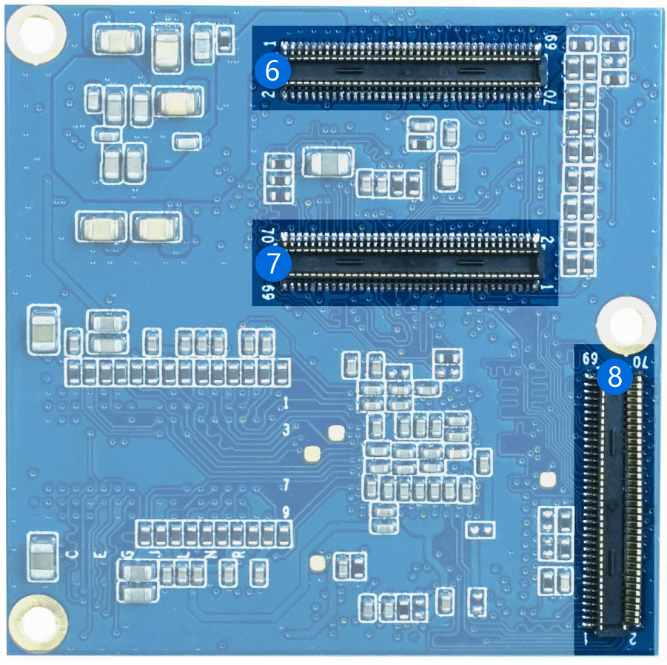
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* **6.70-PIN connector:** You can find the function for each pin from the table below:

| Pin Package Number | Pin Number | Pin Name | Pin Type | Optional Function | Additional Function |
| --- | --- | --- | --- | --- | --- |
| - | 1 | 5V\_VIN | S | - | - |
| - | 2 | 3V3 | S | - | - |
| - | 3 | 5V\_VIN | S | - | - |
| - | 4 | 3V3 | S | - | - |
| - | 5 | 5V\_VIN | S | - | - |
| - | 6 | 3V3 | S | - | - |
| - | 7 | 5V\_VIN | S | - | - |
| - | 8 | 3V3 | S | - | - |
| - | 9 | 5V\_VIN | S | - | - |
| - | 10 | 3V3 | S | - | - |
| - | 11 | 5V\_VIN | S | - | - |
| - | 12 | VDD | S | - | - |
| - | 13 | 5V\_VIN | S | - | - |
| - | 14 | VDD | S | - | - |
| - | 15 | 5V\_VIN | S | - | - |
| - | 16 | VBUS\_OTG | S | - | - |
| - | 17 | BST\_OUT | S | - | - |
| - | 18 | VBUS\_OTG | S | - | - |
| - | 19 | BST\_OUT | S | - | - |
| - | 20 | VBUS\_SW | S | - | - |
| - | 21 | BST\_OUT | S | - | - |
| - | 22 | VBUS\_SW | S | - | - |
| - | 23 | 1V8\_AUDIO | S | - | - |
| - | 24 | VBUS\_SW | S | - | - |
| - | 25 | 1V2\_HDMI | S | - | - |
| - | 26 | VBAT | S | - | - |
| - | 27 | 3V3\_HDMI | S | - | - |
| - | 28 | VBAT | S | - | - |
| - | 29 | - | - | - | - |
| - | 30 | - | - | - | - |
| R4 | 31 | VREF+ | S | - | - |
| AC4 | 32 | PF14 | I/O | TRACED6,DFSDM1\_CKIN6, I2C4\_SCL,I2C1\_SCL, ETH1\_GMII\_RXD6, FMC\_A8,EVENTOUT | ADC2\_INP6, ADC2\_INN2 |
| Y5 | 33 | PF13 | I/O | TRACED5,DFSDM1\_DATIN6, I2C4\_SMBA,I2C1\_SMBA, DFSDM1\_DATIN3, ETH1\_GMII\_RXD5, FMC\_A7,EVENTOUT | ADC2\_INP2 |
| Y4 | 34 | PF15 | I/O | TRACED7,I2C4\_SDA, I2C1\_SDA, ETH1\_GMII\_RXD7, FMC\_A9, EVENTOUT | - |
| - | 35 | GND | S | - | - |
| L3 | 36 | PD14 | I/O | TIM4\_CH3,SAI3\_MCLK\_B, UART8\_CTS,FMC\_AD0/ FMC\_D0,EVENTOUT | - |
| U3 | 37 | ANA0 | A | - | ADC1\_INP0, ADC1\_INN1, ADC2\_INP0, ADC2\_INN1 |
| J2 | 38 | PD15 | I/O | TIM4\_CH4,SAI3\_MCLK\_A, UART8\_CTS,FMC\_AD1/ FMC\_D1,LCD\_R1,EVENTOUT | - |
| U4 | 39 | ANA1 | A | - | ADC1\_INP1, ADC2\_INP1 |
| R2 | 40 | PWR\_ON | O | - | PWR\_ONLP |
| - | 41 | GND | S | - | - |
| K2 | 42 | PC13 | I/O | EVENTOUT | RTC\_OUT1/ RTC\_TS/ RTC\_LSCO, TAMP\_IN1/ TAMP\_OUT2/ TAMP\_OUT3, WKUP3 |
| T2 | 43 | PA14 | I/O | DBTRGO,DBTRGI,MCO2, EVENTOUT | - |
| AB3 | 44 | PA0 | I/O | TIM2\_CH1/TIM2\_ETR, TIM5\_CH1,TIM8\_ETR, TIM15\_BKIN,USART2\_CTS/ USART2\_NSS,UART4\_TX, SDMMC2\_CMD,SAI2\_SD\_B, ETH1\_GMII\_CRS/ ETH1\_MII\_CRS,EVENTOUT | ADC1\_INP16, WKUP1 |
| G2 | 45 | PZ4 | I/O | I2C6\_SCL,I2C2\_SCL, I2C5\_SCL,I2C4\_SCL, EVENTOUT | - |
| - | 46 | PONKEYN | S | - | - |
| B6 | 47 | PD4 | I/O | SAI3\_FS\_A,USART2\_RTS/ USART2\_DE,SDMMC3\_D1, DFSDM1\_CKIN0,FMC\_NOE, EVENTOUT | - |
| - | 48 | GND | S | - | - |
| Y9 | 49 | PF12 | I/O | TRACED4, ETH1\_GMII\_RXD4, FMC\_A6,EVENTOUT | ADC1\_INP6, ADC1\_INN2 |
| M3 | 50 | NRST | I/O | - | - |
| AC11 | 51 | PF8 | I/O | TRACED12,TIM16\_CH1N, SPI5\_MISO,SAI1\_SCK\_B, UART7\_RTS/UART7\_DE, TIM13\_CH1, QUADSPI\_BK1\_IO0, EVENTOUT | - |
| C20 | 52 | JTMS-SWDIO | I/O | - | - |
| U1 | 53 | PF3 | I/O | ETH1\_GMII\_TX\_ER,FMC\_A3, EVENTOUT | - |
| B20 | 54 | JTCK-SWCLK | I | - | - |
| Y7 | 55 | PG11 | I/O | TRACED11,USART1\_TX, UART4\_TX,SPDIFRX\_IN0, ETH1\_GMII\_TX\_EN/ ETH1\_MII\_TX\_EN/ ETH1\_RGMII\_TX\_CTL/ ETH1\_RMII\_TX\_EN, DCMI\_D3,LCD\_B3, EVENTOUT | - |
| A20 | 56 | JTDI | I | - | - |
| - | 57 | GND | S | - | - |
| A19 | 58 | JTDO-TRACESWO | O | - | - |
| - | 59 | GND | S | - | - |
| B19 | 60 | NJTRST | I | - | - |
| AB17 | 61 | USB\_DM1 | A | - | USBH\_HS\_DM1 |
| - | 62 | GND | S | - | - |
| AC17 | 63 | USB\_DP1 | A | - | USBH\_HS\_DP1 |
| Y8 | 64 | PB5 | I/O | ETH\_CLK,TIM17\_BKIN, TIM3\_CH2,SAI4\_D1, I2C1\_SMBA,SPI1\_MOSI/ I2S1\_SDO,I2C4\_SMBA, SPI3\_MOSI/I2S3\_SDO, SPI6\_MOSI,FDCAN2\_RX, SAI4\_SD\_A,ETH1\_PPS\_OUT, UART5\_RX,DCMI\_D10, LCD\_G7,EVENTOUT | - |
| - | 65 | GND | S | - | - |
| AA10 | 66 | PB13 | I/O | TIM1\_CH1N,DFSDM1\_CKOUT, LPTIM2\_OUT,SPI2\_SCK/ I2S2\_CK,DFSDM1\_CKIN1, USART3\_CTS/USART3\_NSS, FDCAN2\_TX, ETH1\_GMII\_TXD1/ ETH1\_MII\_TXD1/ ETH1\_RGMII\_TXD1/ ETH1\_RMII\_TXD1, UART5\_TX,EVENTOUT | - |
| AB16 | 67 | USB\_DM2 | A | - | USBH\_HS\_DM2, OTG\_HS\_DM |
| B8 | 68 | PD0 | I/O | I2C6\_SDA,DFSDM1\_CKIN6, I2C5\_SDA,SAI3\_SCK\_A, UART4\_RX,FDCAN1\_RX, SDMMC3\_CMD, DFSDM1\_DATIN7, FMC\_AD2/FMC\_D2, EVENTOUT | - |
| AC16 | 69 | USB\_DP2 | A | - | USBH\_HS\_DP2, OTG\_HS\_DP |
| B9 | 70 | PD1 | I/O | I2C6\_SCL,DFSDM1\_DATIN6, I2C5\_SCL,SAI3\_SD\_A, UART4\_TX,FDCAN1\_TX, SDMMC3\_D0,DFSDM1\_CKIN7, FMC\_AD3/FMC\_D3,EVENTOUT | - |

* **7.70-PIN connector:** You can find the function for each pin from the table below:

| Pin Package Number | Pin Number | Pin Name | Pin Type | Optional Function | Additional Function |
| --- | --- | --- | --- | --- | --- |
| D2 | 1 | PD6 | I/O | TIM16\_CH1N,SAI1\_D1, DFSDM1\_CKIN4, DFSDM1\_DATIN1, SPI3\_MOSI/I2S3\_SDO, SAI1\_SD\_A,USART2\_RX, FMC\_NWAIT,DCMI\_D10,LCD\_B2, EVENTOUT | - |
| AB19 | 2 | PA12 | I/O | TIM1\_ETR,I2C6\_SDA,I2C5\_SDA, UART4\_TX,USART1\_RTS/ USART1\_DE,SAI2\_FS\_B, FDCAN1\_TX,LCD\_R5,EVENTOUT | OTG\_FS\_DP |
| D7 | 3 | PF5 | I/O | USART2\_TX,SDMMC3\_D2, FMC\_A5,EVENTOUT | - |
| AA18 | 4 | PA11 | I/O | TIM1\_CH4,I2C6\_SCL,I2C5\_SCL, SPI2\_NSS/I2S2\_WS,UART4\_RX, USART1\_CTS/USART1\_NSS, FDCAN1\_RX,LCD\_R4, EVENTOUT | OTG\_FS\_DM |
| N1 | 5 | BOOT0 | I | - | - |
| P4 | 6 | PI11 | I/O | MCO1,I2S\_CKIN,LCD\_G6, EVENTOUT | WKUP5 |
| N4 | 7 | BOOT1 | I | - | - |
| AC19 | 8 | OTG\_VBUS | A | - | OTG\_FS\_VBUS, OTG\_HS\_VBUS |
| M2 | 9 | BOOT2 | I | - | - |
| - | 10 | GND | S | - | - |
| - | 11 | GND | S | - | - |
| AC10 | 12 | PD11 | I/O | LPTIM2\_IN2,I2C4\_SMBA, I2C1\_SMBA,USART3\_CTS/ USART3\_NSS, QUADSPI\_BK1\_IO0,SAI2\_SD\_A, FMC\_A16/FMC\_CLE,EVENTOUT | - |
| F3 | 13 | PI5 | I/O | TIM8\_CH1,SAI2\_SCK\_A, DCMI\_VSYNC,LCD\_B5, EVENTOUT | - |
| Y18 | 14 | PD12 | I/O | LPTIM1\_IN1,TIM4\_CH1, LPTIM2\_IN1,I2C4\_SCL,I2C1\_SCL, USART3\_RTS/USART3\_DE, QUADSPI\_BK1\_IO1,SAI2\_FS\_A, FMC\_A17/FMC\_ALE,EVENTOUT | - |
| F2 | 15 | PI7 | I/O | TIM8\_CH3,SAI2\_FS\_A,DCMI\_D7, LCD\_B7,EVENTOUT | - |
| AB12 | 16 | PF7 | I/O | TIM17\_CH1,SPI5\_SCK, SAI1\_MCLK\_B,UART7\_TX, QUADSPI\_BK1\_IO2,EVENTOUT | - |
| F4 | 17 | PI6 | I/O | TIM8\_CH2,SAI2\_SD\_A,DCMI\_D6, LCD\_B6,EVENTOUT | - |
| AA13 | 18 | PF6 | I/O | TIM16\_CH1,SPI5\_NSS, SAI1\_SD\_B,UART7\_RX, QUADSPI\_BK1\_IO3,SAI4\_SCK\_B, EVENTOUT | - |
| D6 | 19 | PE0 | I/O | LPTIM1\_ETR,TIM4\_ETR, LPTIM2\_ETR,SPI3\_SCK/ I2S3\_CK,SAI4\_MCLK\_B, UART8\_RX,SAI2\_MCLK\_A, FMC\_NBL0,DCMI\_D2,EVENTOUT | - |
| AA11 | 20 | PE7 | I/O | TIM1\_ETR,TIM3\_ETR, DFSDM1\_DATIN2,UART7\_RX, QUADSPI\_BK2\_IO0,FMC\_AD4/ FMC\_D4,EVENTOUT | - |
| Y10 | 21 | PF11 | I/O | SPI5\_MOSI,SAI2\_SD\_B, DCMI\_D12,LCD\_G5,EVENTOUT | ADC1\_INP2 |
| AC13 | 22 | PE8 | I/O | TIM1\_CH1N,DFSDM1\_CKIN2, UART7\_TX,QUADSPI\_BK2\_IO1, FMC\_AD5/FMC\_D5,EVENTOUT | - |
| Y13 | 23 | PG9 | I/O | DBTRGO,USART6\_RX, SPDIFRX\_IN3, QUADSPI\_BK2\_IO2, SAI2\_FS\_B,FMC\_NE2/FMC\_NCE, DCMI\_VSYNC,LCD\_R1, EVENTOUT | - |
| AA9 | 24 | PE9 | I/O | TIM1\_CH1,DFSDM1\_CKOUT, UART7\_RTS/UART7\_DE, QUADSPI\_BK2\_IO2,FMC\_AD6/ FMC\_D6，EVENTOUT | - |
| - | 25 | GND | S | - | - |
| Y15 | 26 | PE10 | I/O | TIM1\_CH2N,DFSDM1\_DATIN4, UART7\_CTS,QUADSPI\_BK2\_IO3, FMC\_AD7/FMC\_D7,EVENTOUT | - |
| D18 | 27 | PC8 | I/O | TRACED0,TIM3\_CH3,TIM8\_CH3, UART4\_TX,USART6\_CK, UART5\_RTS/UART5\_DE, SDMMC1\_D0,DCMI\_D2, EVENTOUT | - |
| Y16 | 28 | PB2 | I/O | TRACED4,RTC\_OUT2,SAI1\_D1, DFSDM1\_CKIN1,USART1\_RX, I2S\_CKIN,SAI1\_SD\_A, SPI3\_MOSI/I2S3\_SDO, UART4\_RX,QUADSPI\_CLK, EVENTOUT | - |
| D17 | 29 | PC9 | I/O | TRACED1,TIM3\_CH4, TIM8\_CH4,I2C3\_SDA,I2S\_CKIN, UART5\_CTS, QUADSPI\_BK1\_IO0, SDMMC1\_D1,DCMI\_D3,LCD\_B2, EVENTOUT | - |
| - | 30 | GND | S | - | - |
| D15 | 31 | PC10 | I/O | TRACED2,DFSDM1\_CKIN5, SPI3\_SCK/I2S3\_CK,USART3\_TX, UART4\_TX,QUADSPI\_BK1\_IO1, SAI4\_MCLK\_B,SDMMC1\_D2, DCMI\_D8,LCD\_R2,EVENTOUT | - |
| B3 | 32 | PH4 | I/O | I2C2\_SCL,LCD\_G5,LCD\_G4, EVENTOUT | - |
| D16 | 33 | PC11 | I/O | TRACED3,DFSDM1\_DATIN5, SPI3\_MISO/I2S3\_SDI, USART3\_RX,UART4\_RX, QUADSPI\_BK2\_NCS, SAI4\_SCK\_B,SDMMC1\_D3, DCMI\_D4,EVENTOUT | - |
| A2 | 34 | PH5 | I/O | I2C2\_SDA,SPI5\_NSS, SAI4\_SD\_B,EVENTOUT | - |
| D12 | 35 | PD2 | I/O | TIM3\_ETR,I2C5\_SMBA, UART4\_RX,UART5\_RX, SDMMC1\_CMD,DCMI\_D11, EVENTOUT | - |
| J4 | 36 | PZ2 | I/O | I2C6\_SCL,I2C2\_SCL, I2C5\_SMBA,SPI1\_MOSI/ I2S1\_SDO,I2C4\_SMBA, USART1\_TX,SPI6\_MOSI, EVENTOUT | - |
| D13 | 37 | PC12 | I/O | TRACECLK,MCO2,SAI4\_D3, SPI3\_MOSI/I2S3\_SDO, USART3\_CK,UART5\_TX, SAI4\_SD\_B,SDMMC1\_CK, DCMI\_D9,EVENTOUT | - |
| G1 | 38 | PZ1 | I/O | I2C6\_SDA,I2C2\_SDA,I2C5\_SDA, SPI1\_MISO/I2S1\_SDI,I2C4\_SDA, USART1\_RX,SPI6\_MISO, EVENTOUT | - |
| E1 | 39 | PI3 | I/O | TIM8\_ETR,SPI2\_MOSI/I2S2\_SDO, DCMI\_D10,EVENTOUT | - |
| G3 | 40 | PZ0 | I/O | HDP1,UART4\_RX,FDCAN1\_RX, LCD\_VSYNC,EVENTOUT | - |
| - | 41 | GND | S | - | - |
| AA14 | 42 | PF9 | I/O | TRACED13,TIM17\_CH1N, SPI5\_MOSI,SAI1\_FS\_B, UART7\_CTS,TIM14\_CH1, QUADSPI\_BK1\_IO1,EVENTOUT | - |
| A17 | 43 | DSI\_D1N | A | - | - |
| W4 | 44 | PH7 | I/O | I2C3\_SCL,SPI5\_MISO, ETH1\_GMII\_RXD3/ ETH1\_MII\_RXD3/ ETH1\_RGMII\_RXD3, MDIOS\_MDC,DCMI\_D9, EVENTOUT | - |
| B17 | 45 | DSI\_D1P | A | - | - |
| Y11 | 46 | PH6 | I/O | TIM12\_CH1,I2C2\_SMBA, SPI5\_SCK,ETH1\_GMII\_RXD2/ ETH1\_MII\_RXD2/ ETH1\_RGMII\_RXD2, MDIOS\_MDIO,DCMI\_D8, EVENTOUT | - |
| - | 47 | GND | S | - | - |
| - | 48 | GND | S | - | - |
| A16 | 49 | DSI\_CKN | A | - | - |
| L4 | 50 | PI8 | I/O | EVENTOUT | RTC\_OUT2/ RTC\_LSCO, TAMP\_IN2/ TAMP\_OUT3, WKUP4 |
| B16 | 51 | DSI\_CKP | A | - | - |
| J3 | 52 | PZ7 | I/O | I2C6\_SDA,I2C2\_SDA, USART1\_TX,EVENTOUT | - |
| - | 53 | GND | S | - | - |
| H1 | 54 | PZ6 | I/O | I2C6\_SCL,I2C2\_SCL, USART1\_CK,I2S1\_MCK, I2C4\_SMBA,USART1\_RX, EVENTOUT | - |
| B15 | 55 | DSI\_D0N | A | - | - |
| G4 | 56 | PZ3 | I/O | I2C6\_SDA,I2C2\_SDA, I2C5\_SDA,SPI1\_NSS/ I2S1\_WS,I2C4\_SDA, USART1\_CTS/USART1\_NSS, SPI6\_NSS,EVENTOUT | - |
| C15 | 57 | DSI\_D0P | A | - | - |
| H2 | 58 | PZ5 | I/O | I2C6\_SDA,I2C2\_SDA, I2C5\_SDA,I2C4\_SDA, USART1\_RTS/USART1\_DE, EVENTOUT | - |
| - | 59 | GND | S | - | - |
| D8 | 60 | PF0 | I/O | I2C2\_SDA,SDMMC3\_D0, SDMMC3\_CKIN,FMC\_A0, EVENTOUT | - |
| A14 | 61 | PF2 | I/O | I2C2\_SMBA,SDMMC2\_D0DIR, SDMMC3\_D0DIR, SDMMC1\_D0DIR,FMC\_A2, EVENTOUT | - |
| D9 | 62 | PF4 | I/O | USART2\_RX,SDMMC3\_D1, SDMMC3\_D123DIR, FMC\_A4,EVENTOUT | - |
| AA19 | 63 | PD13 | I/O | LPTIM1\_OUT,TIM4\_CH2, I2C4\_SDA,I2C1\_SDA, I2S3\_MCK,QUADSPI\_BK1\_IO3, SAI2\_SCK\_A,FMC\_A18,DSI\_TE, EVENTOUT | - |
| A7 | 64 | PD5 | I/O | USART2\_TX,SDMMC3\_D2, FMC\_NWE,EVENTOUT | - |
| C19 | 65 | PA15 | I/O | DBTRGI,TIM2\_CH1/TIM2\_ETR, SAI4\_D2,SDMMC1\_CDIR,CEC, SPI1\_NSS/I2S1\_WS, SPI3\_NSS/I2S3\_WS, SPI6\_NSS,UART4\_RTS/ UART4\_DE,SDMMC2\_D5, SDMMC2\_CDIR, SDMMC1\_D5,SAI4\_FS\_A, UART7\_TX,LCD\_R1,EVENTOUT | - |
| D10 | 66 | PD7 | I/O | TRACED6,DFSDM1\_DATIN4, I2C2\_SCL,DFSDM1\_CKIN1, USART2\_CK,SPDIFRX\_IN0, SDMMC3\_D3,FMC\_NE1, EVENTOUT | - |
| D19 | 67 | PE4 | I/O | TRACED1,SAI1\_D2, DFSDM1\_DATIN3,TIM15\_CH1N, SPI4\_NSS,SAI1\_FS\_A, SDMMC2\_CKIN,SDMMC1\_CKIN, SDMMC2\_D4,SDMMC1\_D4, FMC\_A20,DCMI\_D4,LCD\_B | - |
| A5 | 68 | PF1 | I/O | I2C2\_SCL,SDMMC3\_CMD, SDMMC3\_CDIR,FMC\_A1, EVENTOUT | - |
| - | 69 | GND | S |  | - |
| B7 | 70 | PG15 | I/O | TRACED7,SAI1\_D2,I2C2\_SDA, SAI1\_FS\_A,USART6\_CTS/ USART6\_NSS,SDMMC3\_CK, DCMI\_D13,EVENTOUT | - |

**8.70-PIN connector: You can find the function for each pin from the table below:**

| kage Number | Pin Number | Pin Name | Pin Type | Optional Function | Additional Function |
| --- | --- | --- | --- | --- | --- |
| Y3 | 1 | PB10 | I/O | TIM2\_CH3,LPTIM2\_IN1,I2C2\_SCL, SPI2\_SCK/I2S2\_CK, DFSDM1\_DATIN7, USART3\_TX,QUADSPI\_BK1\_NCS, ETH1\_GMII\_RX\_ER/ ETH1\_MII\_RX\_ER, LCD\_G4,EVENTOUT | - |
| AC7 | 2 | PC4 | I/O | DFSDM1\_CKIN2,I2S1\_MCK, SPDIFRX\_IN2,ETH1\_GMII\_RXD0/ ETH1\_MII\_RXD0/ETH1\_RGMII\_RXD0/ ETH1\_RMII\_RXD0,EVENTOUT | ADC1\_INP4, ADC2\_INP4 |
| AC5 | 3 | PB12 | I/O | TIM1\_BKIN,I2C6\_SMBA, I2C2\_SMBA,SPI2\_NSS/ I2S2\_WS,DFSDM1\_DATIN1, USART3\_CK,USART3\_RX, FDCAN2\_RX, ETH1\_GMII\_TXD0/ ETH1\_MII\_TXD0/ ETH1\_RGMII\_TXD0/ ETH1\_RMII\_TXD0, UART5\_RX,EVENTOUT | - |
| AB7 | 4 | PC5 | I/O | SAI1\_D3,DFSDM1\_DATIN2, SAI4\_D4,SAI1\_D4, SPDIFRX\_IN3, ETH1\_GMII\_RXD1/ ETH1\_MII\_RXD1/ ETH1\_RGMII\_RXD1/ ETH1\_RMII\_RXD1, SAI4\_D3,EVENTOUT | ADC1\_INP8, ADC1\_INN4, ADC2\_INP8, ADC2\_INN4 |
| W2 | 5 | PC3 | I/O | TRACECLK,DFSDM1\_DATIN1, SPI2\_MOSI/I2S2\_SDO, ETH1\_GMII\_TX\_CLK/ ETH1\_MII\_TX\_CLK,EVENTOUT | ADC1\_INP13, ADC1\_INN12 |
| AB6 | 6 | PB0 | I/O | TIM1\_CH2N,TIM3\_CH3,TIM8\_CH2N, DFSDM1\_CKOUT,UART4\_CTS, LCD\_R3,ETH1\_GMII\_RXD2/ ETH1\_MII\_RXD2/ ETH1\_RGMII\_RXD2,MDIOS\_MDIO, LCD\_G1,EVENTOUT | ADC1\_INP9, ADC1\_INN5, ADC2\_INP9, ADC2\_INN5 |
| Y14 | 7 | PB6 | I/O | TIM16\_CH1N,TIM4\_CH1,I2C1\_SCL, CEC,I2C4\_SCL,USART1\_TX, FDCAN2\_TX,QUADSPI\_BK1\_NCS, DFSDM1\_DATIN5,UART5\_TX, DCMI\_D5,EVENTOUT | - |
| AA7 | 8 | PB1 | I/O | TIM1\_CH3N,TIM3\_CH4,TIM8\_CH3N, DFSDM1\_DATIN1,LCD\_R6, ETH1\_GMII\_RXD3/ETH1\_MII\_RXD3/ ETH1\_RGMII\_RXD3,MDIOS\_MDC, LCD\_G0,EVENTOUT | ADC1\_INP5, ADC2\_INP5 |
| W1 | 9 | PG1 | I/O | TRACED1,ETH1\_GMII\_TXD5, FMC\_A11,EVENTOUT | - |
| AB8 | 10 | PA7 | I/O | TIM1\_CH1N,TIM3\_CH2,TIM8\_CH1N, SAI4\_D1,SPI1\_MOSI/I2S1\_SDO, SPI6\_MOSI,TIM14\_CH1, QUADSPI\_CLK,ETH1\_GMII\_RX\_DV/ ETH1\_MII\_RX\_DV/ ETH1\_RGMII\_RX\_CTL/ ETH1\_RMII\_CRS\_DV,SAI4\_SD\_A, EVENTOUT | ADC1\_INP7, ADC1\_INN3, ADC2\_INP7, ADC2\_INN3 |
| Y17 | 11 | PA10 | I/O | TIM1\_CH3,SPI3\_NSS/I2S3\_WS, USART1\_RX,MDIOS\_MDIO, SAI4\_FS\_B,DCMI\_D1,LCD\_B1, EVENTOUT | OTG\_FS\_ID, OTG\_HS\_ID |
| Y6 | 12 | PG5 | I/O | TIM1\_ETR,ETH1\_GMII\_CLK125/ ETH1\_RGMII\_CLK125,FMC\_A15, EVENTOUT | - |
| - | 13 | GND | S | - | - |
| AA4 | 14 | PA1 | I/O | ETH\_CLK,TIM2\_CH2,TIM5\_CH2, LPTIM3\_OUT,TIM15\_CH1N, USART2\_RTS/USART2\_DE, UART4\_RX,QUADSPI\_BK1\_IO3, SAI2\_MCLK\_B, ETH1\_GMII\_RX\_CLK/ ETH1\_MII\_RX\_CLK/ ETH1\_RGMII\_RX\_CLK/ ETH1\_RMII\_REF\_CLK,LCD\_R2, EVENTOUT | ADC1\_INP17, ADC1\_INN16 |
| K3 | 15 | PD8 | I/O | DFSDM1\_CKIN3,SAI3\_SCK\_B, USART3\_TX,SPDIFRX\_IN1, FMC\_AD13/FMC\_D13,LCD\_B7, EVENTOUT | - |
| - | 16 | GND | S | - | - |
| AB10 | 17 | PB8 | I/O | HDP6,TIM16\_CH1,TIM4\_CH3, DFSDM1\_CKIN7,I2C1\_SCL, SDMMC1\_CKIN,I2C4\_SCL, SDMMC2\_CKIN,UART4\_RX, FDCAN1\_RX,SDMMC2\_D4, ETH1\_GMII\_TXD3/ ETH1\_MII\_TXD3/ ETH1\_RGMII\_TXD3, SDMMC1\_D4,DCMI\_D6, LCD\_B6,EVENTOUT | - |
| AB2 | 18 | PG4 | I/O | TIM1\_BKIN2, ETH1\_GMII\_GTX\_CLK/ ETH1\_RGMII\_GTX\_CLK, FMC\_A14,EVENTOUT | - |
| U2 | 19 | PA3 | I/O | TIM2\_CH4,TIM5\_CH4, LPTIM5\_OUT, TIM15\_CH2,USART2\_RX, LCD\_B2,ETH1\_GMII\_COL/ ETH1\_MII\_COL,LCD\_B5, EVENTOUT | ADC1\_INP15, PVD\_IN |
| AA2 | | 20 | PG13 | I/O | TRACED0,LPTIM1\_OUT, SAI1\_CK2,SAI4\_CK1,SPI6\_SCK, SAI1\_SCK\_A,USART6\_CTS/ USART6\_NSS,SAI4\_MCLK\_A, ETH1\_GMII\_TXD0/ ETH1\_MII\_TXD0/ ETH1\_RGMII\_TXD0/ ETH1\_RMII\_TXD0, FMC\_A24,LCD\_R0, EVENTOUT | - |
| E4 | 21 | PI4 | I/O | TIM8\_BKIN,SAI2\_MCLK\_A, DCMI\_D5,LCD\_B4,EVENTOUT | - |
| AA1 | 22 | PG14 | I/O | TRACED1,LPTIM1\_ETR, SPI6\_MOSI,SAI4\_D1, USART6\_TX, QUADSPI\_BK2\_IO3, SAI4\_SD\_A,ETH1\_GMII\_TXD1/ ETH1\_MII\_TXD1/ ETH1\_RGMII\_TXD1/ ETH1\_RMII\_TXD1,FMC\_A25, LCD\_B0,EVENTOUT | - |
| B5 | 23 | PD10 | I/O | RTC\_REFIN,TIM16\_BKIN, DFSDM1\_CKOUT,I2C5\_SMBA, SPI3\_MISO/I2S3\_SDI,SAI3\_FS\_B, USART3\_CK,FMC\_AD15/ FMC\_D15,LCD\_B3,EVENTOUT | - |
| Y2 | 24 | PC2 | I/O | DFSDM1\_CKIN1,SPI2\_MISO/ I2S2\_SDI,DFSDM1\_CKOUT, ETH1\_GMII\_TXD2/ETH1\_MII\_TXD2/ ETH1\_RGMII\_TXD2,DCMI\_PIXCLK, EVENTOUT | ADC1\_INP12, ADC1\_INN11 |
| AB11 | 25 | PG10 | I/O | TRACED10,UART8\_CTS,LCD\_G3, SAI2\_SD\_B,QUADSPI\_BK2\_IO2, FMC\_NE3,DCMI\_D2,LCD\_B2, EVENTOUT | - |
| Y1 | 26 | PE2 | I/O | TRACECLK,SAI1\_CK1,I2C4\_SCL, SPI4\_SCK,SAI1\_MCLK\_A, QUADSPI\_BK1\_IO2, ETH1\_GMII\_TXD3/ ETH1\_MII\_TXD3/ ETH1\_RGMII\_TXD3, FMC\_A23,EVENTOUT | - |
| K4 | 27 | PG12 | I/O | LPTIM1\_IN1,SPI6\_MISO, SAI4\_CK2,USART6\_RTS/ USART6\_DE,SPDIFRX\_IN1, LCD\_B4,SAI4\_SCK\_A, ETH1\_PHY\_INTN,FMC\_NE4, LCD\_B1,EVENTOUT | - |
| AB1 | 28 | PB11 | I/O | TIM2\_CH4,LPTIM2\_ETR, I2C2\_SDA,DFSDM1\_CKIN7, USART3\_RX,ETH1\_GMII\_TX\_EN/ ETH1\_MII\_TX\_EN/ ETH1\_RGMII\_TX\_CTL/ ETH1\_RMII\_TX\_EN, DSI\_TE,LCD\_G5,EVENTOUT | - |
| K1 | 29 | PD9 | I/O | DFSDM1\_DATIN3,SAI3\_SD\_B, USART3\_RX,FMC\_AD14/ FMC\_D14,DCMI\_HSYNC, LCD\_B0,EVENTOUT | - |
| - | 30 | GND | S | - | - |
| E2 | 31 | PI2 | I/O | TIM8\_CH4,SPI2\_MISO/I2S2\_SDI, DCMI\_D9,LCD\_G7,EVENTOUT | - |
| AA6 | 32 | PC1 | I/O | TRACED0,SAI1\_D1, DFSDM1\_DATIN0, DFSDM1\_CKIN4,SPI2\_MOSI/ I2S2\_SDO,SAI1\_SD\_A, SDMMC2\_CK,ETH1\_MDC, MDIOS\_MDC,EVENTOUT | ADC1\_INP11, ADC1\_INN10, ADC2\_INP11, ADC2\_INN10, TAMP\_IN3, WKUP6 |
| E3 | 33 | PI1 | I/O | TIM8\_BKIN2,SPI2\_SCK/I2S2\_CK, DCMI\_D8,LCD\_G6,EVENTOUT | - |
| AC3 | 34 | PA2 | I/O | TIM2\_CH3,TIM5\_CH3, LPTIM4\_OUT,TIM15\_CH1, USART2\_TX,SAI2\_SCK\_B, SDMMC2\_D0DIR,ETH1\_MDIO, MDIOS\_MDIO,LCD\_R1,EVENTOUT | ADC1\_INP14, WKUP2 |
| C1 | 35 | PI0 | I/O | TIM5\_CH4,SPI2\_NSS/I2S2\_WS, DCMI\_D13,LCD\_G5,EVENTOUT | - |
| - | 36 | GND | S | - | - |
| B1 | 37 | PH15 | I/O | TIM8\_CH3N,DCMI\_D11,LCD\_G4, EVENTOUT | - |
| AC2 | 38 | PG0 | I/O | TRACED0,DFSDM1\_DATIN0, ETH1\_GMII\_TXD4,FMC\_A10, EVENTOUT | - |
| C3 | 39 | PH14 | I/O | TIM8\_CH2N,UART4\_RX, FDCAN1\_RX,DCMI\_D4,LCD\_G3, EVENTOUT | - |
| V2 | 40 | PG2 | I/O | TRACED2,MCO2,TIM8\_BKIN, ETH1\_GMII\_TXD6,FMC\_A12, EVENTOUT | - |
| D1 | 41 | PH13 | I/O | TIM8\_CH1N,UART4\_TX, FDCAN1\_TX,LCD\_G2, EVENTOUT | - |
| AB9 | 42 | PG8 | I/O | TRACED15,TIM2\_CH1/ TIM2\_ETR,ETH\_CLK,TIM8\_ETR, SPI6\_NSS,SAI4\_D2, USART6\_RTS/USART6\_DE, USART3\_RTS/USART3\_DE, SPDIFRX\_IN2,SAI4\_FS\_A, ETH1\_PPS\_OUT,LCD\_G7, EVENTOUT | - |
| C10 | 43 | PE6 | I/O | TRACED2,TIM1\_BKIN2,SAI1\_D1, TIM15\_CH2,SPI4\_MOSI, SAI1\_SD\_A,SDMMC2\_D0, SDMMC1\_D2,SAI2\_MCLK\_B, FMC\_A22,DCMI\_D7,LCD\_G1, EVENTOUT | - |
| - | 44 | GND | S | - | - |
| C6 | 45 | PE14 | I/O | TIM1\_CH4,SPI4\_MOSI, UART8\_RTS/UART8\_DE, SAI2\_MCLK\_B,SDMMC1\_D123DIR, FMC\_AD11/FMC\_D11,LCD\_G0, LCD\_CLK,EVENTOUT | - |
| B14 | 46 | PC6 | I/O | HDP1,TIM3\_CH1,TIM8\_CH1, DFSDM1\_CKIN3,I2S2\_MCK, USART6\_TX,SDMMC1\_D0DIR, SDMMC2\_D0DIR,SDMMC2\_D6, DSI\_TE,SDMMC1\_D6,DCMI\_D0, LCD\_HSYNC,EVENTOUT | - |
| D3 | 47 | PE15 | I/O | HDP3,TIM1\_BKIN,TIM15\_BKIN, USART2\_CTS/USART2\_NSS, UART8\_CTS,FMC\_NCE2, FMC\_AD12/FMC\_D12, LCD\_R7,EVENTOUT | - |
| C2 | 48 | PH10 | I/O | TIM5\_CH1,I2C4\_SMBA,I2C1\_SMBA, DCMI\_D1,LCD\_R4,EVENTOUT | - |
| B2 | 49 | PH12 | I/O | HDP2,TIM5\_CH3,I2C4\_SDA, I2C1\_SDA,DCMI\_D3,LCD\_R6, EVENTOUT | - |
| C4 | 50 | PH11 | I/O | TIM5\_CH2,I2C4\_SCL,I2C1\_SCL, DCMI\_D2,LCD\_R5,EVENTOUT | - |
| AB5 | 51 | PC0 | I/O | DFSDM1\_CKIN0,LPTIM2\_IN2, DFSDM1\_DATIN4,SAI2\_FS\_B, QUADSPI\_BK2\_NCS,LCD\_R5, EVENTOUT | ADC1\_INP10, ADC2\_INP10 |
| C8 | 52 | PE1 | I/O | LPTIM1\_IN2,I2S2\_MCK,SAI3\_SD\_B, UART8\_TX,FMC\_NBL1,DCMI\_D3, EVENTOUT | - |
| V3 | 53 | PA5 | I/O | TIM2\_CH1/TIM2\_ETR,TIM8\_CH1N, SAI4\_CK1,SPI1\_SCK/I2S1\_CK, SPI6\_SCK,SAI4\_MCLK\_A,LCD\_R4, EVENTOUT | ADC1\_INP19, ADC1\_INN18, ADC2\_INP19, ADC2\_INN18, DAC\_OUT2 |
| A4 | 54 | PE11 | I/O | TIM1\_CH2,DFSDM1\_CKIN4, SPI4\_NSS,USART6\_CK,SAI2\_SD\_B, FMC\_AD8/FMC\_D8,DCMI\_D4, LCD\_G3,EVENTOUT | - |
| C5 | 55 | PH9 | I/O | TIM12\_CH2,I2C3\_SMBA,DCMI\_D0, LCD\_R3,EVENTOUT | - |
| D14 | 56 | PD3 | I/O | HDP5,DFSDM1\_CKOUT,SPI2\_SCK/ I2S2\_CK,DFSDM1\_DATIN0, USART2\_CTS/USART2\_NSS, SDMMC1\_D123DIR,SDMMC2\_D7, SDMMC2\_D123DIR,SDMMC1\_D7, FMC\_CLK,DCMI\_D5,LCD\_G7, EVENTOUT | - |
| D5 | 57 | PH8 | I/O | TIM5\_ETR,I2C3\_SDA,DCMI\_HSYNC, LCD\_R2,EVENTOUT | - |
| A3 | 58 | PE13 | I/O | HDP2,TIM1\_CH3,DFSDM1\_CKIN5, SPI4\_MISO,SAI2\_FS\_B, FMC\_AD10/FMC\_D10,DCMI\_D6, LCD\_DE,EVENTOUT | - |
| AA3 | 59 | PH3 | I/O | DFSDM1\_CKIN4,QUADSPI\_BK2\_IO1, SAI2\_MCLK\_B,ETH1\_GMII\_COL/ ETH1\_MII\_COL,LCD\_R1,EVENTOUT | - |
| B10 | 60 | PB9 | I/O | HDP7,TIM17\_CH1,TIM4\_CH4, DFSDM1\_DATIN7,I2C1\_SDA, SPI2\_NSS/I2S2\_WS,I2C4\_SDA, SDMMC2\_CDIR,UART4\_TX, FDCAN1\_TX,SDMMC2\_D5, SDMMC1\_CDIR,SDMMC1\_D5, DCMI\_D7,LCD\_B7,EVENTOUT | - |
| AB4 | 61 | PH2 | I/O | LPTIM1\_IN2,QUADSPI\_BK2\_IO0, SAI2\_SCK\_B,ETH1\_GMII\_CRS/ ETH1\_MII\_CRS,LCD\_R0, EVENTOUT | - |
| V4 | 62 | PA4 | I/O | HDP0,TIM5\_ETR,SAI4\_D2, SPI1\_NSS/I2S1\_WS,SPI3\_NSS/ I2S3\_WS,USART2\_CK,SPI6\_NSS, SAI4\_FS\_A,DCMI\_HSYNC, LCD\_VSYNC,EVENTOUT | ADC1\_INP18, ADC2\_INP18, DAC\_OUT1 |
| AC14 | 63 | PG7 | I/O | TRACED5,SAI1\_MCLK\_A, USART6\_CK,UART8\_RTS/ UART8\_DE,QUADSPI\_CLK, QUADSPI\_BK2\_IO3,DCMI\_D13, LCD\_CLK,EVENTOUT | - |
| D11 | 64 | PB7 | I/O | TIM17\_CH1N,TIM4\_CH2,I2C1\_SDA, I2C4\_SDA,USART1\_RX, SDMMC2\_D1,DFSDM1\_CKIN5, FMC\_NL,DCMI\_VSYNC,EVENTOUT | - |
| Y12 | 65 | PF10 | I/O | TIM16\_BKIN,SAI1\_D3,SAI4\_D4, SAI1\_D4,QUADSPI\_CLK,SAI4\_D3, DCMI\_D11,LCD\_DE,EVENTOUT | - |
| AC8 | 66 | PA6 | I/O | TIM1\_BKIN,TIM3\_CH1,TIM8\_BKIN, SAI4\_CK2,SPI1\_MISO/I2S1\_SDI, SPI6\_MISO,TIM13\_CH1, MDIOS\_MDC,SAI4\_SCK\_A, DCMI\_PIXCLK,LCD\_G2,EVENTOUT | ADC1\_INP3, ADC2\_INP3 |
| T1 | 67 | PI10 | I/O | HDP0,USART3\_CTS/USART3\_NSS, ETH1\_GMII\_RX\_ER/ ETH1\_MII\_RX\_ER,LCD\_HSYNC, EVENTOUT | - |
| N2 | 68 | PA13 | I/O | DBTRGO,DBTRGI,MCO1,UART4\_TX, EVENTOUT | BOOTFAILN |
| H4 | 69 | PI9 | I/O | HDP1,UART4\_RX,FDCAN1\_RX, LCD\_VSYNC,EVENTOUT | - |
| B4 | 70 | PE12 | I/O | TIM1\_CH3N,DFSDM1\_DATIN5, SPI4\_SCK,SDMMC1\_D0DIR, SAI2\_SCK\_B,FMC\_AD9/FMC\_D9, LCD\_B4,EVENTOUT | - |