



Table 9. Alternate function mapping

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/I2S2/I2S2ext	SPI3/I2Sext/I2S3	USART1/2/3/I2S3ext	UART4/5/USART6	CAN1/CAN2/TIM12/13/14	OTG_FS/OTG_HS	ETH	FSMC/SDIO/OTG_FS	DCMI		
Port A	PA0		TIM2_CH1_ETR	TIM5_CH1	TIM8_ETR				USART2_CTS	UART4_TX			ETH_MII_CRS				EVENTOUT
	PA1		TIM2_CH2	TIM5_CH2					USART2_RTS	UART4_RX			ETH_MII_RX_CLK ETH_RMII_REF_CLK				EVENTOUT
	PA2		TIM2_CH3	TIM5_CH3	TIM9_CH1				USART2_TX				ETH_MDIO				EVENTOUT
	PA3		TIM2_CH4	TIM5_CH4	TIM9_CH2				USART2_RX			OTG_HS_ULPI_D0	ETH_MII_COL				EVENTOUT
	PA4						SPI1_NSS	SPI3_NSS I2S3_WS	USART2_CK					OTG_HS_SOF	DCMI_HSYN_C		EVENTOUT
	PA5		TIM2_CH1_ETR		TIM8_CH1N		SPI1_SCK					OTG_HS_ULPI_CK					EVENTOUT
	PA6		TIM1_BKIN	TIM3_CH1	TIM8_BKIN		SPI1_MISO				TIM13_CH1				DCMI_PIXCK		EVENTOUT
	PA7		TIM1_CH1N	TIM3_CH2	TIM8_CH1N		SPI1_MOSI				TIM14_CH1		ETH_MII_RX_DV ETH_RMII_CRS_DV				EVENTOUT
	PA8	MCO1	TIM1_CH1			I2C3_SCL			USART1_CK			OTG_FS_SOF					EVENTOUT
	PA9		TIM1_CH2			I2C3_SMB_A			USART1_TX						DCMI_D0		EVENTOUT
	PA10		TIM1_CH3						USART1_RX			OTG_FS_ID			DCMI_D1		EVENTOUT
	PA11		TIM1_CH4						USART1_CTS		CAN1_RX	OTG_FS_DM					EVENTOUT
	PA12		TIM1_ETR						USART1_RTS		CAN1_TX	OTG_FS_DP					EVENTOUT
	PA13	JTMS-SWDIO															EVENTOUT
	PA14	JTCK-SWCLK															EVENTOUT
	PA15	JTDI	TIM2_CH1 TIM2_ETR				SPI1_NSS	SPI3_NSS/ I2S3_WS									EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/I2S2/I2S2ext	SPI3/I2Sext/I2S3	USART1/2/3/I2S3ext	UART4/5/USART6	CAN1/CAN2/TIM12/13/14	OTG_FS/OTG_HS	ETH	FSMC/SDIO/OTG_FS	DCMI		
Port B	PB0		TIM1_CH2N	TIM3_CH3	TIM8_CH2N							OTG_HS_ULPI_D1	ETH_MII_RXD2				EVENTOUT
	PB1		TIM1_CH3N	TIM3_CH4	TIM8_CH3N							OTG_HS_ULPI_D2	ETH_MII_RXD3				EVENTOUT
	PB2																EVENTOUT
	PB3	JTDO/TRACES WO	TIM2_CH2				SPI1_SCK	SPI3_SCK I2S3_CK									EVENTOUT
	PB4	NJTRST		TIM3_CH1			SPI1_MISO	SPI3_MISO	I2S3ext_SD								EVENTOUT
	PB5			TIM3_CH2		I2C1_SMB_A	SPI1_MOSI	SPI3_MOSI I2S3_SD			CAN2_RX	OTG_HS_ULPI_D7	ETH_PPS_OUT		DCMI_D10		EVENTOUT
	PB6			TIM4_CH1		I2C1_SCL			USART1_TX		CAN2_TX				DCMI_D5		EVENTOUT
	PB7			TIM4_CH2		I2C1_SDA			USART1_RX					FSMC_NL	DCMI_VSYN_C		EVENTOUT
	PB8			TIM4_CH3	TIM10_CH1	I2C1_SCL					CAN1_RX		ETH_MII_TXD3	SDIO_D4	DCMI_D6		EVENTOUT
	PB9			TIM4_CH4	TIM11_CH1	I2C1_SDA	SPI2_NSS I2S2_WS				CAN1_TX			SDIO_D5	DCMI_D7		EVENTOUT
	PB10		TIM2_CH3			I2C2_SCL	SPI2_SCK I2S2_CK		USART3_TX			OTG_HS_ULPI_D3	ETH_MII_RX_ER				EVENTOUT
	PB11		TIM2_CH4			I2C2_SDA			USART3_RX			OTG_HS_ULPI_D4	ETH_MII_TX_EN ETH_RMII_TX_EN				EVENTOUT
	PB12		TIM1_BKIN			I2C2_SMB_A	SPI2_NSS I2S2_WS		USART3_CK		CAN2_RX	OTG_HS_ULPI_D5	ETH_MII_TXD0 ETH_RMII_TXD0	OTG_HS_ID			EVENTOUT
	PB13		TIM1_CH1N				SPI2_SCK I2S2_CK		USART3_CTS		CAN2_TX	OTG_HS_ULPI_D6	ETH_MII_TXD1 ETH_RMII_TXD1				EVENTOUT
	PB14		TIM1_CH2N		TIM8_CH2N		SPI2_MISO	I2S2ext_SD	USART3_RTS		TIM12_CH1			OTG_HS_DM			EVENTOUT
	PB15	RTC_REFIN	TIM1_CH3N		TIM8_CH3N		SPI2_MOSI I2S2_SD				TIM12_CH2			OTG_HS_DP			EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/ I2S2/I2S2ext	SPI3/I2Sext/ I2S3	USART1/2/3/ I2S3ext	UART4/5/ USART6	CAN1/ CAN2/ TIM12/13/14	OTG_FS/ OTG_HS	ETH	FSMC/SDIO/ OTG_FS	DCMI		
Port C	PC0											OTG_HS_ULPI_ STP					EVENTOUT
	PC1												ETH_MDC				EVENTOUT
	PC2						SPI2_MISO	I2S2ext_SD				OTG_HS_ULPI_ DIR	ETH_MII_TXD2				EVENTOUT
	PC3						SPI2_MOSI I2S2_SD					OTG_HS_ULPI_ NXT	ETH_MII_TX_CLK				EVENTOUT
	PC4												ETH_MII_RXD0 ETH_RMII_RXD0				EVENTOUT
	PC5												ETH_MII_RXD1 ETH_RMII_RXD1				EVENTOUT
	PC6			TIM3_CH1	TIM8_CH1		I2S2_MCK			USART6_TX				SDIO_D6	DCMI_D0		EVENTOUT
	PC7			TIM3_CH2	TIM8_CH2			I2S3_MCK		USART6_RX				SDIO_D7	DCMI_D1		EVENTOUT
	PC8			TIM3_CH3	TIM8_CH3					USART6_CK				SDIO_D0	DCMI_D2		EVENTOUT
	PC9	MCO2		TIM3_CH4	TIM8_CH4	I2C3_SDA	I2S_CKIN							SDIO_D1	DCMI_D3		EVENTOUT
	PC10							SPI3_SCK/ I2S3_CK	USART3_TX/ I2S3ext_SD	UART4_TX				SDIO_D2	DCMI_D8		EVENTOUT
	PC11						I2S3ext_SD	SPI3_MISO/ I2S3_SD	USART3_RX	UART4_RX				SDIO_D3	DCMI_D4		EVENTOUT
	PC12							SPI3_MOSI I2S3_SD	USART3_CK	UART5_TX				SDIO_CK	DCMI_D9		EVENTOUT
	PC13																EVENTOUT
	PC14																EVENTOUT
	PC15																EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/I2S2/I2S2ext	SPI3/I2Sext/I2S3	USART1/2/3/I2S3ext	UART4/5/USART6	CAN1/CAN2/TIM12/13/14	OTG_FS/OTG_HS	ETH	FSMC/SDIO/OTG_FS	DCMI		
Port D	PD0										CAN1_RX			FSMC_D2			EVENTOUT
	PD1										CAN1_TX			FSMC_D3			EVENTOUT
	PD2			TIM3_ETR						UART5_RX				SDIO_CMD	DCMI_D11		EVENTOUT
	PD3								USART2_CTS					FSMC_CLK			EVENTOUT
	PD4								USART2_RTS					FSMC_NOE			EVENTOUT
	PD5								USART2_TX					FSMC_NWE			EVENTOUT
	PD6								USART2_RX					FSMC_NWAIT			EVENTOUT
	PD7								USART2_CK					FSMC_NE1/FSMC_NCE2			EVENTOUT
	PD8								USART3_TX					FSMC_D13			EVENTOUT
	PD9								USART3_RX					FSMC_D14			EVENTOUT
	PD10								USART3_CK					FSMC_D15			EVENTOUT
	PD11								USART3_CTS					FSMC_A16			EVENTOUT
	PD12			TIM4_CH1					USART3_RTS					FSMC_A17			EVENTOUT
	PD13			TIM4_CH2										FSMC_A18			EVENTOUT
	PD14			TIM4_CH3										FSMC_D0			EVENTOUT
	PD15			TIM4_CH4										FSMC_D1			EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/ I2S2/I2S2ext	SPI3/I2Sext/ I2S3	USART1/2/3/ I2S3ext	UART4/5/ USART6	CAN1/ CAN2/ TIM12/13/14	OTG_FS/ OTG_HS	ETH	FSMC/SDIO/ OTG_FS	DCMI		
Port E	PE0			TIM4_ETR										FSMC_NBL0	DCMI_D2		EVENTOUT
	PE1													FSMC_NBL1	DCMI_D3		EVENTOUT
	PE2	TRACECLK											ETH_MII_TXD3	FSMC_A23			EVENTOUT
	PE3	TRACED0												FSMC_A19			EVENTOUT
	PE4	TRACED1												FSMC_A20	DCMI_D4		EVENTOUT
	PE5	TRACED2			TIM9_CH1									FSMC_A21	DCMI_D6		EVENTOUT
	PE6	TRACED3			TIM9_CH2									FSMC_A22	DCMI_D7		EVENTOUT
	PE7		TIM1_ETR											FSMC_D4			EVENTOUT
	PE8		TIM1_CH1N											FSMC_D5			EVENTOUT
	PE9		TIM1_CH1											FSMC_D6			EVENTOUT
	PE10		TIM1_CH2N											FSMC_D7			EVENTOUT
	PE11		TIM1_CH2											FSMC_D8			EVENTOUT
	PE12		TIM1_CH3N											FSMC_D9			EVENTOUT
	PE13		TIM1_CH3											FSMC_D10			EVENTOUT
	PE14		TIM1_CH4											FSMC_D11			EVENTOUT
	PE15		TIM1_BKIN											FSMC_D12			EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/I2S2/I2S2ext	SPI3/I2Sext/I2S3	USART1/2/3/I2S3ext	UART4/5/USART6	CAN1/CAN2/TIM12/13/14	OTG_FS/OTG_HS	ETH	FSMC/SDIO/OTG_FS	DCMI		
Port F	PF0					I2C2_SDA								FSMC_A0			EVENTOUT
	PF1					I2C2_SCL								FSMC_A1			EVENTOUT
	PF2					I2C2_SMBA								FSMC_A2			EVENTOUT
	PF3													FSMC_A3			EVENTOUT
	PF4													FSMC_A4			EVENTOUT
	PF5													FSMC_A5			EVENTOUT
	PF6				TIM10_CH1									FSMC_NIORD			EVENTOUT
	PF7				TIM11_CH1									FSMC_NREG			EVENTOUT
	PF8										TIM13_CH1			FSMC_NIOWR			EVENTOUT
	PF9										TIM14_CH1			FSMC_CD			EVENTOUT
	PF10													FSMC_INTR			EVENTOUT
	PF11														DCMI_D12		EVENTOUT
	PF12													FSMC_A6			EVENTOUT
	PF13													FSMC_A7			EVENTOUT
	PF14													FSMC_A8			EVENTOUT
	PF15													FSMC_A9			EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/ I2S2/I2S2ext	SPI3/I2Sext/ I2S3	USART1/2/3/ I2S3ext	UART4/5/ USART6	CAN1/ CAN2/ TIM12/13/14	OTG_FS/ OTG_HS	ETH	FSMC/SDIO/ OTG_FS	DCMI		
Port G	PG0													FSMC_A10			EVENTOUT
	PG1													FSMC_A11			EVENTOUT
	PG2													FSMC_A12			EVENTOUT
	PG3													FSMC_A13			EVENTOUT
	PG4													FSMC_A14			EVENTOUT
	PG5													FSMC_A15			EVENTOUT
	PG6													FSMC_INT2			EVENTOUT
	PG7									USART6_CK				FSMC_INT3			EVENTOUT
	PG8									USART6_RTS			ETH_PPS_OUT				EVENTOUT
	PG9									USART6_RX				FSMC_NE2/ FSMC_NCE3			EVENTOUT
	PG10													FSMC_NCE4_1/ FSMC_NE3			EVENTOUT
	PG11												ETH_MII_TX_EN ETH_RMII_TX_EN	FSMC_NCE4_2			EVENTOUT
	PG12									USART6_RTS				FSMC_NE4			EVENTOUT
	PG13									USART6_CTS			ETH_MII_TXD0 ETH_RMII_TXD0	FSMC_A24			EVENTOUT
	PG14									USART6_TX			ETH_MII_TXD1 ETH_RMII_TXD1	FSMC_A25			EVENTOUT
	PG15									USART6_CTS					DCMI_D13		EVENTOUT

Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/ I2S2/I2S2ext	SPI3/I2Sext/ I2S3	USART1/2/3/ I2S3ext	UART4/5/ USART6	CAN1/ CAN2/ TIM12/13/14	OTG_FS/ OTG_HS	ETH	FSMC/SDIO/ OTG_FS	DCMI		
Port H	PH0																EVENTOUT
	PH1																EVENTOUT
	PH2												ETH_MII_CRD				EVENTOUT
	PH3												ETH_MII_COL				EVENTOUT
	PH4					I2C2_SCL						OTG_HS_ULPI_NXT					EVENTOUT
	PH5					I2C2_SDA											EVENTOUT
	PH6					I2C2_SMB_A					TIM12_CH1		ETH_MII_RXD2				EVENTOUT
	PH7					I2C3_SCL							ETH_MII_RXD3				EVENTOUT
	PH8					I2C3_SDA									DCMI_HSYN_C		EVENTOUT
	PH9					I2C3_SMB_A					TIM12_CH2				DCMI_D0		EVENTOUT
	PH10			TIM5_CH1											DCMI_D1		EVENTOUT
	PH11			TIM5_CH2											DCMI_D2		EVENTOUT
	PH12			TIM5_CH3											DCMI_D3		EVENTOUT
	PH13				TIM8_CH1N						CAN1_TX						EVENTOUT
	PH14				TIM8_CH2N										DCMI_D4		EVENTOUT
	PH15				TIM8_CH3N										DCMI_D11		EVENTOUT



Table 9. Alternate function mapping (continued)

Port		AF0	AF1	AF2	AF3	AF4	AF5	AF6	AF7	AF8	AF9	AF10	AF11	AF12	AF13	AF14	AF15
		SYS	TIM1/2	TIM3/4/5	TIM8/9/10/11	I2C1/2/3	SPI1/SPI2/ I2S2/I2S2ext	SPI3/I2Sext/ I2S3	USART1/2/3/ I2S3ext	UART4/5/ USART6	CAN1/ CAN2/ TIM12/13/14	OTG_FS/ OTG_HS	ETH	FSMC/SDIO/ OTG_FS	DCMI		
Port I	PI0			TIM5_CH4			SPI2_NSS I2S2_WS								DCMI_D13		EVENTOUT
	PI1						SPI2_SCK I2S2_CK								DCMI_D8		EVENTOUT
	PI2				TIM8_CH4		SPI2_MISO	I2S2ext_SD							DCMI_D9		EVENTOUT
	PI3				TIM8_ETR		SPI2_MOSI I2S2_SD								DCMI_D10		EVENTOUT
	PI4				TIM8_BKIN										DCMI_D5		EVENTOUT
	PI5				TIM8_CH1										DCMI_VSYNC		EVENTOUT
	PI6				TIM8_CH2										DCMI_D6		EVENTOUT
	PI7				TIM8_CH3										DCMI_D7		EVENTOUT
	PI8																EVENTOUT
	PI9										CAN1_RX						EVENTOUT
	PI10												ETH_MII_RX_ER				EVENTOUT
	PI11											OTG_HS_ULPI_DIR					EVENTOUT