClockCmd(RCC\_APB2Periph\_SPI1, ENABLE);//使能 SPI1 时钟

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_AF;//复用功能

GPIO\_InitStructure.GPIO\_OType=GPIO\_OType\_PP;//推挽输出

GPIO\_InitStructure.GPIO\_Speed=GPIO\_Speed\_100MHz;//100MHz GPIO\_InitStructure.GPIO\_PuPd = GPIO\_PuPd\_UP;//上拉

GPIO\_Init(GPIOB, &GPIO\_InitStructure);// 初始化

GPIO\_PinAFConfig(GPIOB,GPIO\_PinSource3,GPIO\_AF\_SPI1); //PB3 复用为 SPI1

GPIO\_PinAFConfig(GPIOB,GPIO\_PinSource4,GPIO\_AF\_SPI1); //PB4 复用为 SPI1

GPIO\_PinAFConfig(GPIOB,GPIO\_PinSource5,GPIO\_AF\_SPI1); //PB5 复用为 SPI1

5,i2c

GPIO\_InitTypeDef GPIO\_InitStructure;

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOB, ENABLE);//使能 GPIOB 时钟

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_8 | GPIO\_Pin\_9;

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_OUT;//普通输出模式

GPIO\_InitStructure.GPIO\_OType = GPIO\_OType\_PP;//推挽输出

GPIO\_InitStructure.GPIO\_Speed = GPIO\_Speed\_100MHz;//100MHz

GPIO\_InitStructure.GPIO\_PuPd = GPIO\_PuPd\_UP;//上拉

GPIO\_Init(GPIOB, &GPIO\_InitStructure);//初始化

6,dac

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOA, ENABLE);//使能 GPIOA 时

钟

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_4;

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_AN;//模拟输入

GPIO\_InitStructure.GPIO\_PuPd = GPIO\_PuPd\_DOWN;//下拉

GPIO\_Init(GPIOA, &GPIO\_InitStructure);//初始化

7,adc

GPIO\_InitTypeDef GPIO\_InitStructure;

RCC\_AHB1PeriphClockCmd(RCC\_AHB1Periph\_GPIOA, ENABLE);//使能 GPIOA 时钟

GPIO\_InitStructure.GPIO\_Pin = GPIO\_Pin\_5;//PA5 通道 5

GPIO\_InitStructure.GPIO\_Mode = GPIO\_Mode\_AN;//模拟输入

GPIO\_InitStructure.GPIO\_PuPd = GPIO\_PuPd\_NOPULL ;//不带上下拉

GPIO\_Init(GPIOA, &GPIO\_InitStructure);//初始化