

## 4.3 GPIO Multiplex Function

The following table provides a description of the D1-H GPIO multiplex function.



### NOTE

For each GPIO, Function0 is input function; Function1 is output function; Function9 to Function13 are reserved.

Table 4-3 GPIO Multiplex Function

Pin Name	GPIO Group	IO Type	Function2	Function3	Function4	Function5	Function6	Function7	Function8	Function14
PB0	GPIOB	I/O	PWM3	IR-TX	TWI2-SCK	SPI1-WP/ DBI-TE	UART0-TX	UART2-TX	OWA-OUT	PB-EINT0
PB1		I/O	PWM4	I2S2-DOUT3	TWI2-SDA	I2S2-DIN3	UART0-RX	UART2-RX	IR-RX	PB-EINT1
PB2		I/O	LCD0-D0	I2S2-DOUT2	TWI0-SDA	I2S2-DIN2	LCD0-D18	UART4-TX		PB-EINT2
PB3		I/O	LCD0-D1	I2S2-DOUT1	TWI0-SCK	I2S2-DIN0	LCD0-D19	UART4-RX		PB-EINT3
PB4		I/O	LCD0-D8	I2S2-DOUT0	TWI1-SCK	I2S2-DIN1	LCD0-D20	UART5-TX		PB-EINT4
PB5		I/O	LCD0-D9	I2S2-BCLK	TWI1-SDA	PWM0	LCD0-D21	UART5-RX		PB-EINT5
PB6		I/O	LCD0-D16	I2S2-LRCK	TWI3-SCK	PWM1	LCD0-D22	UART3-TX	CPUBIST0	PB-EINT6
PB7		I/O	LCD0-D17	I2S2-MCLK	TWI3-SDA	IR-RX	LCD0-D23	UART3-RX	CPUBIST1	PB-EINT7
PB8		I/O	DMIC-DATA3	PWM5	TWI2-SCK	SPI1-HOLD/ DBI-DCX/ DBI-WRX	UART0-TX	UART1-TX		PB-EINT8
PB9		I/O	DMIC-DATA2	PWM6	TWI2-SDA	SPI1-MISO/ DBI-SDI/ DBI-TE/ DBI-DCX	UART0-RX	UART1-RX		PB-EINT9
PB10		I/O	DMIC-DATA1	PWM7	TWI0-SCK	SPI1-MOSI/ DBI-SDO	CLK-FANOUT0	UART1-RTS		PB-EINT10
PB11		I/O	DMIC-DATA0	PWM2	TWI0-SDA	SPI1-CLK/ DBI-SCLK	CLK-FANOUT1	UART1-CTS		PB-EINT11
PB12		I/O	DMIC-CLK	PWM0	OWA-IN	SPI1-CS/ DBI-CSX	CLK-FANOUT2	IR-RX		PB-EINT12
PC0	GPIOC	I/O	UART2-TX	TWI2-SCK	LEDC-DO					PC-EINT0
PC1		I/O	UART2-RX	TWI2-SDA						PC-EINT1
PC2		I/O	SPI0-CLK	SDC2-CLK						PC-EINT2
PC3		I/O	SPI0-CS0	SDC2-CMD						PC-EINT3
PC4		I/O	SPI0-MOSI	SDC2-D2	BOOT-SEL0					PC-EINT4
PC5		I/O	SPI0-MISO	SDC2-D1	BOOT-SEL1					PC-EINT5
PC6		I/O	SPI0-WP	SDC2-D0	UART3-TX	TWI3-SCK	DBG-CLK			PC-EINT6
PC7		I/O	SPI0-HOLD	SDC2-D3	UART3-RX	TWI3-SDA	TCON-TRIG			PC-EINT7
PD0	GPIOD	I/O	LCD0-D2	LVDS0-V0P	DSI-D0P	TWI0-SCK				PD-EINT0
PD1		I/O	LCD0-D3	LVDS0-V0N	DSI-D0N	UART2-TX				PD-EINT1

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PD2		I/O	LCD0-D4	LVDS0-V1P	DSI-D1P	UART2-RX				PD-EINT2
PD3		I/O	LCD0-D5	LVDS0-V1N	DSI-D1N	UART2-RTS				PD-EINT3
PD4		I/O	LCD0-D6	LVDS0-V2P	DSI-CKP	UART2-CTS				PD-EINT4
PD5		I/O	LCD0-D7	LVDS0-V2N	DSI-CKN	UART5-TX				PD-EINT5
PD6		I/O	LCD0-D10	LVDS0-CKP	DSI-D2P	UART5-RX				PD-EINT6
PD7		I/O	LCD0-D11	LVDS0-CKN	DSI-D2N	UART4-TX				PD-EINT7
PD8		I/O	LCD0-D12	LVDS0-V3P	DSI-D3P	UART4-RX				PD-EINT8
PD9		I/O	LCD0-D13	LVDS0-V3N	DSI-D3N	PWM6				PD-EINT9
PD10		I/O	LCD0-D14	LVDS1-V0P	SPI1-CS/DBI-CSX	UART3-TX				PD-EINT10
PD11		I/O	LCD0-D15	LVDS1-V0N	SPI1-CLK/DBI-SCLK	UART3-RX				PD-EINT11
PD12		I/O	LCD0-D18	LVDS1-V1P	SPI1-MOSI/DBI-SDO	TWI0-SDA				PD-EINT12
PD13		I/O	LCD0-D19	LVDS1-V1N	SPI1-MISO/DBI-SDI/ DBI-TE/DBI-DCX	UART3-RTS				PD-EINT13
PD14		I/O	LCD0-D20	LVDS1-V2P	SPI1-HOLD/DBI-DCX /DBI-WRX	UART3-CTS				PD-EINT14
PD15		I/O	LCD0-D21	LVDS1-V2N	SPI1-WP/DBI-TE	IR-RX				PD-EINT15
PD16		I/O	LCD0-D22	LVDS1-CKP	DMIC-DATA3	PWM0				PD-EINT16
PD17		I/O	LCD0-D23	LVDS1-CKN	DMIC-DATA2	PWM1				PD-EINT17
PD18		I/O	LCD0-CLK	LVDS1-V3P	DMIC-DATA1	PWM2				PD-EINT18
PD19		I/O	LCD0-DE	LVDS1-V3N	DMIC-DATA0	PWM3				PD-EINT19
PD20		I/O	LCD0-HSYNC	TWI2-SCK	DMIC-CLK	PWM4				PD-EINT20
PD21		I/O	LCD0-VSYNC	TWI2-SDA	UART1-TX	PWM5				PD-EINT21
PD22		I/O	OWA-OUT	IR-RX	UART1-RX	PWM7				PD-EINT22
PE0	GPIOE	I/O	NCSI0-HSYNC	UART2-RTS	TWI1-SCK	LCD0-HSYNC			RGMII-RXCTRL /RMII-CRS-DV	PE-EINT0
PE1		I/O	NCSI0-VSYNC	UART2-CTS	TWI1-SDA	LCD0-VSYNC			RGMII-RXD0/ RMII-RXD0	PE-EINT1
PE2		I/O	NCSI0-PCLK	UART2-TX	TWI0-SCK	CLK-FANOUT0	UART0-TX		RGMII-RXD1/ RMII-RXD1	PE-EINT2
PE3		I/O	NCSI0-MCLK	UART2-RX	TWI0-SDA	CLK-FANOUT1	UART0-RX		RGMII-TXCK/ RMII-TXCK	PE-EINT3
PE4		I/O	NCSI0-D0	UART4-TX	TWI2-SCK	CLK-FANOUT2	D-JTAG-MS	R-JTAG-MS	RGMII-TXD0/ RMII-TXD0	PE-EINT4
PE5		I/O	NCSI0-D1	UART4-RX	TWI2-SDA	LEDC-DO	D-JTAG-DI	R-JTAG-DI	RGMII-TXD1/ RMII-TXD1	PE-EINT5
PE6		I/O	NCSI0-D2	UART5-TX	TWI3-SCK	OWA-IN	D-JTAG-DO	R-JTAG-DO	RGMII-TXCTRL /RMII-TXEN	PE-EINT6
PE7		I/O	NCSI0-D3	UART5-RX	TWI3-SDA	OWA-OUT	D-JTAG-CK	R-JTAG-CK	RGMII-CLKIN/ RMII-RXER	PE-EINT7
PE8		I/O	NCSI0-D4	UART1-RTS	PWM2	UART3-TX			MDC	PE-EINT8
PE9		I/O	NCSI0-D5	UART1-CTS	PWM3	UART3-RX			MDIO	PE-EINT9

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PE10		I/O	NCSI0-D6	UART1-TX	PWM4	IR-RX			EPHY-25M	PE-EINT10
PE11		I/O	NCSI0-D7	UART1-RX	I2S0-DOUT3	I2S0-DIN3			RGMII-TXD2	PE-EINT11
PE12		I/O	TWI2-SCK	NCSI0-FIELD	I2S0-DOUT2	I2S0-DIN2			RGMII-TXD3	PE-EINT12
PE13		I/O	TWI2-SDA	PWM5	I2S0-DOUT0	I2S0-DIN1	DMIC-DATA3		RGMII-RXD2	PE-EINT13
PE14		I/O	TWI1-SCK	D-JTAG-MS	I2S0-DOUT1	I2S0-DIN0	DMIC-DATA2		RGMII-RXD3	PE-EINT14
PE15		I/O	TWI1-SDA	D-JTAG-DI	PWM6	I2S0-LRCK	DMIC-DATA1		RGMII-RXCK	PE-EINT15
PE16		I/O	TWI3-SCK	D-JTAG-DO	PWM7	I2S0-BCLK	DMIC-DATA0			PE-EINT16
PE17		I/O	TWI3-SDA	D-JTAG-CK	IR-TX	I2S0-MCLK	DMIC-CLK			PE-EINT17
PF0	GPIOF	I/O	SDC0-D1		R-JTAG-MS	I2S2-DOUT1	I2S2-DIN0			PF-EINT0
PF1		I/O	SDC0-D0		R-JTAG-DI	I2S2-DOUT0	I2S2-DIN1			PF-EINT1
PF2		I/O	SDC0-CLK	UART0-TX	TWI0-SCK	LEDC-DO	OWA-IN			PF-EINT2
PF3		I/O	SDC0-CMD		R-JTAG-DO	I2S2-BCLK				PF-EINT3
PF4		I/O	SDC0-D3	UART0-RX	TWI0-SDA	PWM6	IR-TX			PF-EINT4
PF5		I/O	SDC0-D2		R-JTAG-CK	I2S2-LRCK				PF-EINT5
PF6		I/O		OWA-OUT	IR-RX	I2S2-MCLK	PWM5			PF-EINT6
PG0	GPIOG	I/O	SDC1-CLK	UART3-TX	RGMII-RXCTRL/ RMII-CRS-DV	PWM7				PG-EINT0
PG1		I/O	SDC1-CMD	UART3-RX	RGMII-RXD0/ RMII-RXD0	PWM6				PG-EINT1
PG2		I/O	SDC1-D0	UART3-RTS	RGMII-RXD1/ RMII-RXD1	UART4-TX				PG-EINT2
PG3		I/O	SDC1-D1	UART3-CTS	RGMII-TXCK/ RMII-TXCK	UART4-RX				PG-EINT3
PG4		I/O	SDC1-D2	UART5-TX	RGMII-TXD0/ RMII-TXD0	PWM5				PG-EINT4
PG5		I/O	SDC1-D3	UART5-RX	RGMII-TXD1/ RMII-TXD1	PWM4				PG-EINT5
PG6		I/O	UART1-TX	TWI2-SCK	RGMII-TXD2	PWM1				PG-EINT6
PG7		I/O	UART1-RX	TWI2-SDA	RGMII-TXD3	OWA-IN				PG-EINT7
PG8		I/O	UART1-RTS	TWI1-SCK	RGMII-RXD2	UART3-TX				PG-EINT8
PG9		I/O	UART1-CTS	TWI1-SDA	RGMII-RXD3	UART3-RX				PG-EINT9
PG10		I/O	PWM3	TWI3-SCK	RGMII-RXCK	CLK-FANOUT0	IR-RX			PG-EINT10
PG11		I/O	I2S1-MCLK	TWI3-SDA	EPHY-25M	CLK-FANOUT1	TCON-TRIG			PG-EINT11
PG12		I/O	I2S1-LRCK	TWI0-SCK	RGMII-TXCTRL/ RMII-TXEN	CLK-FANOUT2	PWM0	UART1-TX		PG-EINT12
PG13		I/O	I2S1-BCLK	TWI0-SDA	RGMII-CLKIN/ RMII-RXER	PWM2	LEDC-DO	UART1-RX		PG-EINT13
PG14		I/O	I2S1-DIN0	TWI2-SCK	MDC	I2S1-DOUT1	SPI0-WP	UART1-RTS		PG-EINT14
PG15		I/O	I2S1-DOUT0	TWI2-SDA	MDIO	I2S1-DIN1	SPI0-HOLD	UART1-CTS		PG-EINT15
PG16		I/O	IR-RX	TCON-TRIG	PWM5	CLK-FANOUT2	OWA-IN	LEDC-DO		PG-EINT16

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PG17		I/O	UART2-TX	TWI3-SCK	PWM7	CLK-FANOUT0	IR-TX	UART0-TX		PG-EINT17
PG18		I/O	UART2-RX	TWI3-SDA	PWM6	CLK-FANOUT1	OWA-OUT	UART0-RX		PG-EINT18

