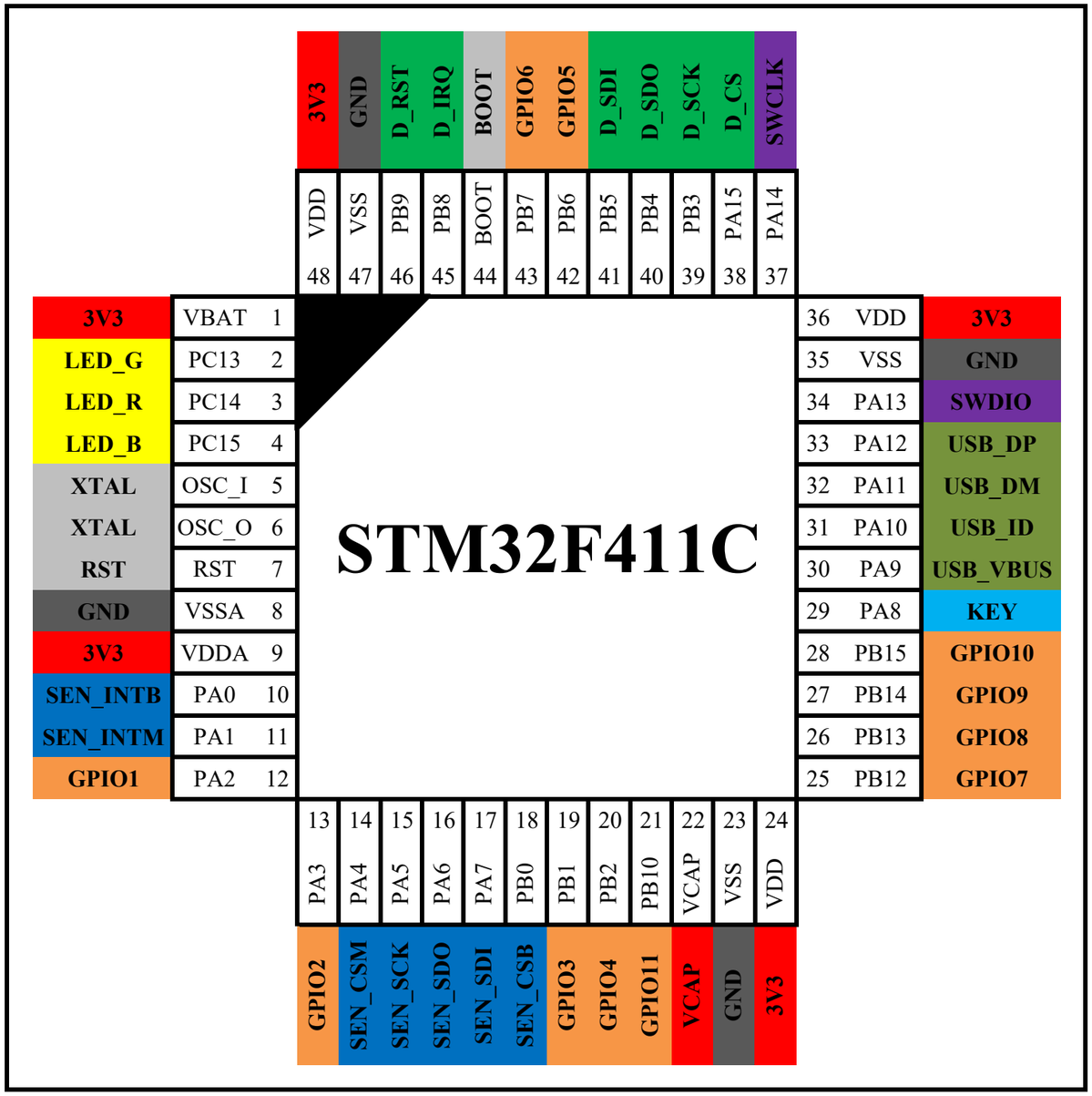
3V3
GND
D_RST
D_IRQ
BOOT
GPIO6
GPIO5
D_SDI
D_SDO
D_SCK
D_CS
SWCLK
VDD 48
VSS 47
PB9 46
PB8 45
BOOT 44
PB7 43
PB6 42
PB5 41
PB4 40
PB3 39
PA15 38
PA14 37
3V3 VBAT 1
LED_G PC13 2
LED_R PC14 3
LED_B PC15 4
XTAL OSC_I 5
XTAL OSC_O 6
RST RST 7
GND VSSA 8
3V3 VDDA 9
SEN_INTB PA0 10
SEN_INTM PA1 11
GPIO1 PA2 12
36 VDD 3V3
35 VSS GND
34 PA13 SWDIO
33 PA12 USB_DP
32 PA11 USB_DM
31 PA10 USB_ID
30 PA9 USB_VBUS
29 PA8 KEY
28 PB15 GPIO10
27 PB14 GPIO9
26 PB13 GPIO8
25 PB12 GPIO7
STM32F411C
13 PA3
14 PA4
15 PA5
16 PA6
17 PA7
18 PB0
19 PB1
20 PB2
21 PB10
22 VCAP
23 VSS
24 VDD
GPIO2
SEN_CSM
SEN_SCK
SEN_SDO
SEN_SDI
SEN_CSB
GPIO3
GPIO4
GPIO11
VCAP
GND
3V3

PORT		AF0	AF1		AF2			AF3			AF4			AF5			AF6			AF7			AF8	AF9		AF10	AF12	ADC	配置	
		SYS	TIM1	TIM2	TIM3	TIM4	TIM5	TIM9	TIM10	TIM11	I2C1	I2C2	I2C3	SPI1	SPI2	SPI4	SPI3	SPI4	SPI5	SPI3	USART1	USART2	USART6	I2C2	I2C3	OTG_FS	SDIO			
PA	0			CH1 / ETR			CH1									MOSI						CTS						ADC1_IN0	X	SEN_INTB
	1			CH2			CH2															RTS						ADC1_IN1	X	SEN_INTM
	2			CH3			CH3	CH1														TX						ADC1_IN2	O	GPIO1
	3			CH4			CH4	CH2														RX						ADC1_IN3	O	GPIO2
	4													NSS			NSS					CK						ADC1_IN4	X	SEN_CSM
	5			CH1 / ETR										SCK														ADC1_IN5	X	SEN_SCK
	6		BKIN		CH1									MISO													CMD	ADC1_IN6	X	SEN_SDO
	7		CH1N		CH2									MOSI														ADC1_IN7	X	SEN_SDI
	8	MCO1	CH1										SCL								CK					SOF	D1		X	KEY
	9		CH2										SMBA								TX					VBUS	D2		X	USB_VBUS
	10		CH3																MOSI		RX					ID			X	USB_ID
	11		CH4															MISO			CTS		TX			DM			X	USB_DM
	12		ETR																MISO		RTS		RX			DP			X	USB_DP
	13	SDIO																											O	SWDIO
	14	SCLK																											O	SWCLK
	15	JTDI		CH1 / ETR										NSS			NSS				TX								O	D_CS
PB	0		CH2N		CH3														SCK									ADC1_IN8	X	SEN_CSB
	1		CH3N		CH4														NSS									ADC1_IN9	O	GPIO3
	2	BOOT																											O	GPIO4
	3	JTDO		CH2										SCK			SCK				RX			SDA					O	D_SCK
	4	JTRST			CH1									MISO			MISO								SDA		D0		O	D_SDO
	5				CH2						SMBA			MOSI			MOSI										D3		O	D_SDI
	6					CH1					SCL										TX								O	GPIO5
	7					CH2					SDA										RX						D0		O	GPIO6
	8					CH3			CH1		SCL								MOSI						SDA		D4		O	D_IRQ
	9					CH4				CH1	SDA				NSS									SDA			D5		O	D_RST
	10			CH3								SCL			SCK												D7		O	GPIO11
	12		BKIN									SMBA			NSS			NSS		SCK									O	GPIO7
	13		CH1N												SCK			SCK											O	GPIO8
	14		CH2N												MISO												D6		O	GPIO9
	15	RTC	CH3N												MOSI												CK		O	GPIO10
PC	13																												X	LED_G
	14																												X	LED_R
	15																												X	LED_B

DMA1

	Stream 0	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5	Stream 6	Stream 7
Channel 0	SPI3_RX	I2C1_TX	SPI3_RX	SPI2_RX	SPI2_TX	SPI3_TX		SPI3_TX
Channel 1	I2C1_RX	I2C3_RX				I2C1_RX	I2C1_TX	I2C1_TX
Channel 2	TIM4_CH1		I2S3_EXT_RX	TIM4_CH2	I2S2_EXT_TX	I2S3_EXT_TX	TIM4_UP	TIM4_CH3
Channel 3	I2S3_EXT_RX	TIM2_CH3 TIM2_UP	I2C3_RX	I2S2_EXT_RX	I2C3_TX	TIM2_CH1	TIM2_CH2 TIM2_CH4	TIM2_CH4 TIM2_UP
Channel 4						USART2_RX	USART2_TX	
Channel 5			TIM3_CH4 TIM3_UP		TIM3_CH1 TIM3_TRIG	TIM3_CH2		TIM3_CH3
Channel 6	TIM5_CH3 TIM5_UP	TIM5_CH4 TIM5_TRIG	TIM5_CH1	TIM5_CH4 TIM5_TRIG	TIM5_CH2	I2C3_TX	TIM5_UP	USART2_RX
Channel 7			I2C2_RX	I2C2_RX				I2C2_TX

DMA2

	Stream 0	Stream 1	Stream 2	Stream 3	Stream 4	Stream 5	Stream 6	Stream 7
Channel 0	ADC1				ADC1		TIM1_CH1 / CH2 / CH3	
Channel 1								
Channel 2			SPI1_TX	SPI5_RX	SPI5_TX			
Channel 3	SPI1_RX		SPI1_RX	SPI1_TX		SPI1_TX		
Channel 4	SPI4_RX	SPI4_TX	USART1_RX	SDIO	SPI4_RX	USART1_RX	SDIO	USART1_TX
Channel 5		USART6_RX	USART6_RX	SPI4_RX	SPI4_TX	SPI5_TX	USART6_TX	USART6_TX
Channel 6	TIM1_TRIG	TIM1_CH1	TIM1_CH2	TIM1_CH1	TIM1_CH4 TIM1_TRIG / COM	TIM1_UP	TIM1_CH3	
Channel 7						SPI5_RX	SPI5_TX	