STM32F4 Pin	Discovery F4 Pin	LQFP100	Pin name	I/O Level	Function (1) after reset	Alternate functions (2)									
PA0	P1.12	23	PA0(6)-WKUP(5)	FT	PA0-WKUP	USART2_CTS	USART4_TX	ETH_MII_CRS	TIM2_CH1_ETR	TIM5_CH1	TIM8_ETR	ADC123_IN0	WKUP		
PA1	P1.11	24	PA1	FT	PA1	USART2_RTS	USART4_RX	ETH_RMII_REF_CLK	ETH_MII_RX_CLK	TIM5_CH2	TIMM2_CH2	ADC123_IN1			
PA2	P1.14	25	PA2(5)	FT	PA2	USART2_TX	TIM5_CH3	TIM9_CH1	TIM2_CH3	ETH_MDIO	ADC123_IN2				
PA3	P1.13	26	PA3(5)	FT	PA3	USART2_RX	TIM5_CH4	TIM9_CH2	OTG_HS_ULPI_D0	ETH_MII_COL	ADC123_IN3				
PA4	P1.16	29	PA4(5)	FT	PA4	SPI1_NSS	USART2_CK	DCMI_HSYNC	I2S3_WS	ADC12_IN4	DAC1_OUT				
PA5	P1.15	30	PA5(5)	FT	PA5	SPI1_SCK	OTG_HS_ULPI_CK	TIM2_CH1_ETR	TIM8_CHIN	ADC12_IN5	DAC2_OUT				
PA6	P1.18	31	PA6(5)	FT	PA6	SPI1_MISO	TIM8_BKIN	TIM13_CH1	DCMI_PIXCLK	TIM3_CH1	TIM1_BKIN	ADC12_IN6			
PA7	P1.17	32	PA7(5)	FT	PA7	SPI1_MOSI	TIM8_CH1N	TIM14_CH1	TIM3_CH2	ETH_MII_RX_DV	TIM1_CH1	NRMII_CRS_DV	ADC12_IN7		
PA8	P1.43	67	PA8	FT	PA8	MCO1	USART1_CK	TIM1_CH1	I2C3_SCL	OTG_FS_SOF					
PA9	P2.44	68	PA9	FT	PA9	USART1_TX	TIM1_CH2	I2C3_SMBA	DCMI_D0	OTG_FS_VBUS					
PA10	P2.41	69	PA10	FT	PA10	USART1_RX	TIM1_CH3	OTG_FS_ID	DCMI_D1						
PA11	CN5 (USB)	70	PA11	FT	PA11	USART1_CTS	CAN1_RX	TIM1_CH4	OTG_FS_DM						
PA12	CN5 (USB)	71	PA12	FT	PA12	USART1_RTS	CAN1_TX	TIM1_ETR	OTG_FS_DP						
PA13	P2.42	72	PA13	FT	JTMS-SWDIO	JTMS-SWDIO									
PA14	P2.39	76	PA14	FT	JTCK-SWCLK	JTCK-SWCLK									
PA15	P2.40	77	PA15	FT	JTDI	JTDI	SPI3_NSS	I2S3_WS	TIM2_CH1_ETR	SPI1_NSS					
PB0	P1.22	35	PB0(5)	FT	PB0	TIM3_CH3	TIM8_CH2N	OTG_HS_ULPI_D1	ETH_MII_RXD2	TIM1_CH2N	ADC12_IN8				
PB1	P1.21	36	PB1(5)	FT	PB1	TIM3_CH4	TIM8_CH3N	OTG_HS_ULPI_D2	ETH_MII_RXD3	OTG_HS_INTN	TIM1_CH3N	ADC12_IN9			
PB2	P1.24	37	PB2	FT	PB2-BOOT1										
PB3	P2.28	89	PB3	FT	JTDO TRACESWO	JTDO	TRACESWO	SPI3_SCK	I2S3_CK	SPI1_SCK	TIM2_CH2				
PB4	P2.25	90	PB4	FT	NJTRST	NJTRST	SPI3_MISO	TIM3_CH1	SPI1_MISO	I2S3ext_SD					
PB5	P2.26	91	PB5	FT	PB5	I2C1_SMBA	CAN2_RX	OTG_HS_ULPI_D7	ETH_PPS_OUT	TIM3_CH2	SPI1_MOSI	SPI3_MOSI	DCMI_D10	I2S3_SD	
PB6	P2.23	92	PB6	FT	PB6	I2C1_SCL	TIM4_CH1	CAN2_TX	OTG_FS_INTN	DCMI_D5	USART1_TX				
PB7	P2.24	93	PB7	FT	PB7	I2C1_SDA	FSMC_NL	DCMI_VSYNC	USART1_RX	TIM4_CH2					
PB8	P2.19	95	PB8	FT	PB8	TIM4_CH3	SDIO_D4	TIM10_CH1	DCMI_D6	OTG_FS_SCL	ETH_MII_TXD3	I2C1_SCL	CAN1_RX		
PB9	P2.20	96	PB9	FT	PB9	SPI2_NSS	I2S2_WS	TIM4_CH4	TIM11_CH1	SDIO_D5	DCMI_D7	I2C1_SDA	CAN1_TX		
PB10	P1.34	47	PB10	FT	PB10	SPI2_SCK	I2S2_CK	I2C2_SCL	USART3_TX	OTG_HS_ULPI_D3	ETH_MII_RX_ER	OTG_HS_SCL	TIM2_CH3		
PB11	P1.35	48	PB11	FT	PB11	I2C2_SDA	USART3_RX	OTG_HS_ULPI_D4	ETH_RMII_TX_EN	ETH_MII_TX_EN	OTG_HS_SDA	TIM2_CH4			
PB12	P1.36	51	PB12	FT	PB12	SPI2_NSS	I2S2_WS	I2C2_SMBA	USART3_CK	TIM1_BKIN	CAN2_RX	OTG_HS_ULPI_D5	ETH_RMII_TXD0	ETH_MII_TXD0	OTG_HS_ID
PB13	P1.37	52	PB13	FT	PB13	SPI2_SCK	I2S2_CK	USART3_CTS	TIM1_CH1N	CAN2_TX	OTG_HS_ULPI_D6	ETH_RMII_TXD1	ETH_MII_TXD1	OTG_HS_VBUS	
PB14	P1.38	53	PB14	FT	PB14	SPI2_MISO	TIM1_CH2N	TIM12_CH1	OTG_HS_DM	USART3_RTS	TIM8_CH2N	I2S2ext_SD			
PB15	P1.39	54	PB15	FT	PB15	SPI2_MOSI	I2S2_SD	TIM1_CH3N	TIM8_CH3N	TIM12_CH2	OTG_HS_DP				
PC0	P1.8	15	PC0(5)	FT	PC0	OTG_HS_ULPI_STP	ADC123_IN10								
PC1	P1.7	16	PC1(5)	FT	PC1	ETH_MDC	ADC123_IN11								
PC2	P1.10	17	PC2(5)	FT	PC2	SPI2_MISO	OTG_HS_ULPI_DIR	TH_MII_TXD2	I2S2ext_SD	ADC123_IN12					
PC3	P1.9	18	PC3(5)	FT	PC3	SPI2_MOSI	I2S2_SD	OTG_HS_ULPI_NXT	ETH_MII_TX_CLK	ADC123_IN13					
PC4	P1.20	33	PC4(5)	FT	PC4	ETH_RMII_RX_D0	ETH_MII_RX_D0	ADC12_IN14							
PC5	P1.19	34	PC5(5)	FT	PC5	ETH_RMII_RX_D1	ETH_MII_RX_D1	ADC12_IN15							
PC6	P2.47	63	PC6	FT	PC6	I2S2_MCK	TIM8_CH1	SDIO_D6	USART6_TX	DCMI_D0	TIM3_CH1				
PC7	P2.48	64	PC7	FT	PC7	I2S3_MCK	TIM8_CH2	SDIO_D7	USART6_RX	DCMI_D1	TIM3_CH2				
PC8	P2.45	65	PC8	FT	PC8	TIM8_CH3	SDIO_D0	TIM3_CH3	USART6_CK	DCMI_D2					
PC9	P2.46	66	PC9	FT	PC9	I2S_CKIN	MCO2	TIM8_CH4	SDIO_D1	DCMI_D3	TIM3_CH4	I2C3_SDA			
PC10	P2.37	78	PC10	FT	PC10	SPI3_SCK	I2S3_CK	UART4_TX	SDIO_D2	USART3_TX	DCMI_D8				
PC11	P2.38	79	PC11	FT	PC11	UART4_RX	SPI3_MISO	SDIO_D3	DCMI_D4	USART3_RX	I2S3ext_SD				
PC12	P2.35	80	PC12	FT	PC12	UART5_TX	SDIO_CK	DCMI_D9	SPI3_MOSI	I2S3_SD	USART3_CK				
PC13	P2.12	7	PC13(3)	FT	PC13(4)	RTC_AF1									
PC14	P2.9	8	PC14(3)-OSC32_I(5)	FT	PC14(4)	OSC32_IN									
PC15	P2.10	9	PC15(3)-OSC32_OUT(5)	FT	PC15(4)	OSC32_OUT									
PD0	P2.36	81	PD0	FT	PD0	FSMC_D2	CAN1_RX								
PD1	P2.33	82	PD1	FT	PD1	FSMC_D3	CAN1_TX								
PD2	P2.34	83	PD2	FT	PD2	TIM3_ETR	UART5_RX	SDIO_CMD	DCMI_D11						
PD3	P2.31	84	PD3	FT	PD3	FSMC_CLK	USART2_CTS								
PD4	P2.32	85	PD4	FT	PD4	FSMC_NOE	USART2_RTS								
PD5	P2.29	86	PD5	FT	PD5	FSMC_NWE	USART2_TX								
PD6	P2.30	87	PD6	FT	PD6	FSMC_NWAIT	USART2_RX								
PD7	P2.27	88	PD7	FT	PD7	USART2_CK	FSMC_NE1	FSMC_NCE2							
PD8	P1.40	55	PD8	FT	PD8	FSMC_D13	USART3_TX								
PD9	P1.41	56	PD9	FT	PD9	FSMC_D14	USART3_RX								
PD10	P1.42	57	PD10	FT	PD10	FSMC_D15	USART3_CK								
PD11	P1.43	58	PD11	FT	PD11	FSMC_A16	USART3_CTS								
PD12	P1.44	59	PD12	FT	PD12	FSMC_A17	TIM4_CH1	USART3_RTS							
PD13	P1.45	60	PD13	FT	PD13	FSMC_A18	TIM4_CH2								
PD14	P1.46	61	PD14	FT	PD14	FSMC_D0	TIM4_CH3								
PD15	P1.47	62	PD15	FT	PD15	FSMC_D1	TIM4_CH4								
PE0	P2.17	97	PE0	FT	PE0	TIM4_ETR	FSMC_NBL0	DCMI_D2							
PE1	P2.18	98	PE1	FT	PE1	FSMC_NBL1	DCMI_D3								
PE2	P2.15	1	PE2	FT	PE2	TRACECLK	FSMC_A23	ETH_MII_TXD3							
PE3	P2.16	2	PE3	FT	PE3	TRACED0	FSMC_A19								
PE4	P2.13	3	PE4	FT	PE4	TRACED1	FSMC_A20	DCMI_D4							
PE5	P2.14	4	PE5	FT	PE5	TRACED2	FSMC_A21	TIM9_CH1	DCMI_D6						
PE6	P2.11	5	PE6	FT	PE6	TRACED3	FSMC_A22	TIM9_CH2	DCMI_D7						
PE7	P1.25	38	PE7	FT	PE7	FSMC_D4	TIM1_ETR								
PE8	P1.26	39	PE8	FT	PE8	FSMC_D5	TIM1_CH1N								
PE9	P1.27	40	PE9	FT	PE9	FSMC_D6	TIM1_CH1								
PE10	P1.28	41	PE10	FT	PE10	FSMC_D7	TIM1_CH2N								
PE11	P1.29	42	PE11	FT	PE11	FSMC_D8	TIM1_CH2								
PE12	P1.30	43	PE12	FT	PE12	FSMC_D9	TIM1_CH3N								
PE13	P1.31	44	PE13	FT	PE13	FSMC_D10	TIM1_CH3								
PE14	P1.32	45	PE14	FT	PE14	FSMC_D11	TIM1_CH4								
PE15	P1.33	46	PE15	FT	PE15	FSMC_D12	TIM1_BKIN								
PH0	P2.7	12	PH0(5)-OSC_IN	FT	PH0	OSC_IN									
PH1	P2.8	13	PH1(5)-OSC_OUT	FT	PH1	OSC_OUT									
		99	PDR_ON		PDR_ON										
BOOT0	P2.21	94	BOOT0		BOOT0	V_{PP}									
NRST	P1.6	14	NRST	I/O	NRST										
		6	V_{BAT}		V_{BAT}										
		49	V_{CAP_1}		V_{CAP_1}										
		73	V_{CAP_2}		V_{CAP_2}										
		11	V_{DD}		V_{DD}										
		19	V_{DD}		V_{DD}										
		28	V_{DD}		V_{DD}										
		50	V_{DD}		V_{DD}										
		75	V_{DD}		V_{DD}										
		100	V_{DD}		V_{DD}										
		22	V_{DDA}		V_{DDA}										
		21	V_{REF+}		V_{REF+}										
		10	V_{SS}		V_{SS}										
		74	V_{SS}		V_{SS}										
		27	V_{SS_4}		V_{SS_4}										
		20	V_{SSA}		V_{SSA}										