STM32F103R4H6, STM32F103R6H6 引脚功能定义
（TFBGA64）

Object Kind	Pin Num	Name	Full Name	Type	I/O Level	X1	Y1	Origetation
Pin	B2	VBAT	VBAT	Power	-	-220	160	180 Degrees
Pin	A2	PC13-TAMPER-RTC	PC13/TAMPER-RTC	I/O	-	-220	150	180 Degrees
Pin	A1	PC14-OSC32_IN	PC14/OSC32_IN	I/O	-	-220	140	180 Degrees
Pin	B1	PC15-OSC32_OUT	PC15/OSC32_OUT	I/O	-	-220	130	180 Degrees
Pin	C1	OSC_IN	OSC_IN/PD0	Input	(FT)	-220	120	180 Degrees
Pin	D1	OSC_OUT	OSC_OUT/PD1	Output	(FT)	-220	110	180 Degrees
Pin	E1	NRST	NRST	I/O	-	-220	100	180 Degrees
Pin	E3	PC0	PC0/ADC12_IN10	I/O	-	-220	90	180 Degrees
Pin	E2	PC1	PC1/ADC12_IN11	I/O	-	-220	80	180 Degrees
Pin	F2	PC2	PC2/ADC12_IN12	I/O	-	-220	70	180 Degrees
Pin	G1	VREF+	VREF+	Power	-	-220	60	180 Degrees
Pin	F1	VSSA	VSSA	Power	-	-220	50	180 Degrees
Pin	H1	VDDA	VDDA	Power	-	-220	40	180 Degrees
Pin	G2	PA0-WKUP	PA0/WKUP/USART2_CTS/ADC12_IN0/TIM2_CH1_ETR	I/O	-	-220	30	180 Degrees
Pin	H2	PA1	PA1/USART2_RTS/ADC12_IN1/ TIM2_CH2	I/O	-	-220	20	180 Degrees
Pin	F3	PA2	PA2/USART2_TX/ADC12_IN2/ TIM2_CH3	I/O	-	-220	10	180 Degrees
Pin	G3	PA3	PA3/USART2_RX/ADC12_IN3/TIM2_CH4	I/O	-	-220	-10	180 Degrees
Pin	C2	VSS_4	VSS_4	Power	-	-220	-20	180 Degrees
Pin	D2	VDD_4	VDD_4	Power	-	-220	-30	180 Degrees
Pin	H3	PA4	PA4/SPI1_NSS/USART2_CK/ADC12_IN4	I/O	-	-220	-40	180 Degrees
Pin	F4	PA5	PA5/SPI1_SCK/ ADC12_IN5	I/O	-	-220	-50	180 Degrees
Pin	G4	PA6	PA6/SPI1_MISO/ADC12_IN6/TIM3_CH1/TIM1_BKIN	I/O	-	-220	-60	180 Degrees
Pin	H4	PA7	PA7/SPI1_MOSI/ADC12_IN7/TIM3_CH2/TIM1_CH1N	I/O	-	-220	-70	180 Degrees
Pin	H5	PC4	PC4/ADC12_IN14	I/O	-	-220	-80	180 Degrees
Pin	H6	PC5	PC5/ADC12_IN15	I/O	-	-220	-90	180 Degrees
Pin	F5	PB0	PB0/ADC12_IN8/TIM3_CH3/TIM1_CH2N	I/O	-	-220	-100	180 Degrees
Pin	G5	PB1	PB1/ADC12_IN9/TIM3_CH4/TIM1_CH3N	I/O	-	-220	-110	180 Degrees
Pin	G6	PB2	PB2/BOOT1	I/O	FT	-220	-120	180 Degrees
Pin	G7	PB10	PB10/TIM2_CH3	I/O	FT	-220	-130	180 Degrees
Pin	H7	PB11	PB11/TIM2_CH4	I/O	FT	-220	-140	180 Degrees
Pin	D6	VSS_1	VSS_1	Power	-	-220	-150	180 Degrees
Pin	E6	VDD_1	VDD_1	Power	-	-220	-160	180 Degrees
Pin	H8	PB12	PB12/TIM1_BKIN	I/O	FT	220	-160	0 Degrees
Pin	G8	PB13	PB13/TIM1_CH1N	I/O	FT	220	-150	0 Degrees
Pin	F8	PB14	PB14/TIM1_CH2N	I/O	FT	220	-140	0 Degrees
Pin	F7	PB15	PB15/TIM1_CH3N	I/O	FT	220	-130	0 Degrees
Pin	F6	PC6	PC6/TIM3_CH1	I/O	FT	220	-120	0 Degrees
Pin	E7	PC7	PC7/TIM3_CH2	I/O	FT	220	-110	0 Degrees
Pin	E8	PC8	PC8/TIM3_CH3	I/O	FT	220	-100	0 Degrees
Pin	D8	PC9	PC9/TIM3_CH4	I/O	FT	220	-90	0 Degrees
Pin	D7	PA8	PA8/USART1_CK/TIM1_CH1/MCO	I/O	FT	220	-80	0 Degrees
Pin	C7	PA9	PA9/USART1_TX/TIM1_CH2	I/O	FT	220	-70	0 Degrees
Pin	C6	PA10	PA10/USART1_RX/TIM1_CH3	I/O	FT	220	-60	0 Degrees
Pin	C8	PA11	PA11/USART1_CTS/CAN_RX/TIM1_CH4/ USBDM	I/O	FT	220	-50	0 Degrees

Pin	B8	PA12	PA12/USART1_RTS/CAN_TX/TIM1_ETR/ USBDP	I/O	FT	220	-40	0 Degrees
Pin	A8	PA13	JTMS/SWDIO/PA13	I/O	FT	220	-30	0 Degrees
Pin	D5	VSS_2	VSS_2	Power	-	220	-20	0 Degrees
Pin	E5	VDD_2	VDD_2	Power	-	220	-10	0 Degrees
Pin	A7	PA14	JTCK/SWCLK/PA14	I/O	FT	220	10	0 Degrees
Pin	A6	PA15	JTDI/TIM2_CH1_ETR/PA15/SPI1_NSS	I/O	FT	220	20	0 Degrees
Pin	B7	PC10	PC10	I/O	FT	220	30	0 Degrees
Pin	B6	PC11	PC11	I/O	FT	220	40	0 Degrees
Pin	C5	PC12	PC12	I/O	FT	220	50	0 Degrees
Pin	B5	PD2	PD2/TIM3_ETR	I/O	FT	220	60	0 Degrees
Pin	A5	PB3	JTDO/TIM2_CH2/PB3/TRACESWO	I/O	FT	220	70	0 Degrees
Pin	A4	PB4	NJTRST/TIM3_CH1/PB4/SPI1_MISO	I/O	FT	220	80	0 Degrees
Pin	C4	PB5	PB5/I2C1_SMBA/TIM3_CH2/SPI1_MOSI	I/O	-	220	90	0 Degrees
Pin	D3	PB6	PB6/I2C1_SCL/USART1_TX	I/O	FT	220	100	0 Degrees
Pin	C3	PB7	PB7/I2C1_SDA/USART1_RX	I/O	FT	220	110	0 Degrees
Pin	B4	BOOT0	BOOT0	Input	-	220	120	0 Degrees
Pin	B3	PB8	PB8/I2C1_SCL/CAN_RX	I/O	FT	220	130	0 Degrees
Pin	A3	PB9	PB9/I2C1_SDA /CAN_TX	I/O	FT	220	140	0 Degrees
Pin	D4	VSS_3	VSS_3	Power	-	220	150	0 Degrees
Pin	E4	VDD_3	VDD_3	Power	-	220	160	0 Degrees

（1）　　表示引脚默认功能定义名称，　　表示引脚全功能定义名称，包括引脚默认复用功能定义和重映射复用功能定义；

（2）　　*栏中：FT = 可以耐受 5V 电压；(FT) = 在引脚作为 I/O 使用时，可以耐受 5V 电压；5V 电压波纹比较大时，请慎用，具体参数请参考数据手册；*

（3）引脚功能定义参考 2015 年6月 STM32F103x4/x6 英文数据手册第7版（DocID15060 Rev 7）；

（4）此引脚功能定义表格旨在用于Altium Designer 原理图库制作的多管脚元件快速画法Smart Grid Insert，方法在我的文库中。

图1 STM32F103R4H6, STM32F103R6H6 (TFBGA64)　引脚分布