

**Table 12. Alternate functions for port A**

Port & Pin Name	AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF14	AF15
PA0	-	TIM2_CH1_ETR	-	TSC_G1_IO1	-	-	-	USART2_CTS	COMP1_OUT	-	-	-	-	-	EVENT OUT
PA1	RTC_REFIN	TIM2_CH2	-	TSC_G1_IO2	-	-	-	USART2_RTS		TIM15_CH1N	-	-	-	-	EVENT OUT
PA2	-	TIM2_CH3	-	TSC_G1_IO3	-	-	-	USART2_TX	COMP2_OUT	TIM15_CH1	-	-	-	-	EVENT OUT
PA3	-	TIM2_CH4	-	TSC_G1_IO4	-	-	-	USART2_RX	-	TIM15_CH2	-	-	-	-	EVENT OUT
PA4	-	-	TIM3_CH2	TSC_G2_IO1	-	SPI1_NSS	SPI3_NSS, I2S3_WS	USART2_CK	-	-	-	-	-	-	EVENT OUT
PA5	-	TIM2_CH1_ETR	-	TSC_G2_IO2	-	SPI1_SCK	-	-	-	-	-	-	-	-	EVENT OUT
PA6	-	TIM16_CH1	TIM3_CH1	TSC_G2_IO3	-	SPI1_MISO	TIM1_BKIN	-	COMP1_OUT	-	-	-	-	-	EVENT OUT
PA7	-	TIM17_CH1	TIM3_CH2	TSC_G2_IO4	-	SPI1_MOSI	TIM1_CH1N	-	COMP2_OUT	-	-	-	-	-	EVENT OUT
PA8	MCO	-	-	-	I2C2_SMBA	I2S2_MCK	TIM1_CH1	USART1_CK	-	-	TIM4_ETR	-	-	-	EVENT OUT
PA9	-	-	-	TSC_G4_IO1	I2C2_SCL	I2S3_MCK	TIM1_CH2	USART1_TX	-	TIM15_BKIN	TIM2_CH3	-	-	-	EVENT OUT
PA10	-	TIM17_BKIN	-	TSC_G4_IO2	I2C2_SDA	-	TIM1_CH3	USART1_RX	COMP6_OUT	-	TIM2_CH4	-	-	-	EVENT OUT
PA11	-	-	-	-	-	-	TIM1_CH1N	USART1_CTS	COMP1_OUT	CAN_RX	TIM4_CH1	TIM1_CH4	TIM1_BKIN2	USB_DM	EVENT OUT

GPIO/ADC

LED/BLUE

LED/RED

LED/GREEN

CAN_SPEED

ADC/I_MOT

ADC/V_BAT

MOTOR/PWM_A

MOTOR/PWM_B

MOTOR/EN_A

MOTOR/EN_B



Table 12. Alternate functions for port A (continued)

Port & Pin Name	AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF14	AF15
PA12	-	TIM16_CH1	-	-	-	-	TIM1_CH2N	USART1_RTS	COMP2_OUT	CAN_TX	TIM4_CH2	TIM1_ETR	-	USB_DP	EVENT OUT
PA13	SWDIO-JTMS	TIM16_CH1N	-	TSC_G4_IO3	-	IR_OUT	-	USART3_CTS	-	-	TIM4_CH3	-	-	-	EVENT OUT
PA14	SWCLK-JTCK	-	-	TSC_G4_IO4	I2C1_SDA	-	TIM1_BKIN	USART2_TX	-	-	-	-	-	-	EVENT OUT
PA15	JTDI	TIM2_CH1_ETR	-	-	I2C1_SCL	SPI1_NSS	SPI3_NSS, I2S3_WS	USART2_RX	-	TIM1_BKIN	-	-	-	-	EVENT OUT

QUADENC/I [FT]

DBG/SWDIO

DBG/SWDCK

TESTPT



Table 13. Alternate functions for port B

Port & Pin Name	AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF12	AF15
PB0	-	-	TIM3_CH3	TSC_G3_IO2	-	-	TIM1_CH2N	-	-	-	-	-	EVENT OUT
PB1	-	-	TIM3_CH4	TSC_G3_IO3	-	-	TIM1_CH3N	-	COMP4_OUT	-	-	-	EVENT OUT
PB2	-	-	-	TSC_G3_IO4	-	-	-	-	-	-	-	-	EVENT OUT
PB3	JTDO-TRACES WO	TIM2_CH2	TIM4_ETR	TSC_G5_IO1	-	SPI1_SCK	SPI3_SCK, I2S3_CK	USART2_TX	-	-	TIM3_ETR	-	EVENT OUT
PB4	NJTRST	TIM16_CH1	TIM3_CH1	TSC_G5_IO2	-	SPI1_MISO	SPI3_MISO, I2S3ext_SD	USART2_RX	-	-	TIM17_BKIN	-	EVENT OUT
PB5	-	TIM16_BKIN	TIM3_CH2		I2C1_SMBA	SPI1_MOSI	SPI3_MOSI, I2S3_SD	USART2_CK	-	-	TIM17_CH1	-	EVENT OUT
PB6	-	TIM16_CH1N	TIM4_CH1	TSC_G5_IO3	I2C1_SCL	-	-	USART1_TX	-	-	-	-	EVENT OUT
PB7	-	TIM17_CH1N	TIM4_CH2	TSC_G5_IO4	I2C1_SDA	-	-	USART1_RX	-	-	TIM3_CH4	-	EVENT OUT
PB8	-	TIM16_CH1	TIM4_CH3	TSC_SYNC	I2C1_SCL	-	-	-	COMP1_OUT	CAN_RX	-	TIM1_BKIN	EVENT OUT
PB9	-	TIM17_CH1	TIM4_CH4		I2C1_SDA	-	IR_OUT	-	COMP2_OUT	CAN_TX	-	-	EVENT OUT
PB10	-	TIM2_CH3	-	TSC_SYNC	-	-	-	USART3_TX	-	-	-	-	EVENT OUT
PB11	-	TIM2_CH4	-	TSC_G6_IO1	-	-	-	USART3_RX	-	-	-	-	EVENT OUT
PB12	-		-	TSC_G6_IO2	I2C2_SMBA	SPI2_NSS, I2S2_WS	TIM1_BKIN	USART3_CK	-	-	-	-	EVENT OUT

GPIO/A[FT]

GPIO/B[FT]

Quadenc/A[FT]

Quadenc/B[FT]

CAN/RX

CAN/TX

DBG/TX

DBG/RX

**Table 13. Alternate functions for port B (continued)**

Port & Pin Name	AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF12	AF15
PB13	-	-	-	TSC_G6_IO3	-	SPI2_SCK, I2S2_CK	TIM1_CH1N	USART3_CTS	-	-	-	-	EVENT OUT
PB14	-	TIM15_CH1	-	TSC_G6_IO4	-	SPI2_MISO, I2S2ext_SD	TIM1_CH2N	USART3_RTS	-	-	-	-	EVENT OUT
PB15	RTC_REFIN	TIM15_CH2	TIM15_CH1N	-	TIM1_CH3N	SPI2_MOSI, I2S2_SD	-	-	-	-	-	-	EVENT OUT

Table 14. Alternate functions for port C

Port & Pin Name	AF1	AF2	AF3	AF4	AF5	AF6	AF7
PC0	EVENTOUT	-	-	-	-	-	-
PC1	EVENTOUT	-	-	-	-	-	-
PC2	EVENTOUT	-	COMP7_OUT	-	-	-	-
PC3	EVENTOUT	-	-	-	-	TIM1_BKIN2	-
PC4	EVENTOUT	-	-	-	-	-	USART1_TX
PC5	EVENTOUT	-	TSC_G3_IO1	-	-	-	USART1_RX
PC6	EVENTOUT	TIM3_CH1	-	-	-	I2S2_MCK	COMP6_OUT
PC7	EVENTOUT	TIM3_CH2	-	-	-	I2S3_MCK	-
PC8	EVENTOUT	TIM3_CH3	-	-	-	-	-
PC9	EVENTOUT	TIM3_CH4	-	-	I2S_CKIN	-	-
PC10	EVENTOUT	-	-	-	UART4_TX	SPI3_SCK, I2S3_CK	USART3_TX
PC11	EVENTOUT	-	-	-	UART4_RX	SPI3_MISO, I2S3ext_SD	USART3_RX
PC12	EVENTOUT	-	-	-	UART5_TX	SPI3_MOSI, I2S3_SD	USART3_CK
PC13	-	-	-	TIM1_CH1N	-	-	-
PC14	-	-	-	-	-	-	-
PC15	-	-	-	-	-	-	-

Table 15. Alternate functions for port D

Port & Pin Name	AF1	AF2	AF3	AF4	AF5	AF6	AF7
PD0	EVENTOUT	-	-	-	-	-	CAN_RX
PD1	EVENTOUT	-	-	-	-	-	CAN_TX
PD2	EVENTOUT	TIM3_ETR	-	-	UART5_RX	-	-
PD3	EVENTOUT	TIM2_CH1_ETR	-	-	-	-	USART2_CTS
PD4	EVENTOUT	TIM2_CH2	-	-	-	-	USART2_RTS
PD5	EVENTOUT	-	-	-	-	-	USART2_TX
PD6	EVENTOUT	TIM2_CH4	-	-	-	-	USART2_RX
PD7	EVENTOUT	TIM2_CH3	-	-	-	-	USART2_CK
PD8	EVENTOUT	-	-	-	-	-	USART3_TX
PD9	EVENTOUT	-	-	-	-	-	USART3_RX
PD10	EVENTOUT	-	-	-	-	-	USART3_CK
PD11	EVENTOUT	-	-	-	-	-	USART3_CTS
PD12	EVENTOUT	TIM4_CH1	TSC_G8_IO1	-	-	-	USART3_RTS
PD13	EVENTOUT	TIM4_CH2	TSC_G8_IO2	-	-	-	-
PD14	EVENTOUT	TIM4_CH3	TSC_G8_IO3	-	-	-	-
PD15	EVENTOUT	TIM4_CH4	TSC_G8_IO4	-	-	SPI2_NSS	-

Table 16. Alternate functions for port E

Port & Pin Name	AF0	AF1	AF2	AF3	AF4	AF6	AF7
PE0	-	EVENTOUT	TIM4_ETR	-	TIM16_CH1	-	USART1_TX
PE1	-	EVENTOUT	-	-	TIM17_CH1	-	USART1_RX
PE2	TRACECK	EVENTOUT	TIM3_CH1	TSC_G7_IO1	-	-	-
PE3	TRACED0	EVENTOUT	TIM3_CH2	TSC_G7_IO2	-	-	-
PE4	TRACED1	EVENTOUT	TIM3_CH3	TSC_G7_IO3	-	-	-
PE5	TRACED2	EVENTOUT	TIM3_CH4	TSC_G7_IO4	-	-	-
PE6	TRACED3	EVENTOUT		-	-	-	-
PE7	-	EVENTOUT	TIM1_ETR	-	-	-	-
PE8	-	EVENTOUT	TIM1_CH1N	-	-	-	-
PE9	-	EVENTOUT	TIM1_CH1	-	-	-	-
PE10	-	EVENTOUT	TIM1_CH2N	-	-	-	-
PE11	-	EVENTOUT	TIM1_CH2	-	-	-	-
PE12	-	EVENTOUT	TIM1_CH3N	-	-	-	-
PE13	-	EVENTOUT	TIM1_CH3	-	-	-	-
PE14	-	EVENTOUT	TIM1_CH4	-	-	TIM1_BKIN2	-
PE15	-	EVENTOUT	TIM1_BKIN	-	-	-	USART3_RX

Table 17. Alternate functions for port F

Port & Pin Name	AF1	AF2	AF3	AF4	AF5	AF6	AF7
PF0	-	-	-	I2C2_SDA	-	TIM1_CH3N	-
PF1	-	-	-	I2C2_SCL	-	-	-
PF2	EVENTOUT	-	-	-	-	-	-
PF4	EVENTOUT	COMP1_OUT	-	-	-	-	-
PF6	EVENTOUT	TIM4_CH4	-	I2C2_SCL	-	-	USART3_RTS
PF9	EVENTOUT	-	TIM15_CH1	-	SPI2_SCK	-	-
PF10	EVENTOUT	-	TIM15_CH2	-	SPI2_SCK	-	-

OSC/IN
OSC/OUT