

按钮编码器

LQFP48管脚定义

表 4 LQFP 48管脚定义配置表

LQFP 48	Pin Name	Type	I/O Level	Main Function (after reset)	Default	Remap
1	VBAT	S	-	VBAT	-	-
2	PC13-TAMPERRTC	I/O	-	PC13	TAMPER-RTC	-
3	PC14-OSC32_IN	I/O	-	PC14	OSC32_IN	-
4	PC15-OSC32_OUT	I/O	-	PC15	OSC32_OUT	-
5	OSC_IN	I/O	-	OSC_IN	-	PD0
6	OSC_OUT	I/O	-	OSC_OUT	-	PD1
7	NRST	I/O	-	NRST	-	-
8	VSSA	S	-	VSSA	-	-
9	VDDA	S	-	VDDA	-	-
10	PA0-WKUP	I/O	-	PA0 ^{pwm 1}	WKUP/USART2_CTS/ ADC12_IN0/TIM2_CH1_ETR/ TIM5_CH1	-
11	PA1	I/O	-	PA1 ²	USART2_RTS/ADC12_IN1/ TIM2_CH2/TIM5_CH2	-
12	PA2	I/O	-	PA2	USART2_TX/ADC12_IN2/ TIM2_CH3/TIM5_CH3/	-
13	PA3	I/O	-	PA3 ³	USART2_RX/ADC12_IN3/ TIM2_CH4/TIM5_CH4/	-
14	PA4	I/O	-	PA4	SPI1_NSS/USART2_CK/ DAC_OUT1/ADC12_IN4	-
15	PA5	I/O	-	PA5	SPI1_SCK/ADC12_IN5/ DAC_OUT2	-
16	PA6	I/O	-	PA6 ⁴	SPI1_MISO/ADC12_IN6/ TIM3_CH1	TIM1_BKIN
17	PA7	I/O	-	PA7 ⁵	SPI1_MOSI/ADC12_IN7/ TIM3_CH2	TIM1_CH1N
18	PB0	I/O	-	PB0	ADC12_IN8/TIM3_CH3	TIM1_CH2N
19	PB1	I/O	-	PB1 ⁶	ADC12_IN9/TIM3_CH4	TIM1_CH3N
20	PB2	I/O	FT	PB2/BOOT1	-	-
21	PB10	I/O	FT	PB10	I2C2_SCL/USART3_TX	TIM2_CH3
22	PB11	I/O	FT	PB11	I2C2_SDA/USART3_RX	TIM2_CH4
23	VSS_1	S	-	VSS_1	-	-
24	VDD_1	S	-	VDD_1	-	-
25	PB12	I/O	FT	PB12 ⁷	SPI2_NSS/I2C2_SMBA/ USART3_CK/TIM1_BKIN	-
26	PB13	I/O	FT	PB13 ⁸	SPI2_SCK/USART3_CTS/ TIM1_CH1N	-
27	PB14	I/O	FT	PB14 ^{KEY}	SPI2_MISO/USART3_RTS/ TIM1_CH2N	-
28	PB15	I/O	FT	PB15 ^{LED}	SPI2_MOSI/TIM1_CH3N	-
29	PA8	I/O	FT	PA8 ^{pwm 7}	USART1_CK/TIM1_CH1/ MCO	-
30	PA9	I/O	FT	PA9	USART1_TX/TIM1_CH2	-
31	PA10	I/O	FT	PA10	USART1_RX/TIM1_CH3	-

32	PA11	I/O	-	PA11	USART1_CTS/USBDM CAN_RX/TIM1_CH4	-
33	PA12	I/O	-	PA12	USART1_RTS/USBDP/ CAN_TX/TIM1_ETR	-
34	PA13	I/O	FT	JTMS-SWDIO	-	PA13
35	VSS_2	S	-	VSS_2	-	-
36	VDD_2	S	-	VDD_2	-	-
37	PA14	I/O	FT	JTCK-SWCLK	-	PA14
38	PA15	I/O	FT	JTD1	SPI3_NSS	TIM2_CH1_ETR/PA15/ SPI1_NSS
39	PB3	I/O	FT	JTD0	SPI3_SCK	TIM2_CH2/PB3/ TRACESWO/SPI1_SCK
40	PB4	I/O	FT	NJTRST	SPI3_MISO	TIM3_CH1/PB4/ SPI1_MISO
41	PB5	I/O	-	PB5	I2C1_SMBA/ SPI3_MOSI	TIM3_CH2/SPI1_MOSI
42	PB6	I/O	FT	PB6	I2C1_SCL/TIM4_CH1	USART1_TX
43	PB7	I/O	FT	PB7	I2C1_SDA/TIM4_CH2	USART1_RX
44	BOOT0	I	-	BOOT0	-	-
45	PB8	I/O	FT	PB8	TIM4_CH3	I2C1_SCL/CAN_RX
46	PB9	I/O	FT	PB9	TIM4_CH4	I2C1_SDA/CAN_TX
47	VSS_3	S	-	VSS_3	-	-
48	VDD_3	S	-	VDD_3	-	-

(1) FT = 5V容忍

LQFP64管脚定义

表 5 LQFP 64管脚定义配置表

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1	VBAT	S	-	VBAT	-	-
2	PC13-TAMPERRTC	I/O	-	PC13	TAMPER-RTC	-
3	PC14-OSC32_IN	I/O	-	PC14	OSC32_IN	PD0
4	PC15-OSC32_OUT	I/O	-	PC15	OSC32_OUT	PD1
5	OSC_IN	I/O	-	OSC_IN	-	-
6	OSC_OUT	I/O	-	OSC_OUT	-	-
7	NRST	I/O	-	NRST	-	-
8	PC0	I/O	-	PC0	ADC123_IN10	-
9	PC1	I/O	-	PC1	ADC123_IN11	-
10	PC2	I/O	-	PC2	ADC123_IN12	-
11	PC3	I/O	-	PC3	ADC123_IN13	-
12	VSSA	S	-	VSSA	-	-
13	VDDA	S	-	VDDA	-	-
14	PA0-WKUP	I/O	-	PA0	WKUP/USART2_CTS/ ADC123_IN0/TIM2_CH1_ETR / TIM5_CH1/TIM8_ETR	-
15	PA1	I/O	-	PA1	USART2_RTS/ADC123_IN1/ TIM2_CH2/TIM5_CH2	-
16	PA2	I/O	-	PA2	USART2_TX/ADC123_IN2/	-