

Table 7. Legend/abbreviations used in the pinout table

| Name | | Abbreviation | Definition |
|---------------|----------------------|---|---|
| Pin name | | Unless otherwise specified in brackets below the pin name, the pin function during and after reset is the same as the actual pin name | |
| Pin type | | S | Supply pin |
| | | I | Input only pin |
| | | I/O | Input / output pin |
| | | ANA | Analog-only Input |
| I/O structure | | FT | 5 V tolerant I/O |
| | | TT | 3.3 V tolerant I/O |
| | | B | Dedicated BOOT0 pin |
| | | RST | Bidirectional reset pin with embedded weak pull-up resistor |
| | | Option for TT and FT I/Os | |
| | | _f | I2C FM+ option |
| | | _a | analog option (supplied by V _{DDA}) |
| | | _u | USB option (supplied by V _{DD33USB}) |
| | | _h | High Speed Low Voltage |
| Notes | | Unless otherwise specified by a note, all I/Os are set as floating inputs during and after reset. | |
| Pin functions | Alternate functions | Functions selected through GPIOx_AFR registers | |
| | Additional functions | Functions directly selected/enabled through peripheral registers | |

Table 8. STM32H743xI pin/ball definition

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|---------------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 1 | A3 | 1 | A2 | A2 | 1 | 1 | C3 | PE2 | I/O | FT_h | - | TRACECLK, SAI1_CK1, SPI4_SCK, SAI1_MCLK_A, SAI4_MCLK_A, QUADSPI_BK1_IO2, SAI4_CK1, ETH_MII_TXD3, FMC_A23, EVENTOUT | - |
| 2 | B3 | 2 | B2 | A1 | 2 | 2 | D3 | PE3 | I/O | FT_h | - | TRACED0, TIM15_BKIN, SAI1_SD_B, SAI4_SD_B, FMC_A19, EVENTOUT | - |
| 3 | C3 | 3 | A1 | B1 | 3 | 3 | D2 | PE4 | I/O | FT_h | - | TRACED1, SAI1_D2, DFSDM_DATIN3, TIM15_CH1N, SPI4_NSS, SAI1_FS_A, SAI4_FS_A, SAI4_D2, FMC_A20, DCMI_D4, LCD_B0, EVENTOUT | - |
| 4 | D3 | 4 | C3 | B2 | 4 | 4 | D1 | PE5 | I/O | FT_h | - | TRACED2, SAI1_CK2, DFSDM_CKIN3, TIM15_CH1, SPI4_MISO, SAI1_SCK_A, SAI4_SCK_A, SAI4_CK2, FMC_A21, DCMI_D6, LCD_G0, EVENTOUT | - |
| 5 | E3 | 5 | C2 | B3 | 5 | 5 | E5 | PE6 | I/O | FT_h | - | TRACED3, TIM1_BKIN2, SAI1_D1, TIM15_CH2, SPI4_MOSI, SAI1_SD_A, SAI4_SD_A, SAI4_D1, SAI2_MCK_B, TIM1_BKIN2_COMP12, FMC_A22, DCMI_D7, LCD_G1, EVENTOUT | - |
| - | - | - | M4 | H10 | - | - | A1 | VSS | S | - | - | - | - |
| - | - | - | A3 | - | - | - | - | VDD | S | - | - | - | - |
| 6 | B2 | 6 | E3 | C1 | 6 | 6 | B1 | VBAT | S | - | - | - | - |
| - | - | - | - | J6 | - | - | B2 | VSS | - | - | - | - | - |
| - | - | - | - | D2 | 7 | 7 | E4 | PI8 | I/O | FT | - | EVENTOUT | RTC_TAMP_2/ RTC_TS/ WKUP3 |
| 7 | A2 | 7 | D3 | D1 | 8 | 8 | E3 | PC13 | I/O | FT | - | EVENTOUT | RTC_TAMP_1/ RTC_TS/ WKUP2 |
| - | - | - | - | J7 | - | - | B6 | VSS | - | - | - | - | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|-------------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 8 | A1 | 8 | C1 | E1 | 9 | 9 | C2 | PC14- OSC32_ IN(PC14) | I/O | FT | - | EVENTOUT | OSC32_IN |
| 9 | B1 | 9 | B1 | F1 | 10 | 10 | C1 | PC15- OSC32_ OUT(PC15) | I/O | FT | - | EVENTOUT | OSC32_OUT |
| - | - | - | - | D3 | 11 | 11 | E2 | PI9 | I/O | FT_h | - | UART4_RX, CAN1_RX, FMC_D30, LCD_VSYNC, EVENTOUT | - |
| - | - | - | - | E3 | 12 | 12 | F3 | PI10 | I/O | FT_h | - | CAN1_RXFD, ETH_MII_RX_ER, FMC_D31, LCD_HSYNC, EVENTOUT | - |
| - | - | - | E1 | E4 | 13 | 13 | F4 | PI11 | I/O | FT | - | LCD_G6, OTG_HS_ULPI_DIR, EVENTOUT | WKUP4 |
| - | C2 | - | D2 | F2 | 14 | 14 | A17 | VSS | S | - | - | - | - |
| - | D2 | - | D1 | F3 | 15 | 15 | E6 | VDD | S | - | - | - | - |
| - | - | - | - | - | - | - | E1 ⁽¹⁾ | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | F1 ⁽²⁾ | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | G2 ⁽³⁾ | NC | - | - | - | - | - |
| - | - | 10 | F3 | E2 | 16 | 16 | G4 | PF0 | I/O | FT_f | - | I2C2_SDA, FMC_A0, EVENTOUT | - |
| - | - | 11 | E4 | H3 | 17 | 17 | G3 | PF1 | I/O | FT_f | - | I2C2_SCL, FMC_A1, EVENTOUT | - |
| - | - | 12 | F4 | H2 | 18 | 18 | G1 | PF2 | I/O | FT | - | I2C2_SMBA, FMC_A2, EVENTOUT | - |
| - | - | - | F2 | - | - | 19 | H1 | PI12 | I/O | FT | - | ETH_TX_ER, LCD_HSYNC, EVENTOUT | - |
| - | - | - | F1 | - | - | 20 | H2 | PI13 | I/O | FT | - | LCD_VSYNC, EVENTOUT | - |
| - | - | - | - | - | - | 21 | H3 | PI14 | I/O | FT_h | - | LCD_CLK, EVENTOUT | - |
| - | - | 13 | E5 | J2 | 19 | 22 | H4 | PF3 | I/O | FT_ha | - | FMC_A3, EVENTOUT | ADC3_INP5 |
| - | - | 14 | G3 | J3 | 20 | 23 | J5 | PF4 | I/O | FT_ha | - | FMC_A4, EVENTOUT | ADC3_INN5, ADC3_INP9 |
| - | - | 15 | F5 | K3 | 21 | 24 | J4 | PF5 | I/O | FT_ha | - | FMC_A5, EVENTOUT | ADC3_INP4 |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 10 | - | 16 | B10 | G2 | 22 | 25 | C10 | VSS | S | - | - | - | - |
| 11 | - | 17 | G1 | G3 | 23 | 26 | E9 | VDD | S | - | - | - | - |
| - | - | 18 | G4 | K2 | 24 | 27 | K2 | PF6 | I/O | FT_ ha | - | TIM16_CH1, SPI5_NSS, SAI1_SD_B, UART7_RX, SAI4_SD_B, QUADSPI_BK1_IO3, EVENTOUT | ADC3_INN4, ADC3_INP8 |
| - | - | 19 | F6 | K1 | 25 | 28 | K3 | PF7 | I/O | FT_ ha | - | TIM17_CH1, SPI5_SCK, SAI1_MCLK_B, UART7_TX, SAI4_MCLK_B, QUADSPI_BK1_IO2, EVENTOUT | ADC3_INP3 |
| - | - | 20 | H4 | L3 | 26 | 29 | K4 | PF8 | I/O | FT_ ha | - | TIM16_CH1N, SPI5_MISO, SAI1_SCK_B, UART7_RTS, SAI4_SCK_B, TIM13_CH1, QUADSPI_BK1_IO0, EVENTOUT | ADC3_INN3, ADC3_INP7 |
| - | - | 21 | G5 | L2 | 27 | 30 | L4 | PF9 | I/O | FT_ ha | - | TIM17_CH1N, SPI5_MOSI, SAI1_FS_B, UART7_CTS, SAI4_FS_B, TIM14_CH1, QUADSPI_BK1_IO1, EVENTOUT | ADC3_INP2 |
| - | - | 22 | H3 | L1 | 28 | 31 | L3 | PF10 | I/O | FT_ ha | - | TIM16_BKIN, SAI1_D3, QUADSPI_CLK, SAI4_D3, DCMI_D11, LCD_DE, EVENTOUT | ADC3_INN2, ADC3_INP6 |
| 12 | C1 | 23 | H1 | G1 | 29 | 32 | J2 | PH0- OSC_IN (PH0) | I/O | FT | - | EVENTOUT | OSC_IN |
| 13 | D1 | 24 | H2 | H1 | 30 | 33 | J1 | PH1- OSC_OUT (PH1) | I/O | FT | - | EVENTOUT | OSC_OUT |
| 14 | E1 | 25 | G6 | J1 | 31 | 34 | K1 | NRST | I/O | RST | - | - | - |
| 15 | F1 | 26 | J1 | M2 | 32 | 35 | L2 | PC0 | I/O | FT_a | - | DFSDM_CKIN0, DFSDM_DATIN4, SAI2_FS_B, OTG_HS_ULPI_STP, FMC_SDNWE, LCD_R5, EVENTOUT | ADC123_ INP10 |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|----------|---------------|-------|---|--|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 16 | F2 | 27 | J2 | M3 | 33 | 36 | M2 | PC1 | I/O | FT_ha | - | TRACED0, SAI1_D1, DFSDM_DATIN0, DFSDM_CKIN4, SPI2_MOSI/I2S2_SDO, SAI1_SD_A, SAI4_SD_A, SDMMC2_CK, SAI4_D1, ETH_MDC, MDIOS_MDC, EVENTOUT | ADC123_INN10, ADC123_INP11, RTC_TAMP_3/ WKUP5 |
| - | - | - | - | - | - | - | M3 ⁽⁴⁾ | PC2 | I/O | FT_a | - | DFSDM_CKIN1, SPI2_MISO/I2S2_SDI, DFSDM_CKOUT, OTG_HS_ULPI_DIR, ETH_MII_TXD2, FMC_SDNE0, EVENTOUT | ADC123_INN11, ADC123_INP12 |
| 17 ⁽⁵⁾ | E2 ⁽⁵⁾ | 28 ⁽⁵⁾ | K2 ⁽⁵⁾ | M4 ⁽⁵⁾ | 34 ⁽⁵⁾ | 37 ⁽⁵⁾ | R1 ⁽⁴⁾ | PC2_C | ANA | TT_a | - | - | ADC3_INN1, ADC3_INP0 |
| - | - | - | - | - | - | - | M4 ⁽⁴⁾ | PC3 | I/O | FT_a | - | DFSDM_DATIN1, SPI2_MOSI/I2S2_SDO, OTG_HS_ULPI_NXT, ETH_MII_TX_CLK, FMC_SDCKE0, EVENTOUT | ADC12_INN12, ADC12_INP13 |
| 18 ⁽⁵⁾ | F3 ⁽⁵⁾ | 29 ⁽⁵⁾ | K1 ⁽⁵⁾ | M5 ⁽⁵⁾ | 35 ⁽⁵⁾ | 38 ⁽⁵⁾ | R2 ⁽⁴⁾ | PC3_C | ANA | TT_a | - | - | ADC3_INP1 |
| - | F5 | 30 | - | G3 | 36 | 39 | E11 | VDD | S | - | - | - | - |
| - | E6 | - | B3 | J10 | - | - | C13 | VSS | S | - | - | - | - |
| 19 | G1 | 31 | J3 | M1 | 37 | 40 | P1 | VSSA | S | - | - | - | - |
| - | - | - | - | N1 | - | - | N1 | VREF- | S | - | - | - | - |
| 20 | _(6) | 32 | L2 | P1 | 38 | 41 | M1 | VREF+ | S | - | - | - | - |
| 21 | H1 | 33 | L1 | R1 | 39 | 42 | L1 | VDDA | S | - | - | - | - |
| 22 | G2 | 34 | J5 | N3 | 40 | 43 | N5 ⁽⁴⁾ | PA0-WKUP (PA0) | I/O | FT_a | - | TIM2_CH1/TIM2_ETR, TIM5_CH1, TIM8_ETR, TIM15_BKIN, USART2_CTS_NSS, UART4_TX, SDMMC2_CMD, SAI2_SD_B, ETH_MII_CRS, EVENTOUT | ADC1_INP16, WKUP0 |
| - | - | - | - | - | - | - | T1 ⁽⁴⁾ | PA0_C | ANA | TT_a | - | - | ADC12_INN1, ADC12_INP0 |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|-------------------|--|----------|---------------|-------|--|---------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 23 | H2 | 35 | K4 | N2 | 41 | 44 | N4 ⁽⁴⁾ | PA1 | I/O | FT_ ha | - | TIM2_CH2, TIM5_CH2, LPTIM3_OUT, TIM15_CH1N, USART2_RTS, UART4_RX, QUADSPI_BK1_IO3, SAI2_MCK_B, ETH_MII_RX_CLK/ETH_ RMII_REF_CLK, LCD_R2, EVENTOUT | ADC1_INN16, ADC1_INP17 |
| - | - | - | - | - | - | - | T2 ⁽⁴⁾ | PA1_C | ANA | TT_a | - | - | ADC12_INP1 |
| 24 | J2 | 36 | N1 | P2 | 42 | 45 | N3 | PA2 | I/O | FT_a | - | TIM2_CH3, TIM5_CH3, LPTIM4_OUT, TIM15_CH1, USART2_TX, SAI2_SCK_B, ETH_MDIO, MDIOS_MDIO, LCD_R1, EVENTOUT | ADC12_INP14, WKUP1 |
| - | - | - | N2 | F4 | 43 | 46 | N2 | PH2 | I/O | FT_ ha | - | LPTIM1_IN2, QUADSPI_BK2_IO0, SAI2_SCK_B, ETH_MII_CRD, FMC_SDCKE0, LCD_R0, EVENTOUT | ADC3_INP13 |
| - | K1 | - | M1 | - | - | - | F5 | VDD | S | - | - | - | - |
| - | J1 | - | M7 | J8 | - | - | C16 | VSS | S | - | - | - | - |
| - | - | - | M3 | G4 | 44 | 47 | P2 | PH3 | I/O | FT_ ha | - | QUADSPI_BK2_IO1, SAI2_MCK_B, ETH_MII_COL, FMC_SDNE0, LCD_R1, EVENTOUT | ADC3_INN13, ADC3_INP14 |
| - | - | - | K3 | H4 | 45 | 48 | P3 | PH4 | I/O | FT_fa | - | I2C2_SCL, LCD_G5, OTG_HS_ULPI_NXT, LCD_G4, EVENTOUT | ADC3_INN14, ADC3_INP15 |
| - | - | - | L3 | J4 | 46 | 49 | P4 | PH5 | I/O | FT_fa | - | I2C2_SDA, SPI5_NSS, FMC_SDNWE, EVENTOUT | ADC3_INN15, ADC3_INP16 |
| 25 | K2 | 37 | N3 | R2 | 47 | 50 | U2 | PA3 | I/O | FT_ ha | - | TIM2_CH4, TIM5_CH4, LPTIM5_OUT, TIM15_CH2, USART2_RX, LCD_B2, OTG_HS_ULPI_D0, ETH_MII_COL, LCD_B5, EVENTOUT | ADC12_INP15 |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|-------------------|--|----------|---------------|-------|--|---|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 26 | - | 38 | G2 | K6 | - | 51 | F2 ⁽³⁾ | VSS | S | - | - | - | - |
| - | - | - | - | L4 | 48 | - | - | VSS | S | - | - | - | - |
| 27 | - | 39 | - | K4 | 49 | 52 | G5 | VDD | S | - | - | - | - |
| 28 | G3 | 40 | H6 | N4 | 50 | 53 | U3 | PA4 | I/O | TT_a | - | TIM5_ETR, SPI1_NSS/I2S1_WS, SPI3_NSS/I2S3_WS, USART2_CK, SPI6_NSS, OTG_HS_SOF, DCMI_HSYNC, LCD_VSYNC, EVENTOUT | ADC12_INP18, DAC1_OUT1 |
| 29 | H3 | 41 | L4 | P4 | 51 | 54 | T3 | PA5 | I/O | TT_ha | - | TIM2_CH1/TIM2_ETR, TIM8_CH1N, SPI1_SCK/I2S1_CK, SPI6_SCK, OTG_HS_ULPI_CK, LCD_R4, EVENTOUT | ADC12_INN18, ADC12_INP19, DAC1_OUT2 |
| 30 | J3 | 42 | K5 | P3 | 52 | 55 | R3 | PA6 | I/O | FT_a | - | TIM1_BKIN, TIM3_CH1, TIM8_BKIN, SPI1_MISO/I2S1_SDI, SPI6_MISO, TIM13_CH1, TIM8_BKIN_COMP12, MDIOS_MDC, TIM1_BKIN_COMP12, DCMI_PIXCLK, LCD_G2, EVENTOUT | ADC12_INP3 |
| 31 | K3 | 43 | J6 | R3 | 53 | 56 | R5 | PA7 | I/O | TT_a | - | TIM1_CH1N, TIM3_CH2, TIM8_CH1N, SPI1_MOSI/I2S1_SDO, SPI6_MOSI, TIM14_CH1, ETH_MII_RX_DV/ETH_R MII_CRS_DV, FMC_SDNWE, EVENTOUT | ADC12_INN3, ADC12_INP7, OPAMP1_VINM |
| 32 | G4 | 44 | K6 | N5 | 54 | 57 | T4 | PC4 | I/O | TT_a | - | DFSDM_CKIN2, I2S1_MCK, SPDIFRX_IN2, ETH_MII_RXD0/ETH_R MII_RXD0, FMC_SDNE0, EVENTOUT | ADC12_INP4, OPAMP1_ VOUT, COMP_1_INM |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|--|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 33 | H4 | 45 | N5 | P5 | 55 | 58 | U4 | PC5 | I/O | TT_a | - | SAI1_D3, DFSDM_DATIN2, SPDIFRX_IN3, SAI4_D3, ETH_MII_RXD1/ETH_R MII_RXD1, FMC_SDCKE0, COMP_1_OUT, EVENTOUT | ADC12_INN4, ADC12_INP8, OPAMP1_ VINM |
| - | - | - | N4 | - | - | 59 | G13 | VDD | S | - | - | - | - |
| - | - | - | H12 | J9 | - | 60 | G16 | VSS | S | - | - | - | - |
| 34 | J4 | 46 | M5 | R5 | 56 | 61 | U5 | PB0 | I/O | FT_a | - | TIM1_CH2N, TIM3_CH3, TIM8_CH2N, DFSDM_CKOUT, UART4_CTS, LCD_R3, OTG_HS_ULPI_D1, ETH_MII_RXD2, LCD_G1, EVENTOUT | ADC12_INN5, ADC12_INP9, OPAMP1_VINP, COMP_1_INP |
| 35 | K4 | 47 | L5 | R4 | 57 | 62 | T5 | PB1 | I/O | TT_u | - | TIM1_CH3N, TIM3_CH4, TIM8_CH3N, DFSDM_DATIN1, LCD_R6, OTG_HS_ULPI_D2, ETH_MII_RXD3, LCD_G0, EVENTOUT | ADC12_INP5, COMP_1_INM |
| 36 | G5 | 48 | L6 | M6 | 58 | 63 | R6 | PB2 | I/O | FT_ha | - | SAI1_D1, DFSDM_CKIN1, SAI1_SD_A, SPI3_MOSI/I2S3_SDO, SAI4_SD_A, QUADSPI_CLK, SAI4_D1, ETH_TX_ER, EVENTOUT | COMP_1_INP, RTC_OUT |
| - | - | - | - | - | - | 64 | P5 | PI15 | I/O | FT | - | LCD_G2, LCD_R0, EVENTOUT | - |
| - | - | - | J4 | - | - | 65 | N6 | PJ0 | I/O | FT | - | LCD_R7, LCD_R1, EVENTOUT | - |
| - | - | - | H5 | - | - | 66 | P6 | PJ1 | I/O | FT | - | LCD_R2, EVENTOUT | - |
| - | - | - | - | - | - | 67 | T6 | PJ2 | I/O | FT | - | LCD_R3, EVENTOUT | - |
| - | - | - | - | - | - | 68 | U6 | PJ3 | I/O | FT | - | LCD_R4, EVENTOUT | - |
| - | - | - | - | - | - | 69 | U7 | PJ4 | I/O | FT | - | LCD_R5, EVENTOUT | - |
| - | - | 49 | M6 | R6 | 59 | 70 | T7 | PF11 | I/O | FT_a | - | SPI5_MOSI, SAI2_SD_B, FMC_SDNRAS, DCMI_D12, EVENTOUT | ADC1_INP2 |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|--------------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | 50 | N6 | P6 | 60 | 71 | R7 | PF12 | I/O | FT_ha | - | FMC_A6, EVENTOUT | ADC1_INN2, ADC1_INP6 |
| - | - | 51 | M11 | M8 | 61 | 72 | J3 | VSS | S | - | - | - | - |
| - | - | 52 | - | N8 | 62 | 73 | H5 | VDD | S | - | - | - | - |
| - | - | 53 | G7 | N6 | 63 | 74 | P7 | PF13 | I/O | FT_ha | - | DFSDM_DATIN6, I2C4_SMBA, FMC_A7, EVENTOUT | ADC2_INP2 |
| - | - | 54 | H7 | R7 | 64 | 75 | P8 | PF14 | I/O | FT_fha | - | DFSDM_CKIN6, I2C4_SCL, FMC_A8, EVENTOUT | ADC2_INN2, ADC2_INP6 |
| - | - | 55 | J7 | P7 | 65 | 76 | R9 | PF15 | I/O | FT_fh | - | I2C4_SDA, FMC_A9, EVENTOUT | - |
| - | - | 56 | K7 | N7 | 66 | 77 | T8 | PG0 | I/O | FT_h | - | FMC_A10, EVENTOUT | - |
| - | - | - | M2 | F6 | - | - | J16 | VSS | S | - | - | - | - |
| - | - | - | A10 | - | - | - | H13 | VDD | S | - | - | - | - |
| - | - | 57 | L7 | M7 | 67 | 78 | U8 | PG1 | I/O | TT_h | - | FMC_A11, EVENTOUT | OPAMP2_ VINM |
| 37 | H5 | 58 | G8 | R8 | 68 | 79 | U9 | PE7 | I/O | TT_ha | - | TIM1_ETR, DFSDM_DATIN2, UART7_RX, QUADSPI_BK2_IO0, FMC_D4/FMC_DA4, EVENTOUT | OPAMP2_ VOUT, COMP_2_INM |
| 38 | J5 | 59 | H8 | P8 | 69 | 80 | T9 | PE8 | I/O | TT_ha | - | TIM1_CH1N, DFSDM_CKIN2, UART7_TX, QUADSPI_BK2_IO1, FMC_D5/FMC_DA5, COMP_2_OUT, EVENTOUT | OPAMP2_ VINM |
| 39 | K5 | 60 | J8 | P9 | 70 | 81 | P9 | PE9 | I/O | TT_ha | - | TIM1_CH1, DFSDM_CKOUT, UART7_RTS, QUADSPI_BK2_IO2, FMC_D6/FMC_DA6, EVENTOUT | OPAMP2_VINP, COMP_2_INP |
| - | - | 61 | C12 | M9 | 71 | 82 | J17 | VSS | S | - | - | - | - |
| - | - | 62 | C13 | N9 | 72 | 83 | J13 | VDD | S | - | - | - | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 40 | G6 | 63 | M8 | R9 | 73 | 84 | N9 | PE10 | I/O | FT_ha | - | TIM1_CH2N, DFSDM_DATIN4, UART7_CTS, QUADSPI_BK2_IO3, FMC_D7/FMC_DA7, EVENTOUT | COMP_2_INM |
| 41 | H6 | 64 | N8 | P10 | 74 | 85 | P10 | PE11 | I/O | FT_ha | - | TIM1_CH2, DFSDM_CKIN4, SPI4_NSS, SAI2_SD_B, FMC_D8/FMC_DA8, LCD_G3, EVENTOUT | COMP_2_INP |
| 42 | J6 | 65 | L8 | R10 | 75 | 86 | R10 | PE12 | I/O | FT_h | - | TIM1_CH3N, DFSDM_DATIN5, SPI4_SCK, SAI2_SCK_B, FMC_D9/FMC_DA9, COMP_1_OUT, LCD_B4, EVENTOUT | - |
| 43 | K6 | 66 | K8 | N11 | 76 | 87 | T10 | PE13 | I/O | FT_h | - | TIM1_CH3, DFSDM_CKIN5, SPI4_MISO, SAI2_FS_B, FMC_D10/FMC_DA10, COMP_2_OUT, LCD_DE, EVENTOUT | - |
| - | - | - | L12 | F7 | - | - | K15 | VSS | S | - | - | - | - |
| - | - | - | H13 | - | - | - | K13 | VDD | S | - | - | - | - |
| 44 | G7 | 67 | J9 | P11 | 77 | 88 | U10 | PE14 | I/O | FT_h | - | TIM1_CH4, SPI4_MOSI, SAI2_MCK_B, FMC_D11/FMC_DA11, LCD_CLK, EVENTOUT | - |
| 45 | H7 | 68 | N9 | R11 | 78 | 89 | R11 | PE15 | I/O | FT_h | - | TIM1_BKIN, HDMI_TIM1_BKIN, FMC_D12/FMC_DA12, TIM1_BKIN_COMP12, LCD_R7, EVENTOUT | - |
| 46 | J7 | 69 | L9 | R12 | 79 | 90 | P11 | PB10 | I/O | FT_f | - | TIM2_CH3, HRTIM_SCOUT, LPTIM2_IN1, I2C2_SCL, SPI2_SCK/I2S2_CK, DFSDM_DATIN7, USART3_TX, QUADSPI_BK1_NCS, OTG_HS_ULPI_D3, ETH_MII_RX_ER, LCD_G4, EVENTOUT | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 47 | K7 | 70 | M9 | R13 | 80 | 91 | P12 | PB11 | I/O | FT_f | - | TIM2_CH4, HRTIM_SCIN, LPTIM2_ETR, I2C2_SDA, DFSDM_CKIN7, USART3_RX, OTG_HS_ULPI_D4, ETH_MII_TX_EN/ETH_R MII_TX_EN, LCD_G5, EVENTOUT | - |
| 48 | F8 | 71 | N10 | M10 | 81 | 92 | U11 | VCAP1 | S | - | - | - | - |
| 49 | E4 | - | - | K7 | - | 93 | L15 | VSS | S | - | - | - | - |
| - | - | - | M10 | - | - | - | U12 | VDDLDO1 | S | - | - | - | - |
| 50 | - | 72 | M1 | N10 | 82 | 94 | L13 | VDD | S | - | - | - | - |
| - | - | - | - | - | - | 95 | R12 | PJ5 | I/O | FT | - | LCD_R6, EVENTOUT | - |
| - | - | - | - | M11 | 83 | 96 | T11 | PH6 | I/O | FT | - | TIM12_CH1, I2C2_SMBA, SPI5_SCK, ETH_MII_RXD2, FMC_SDNE1, DCM1_D8, EVENTOUT | - |
| - | - | - | - | N12 | 84 | 97 | U13 | PH7 | I/O | FT_fa | - | I2C3_SCL, SPI5_MISO, ETH_MII_RXD3, FMC_SDCKE1, DCMI_D9, EVENTOUT | - |
| - | - | - | - | M12 | 85 | 98 | T13 | PH8 | I/O | FT_fa | - | TIM5_ETR, I2C3_SDA, FMC_D16, DCMI_HSYNC, LCD_R2, EVENTOUT | - |
| - | - | - | - | F8 | - | - | M15 | VSS | S | - | - | - | - |
| - | - | - | L13 | - | - | - | M13 | VDD | S | - | - | - | - |
| - | - | - | - | M13 | 86 | 99 | R13 | PH9 | I/O | FT_h | - | TIM12_CH2, I2C3_SMBA, FMC_D17, DCMI_D0, LCD_R3, EVENTOUT | - |
| - | - | - | K9 | L13 | 87 | 100 | P13 | PH10 | I/O | FT_h | - | TIM5_CH1, I2C4_SMBA, FMC_D18, DCM1_D1, LCD_R4, EVENTOUT | - |
| - | - | - | L10 | L12 | 88 | 101 | P14 | PH11 | I/O | FT_fa | - | TIM5_CH2, I2C4_SCL, FMC_D19, DCM1_D2, LCD_R5, EVENTOUT | - |

Table 8. STM32H743xL pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | - | K10 | K12 | 89 | 102 | R14 | PH12 | I/O | FT_fh | - | TIM5_CH3, I2C4_SDA, FMC_D20, DCMI_D3, LCD_R6, EVENTOUT | - |
| - | - | - | - | H12 | 90 | - | N16 | VSS | S | - | - | - | - |
| - | - | - | N11 | J12 | 91 | 103 | P17 | VDD | S | - | - | - | - |
| 51 | K8 | 73 | N12 | P12 | 92 | 104 | T14 | PB12 | I/O | FT_u | - | TIM1_BKIN, I2C2_SMBA, SPI2_NSS/I2S2_WS, DFSDM_DATIN1, USART3_CK, CAN2_RX, OTG_HS_ULPI_D5, ETH_MII_TXD0/ETH_RM II_TXD0, OTG_HS_ID, TIM1_BKIN_COMP12, UART5_RX, EVENTOUT | |
| 52 | J8 | 74 | L11 | P13 | 93 | 105 | U14 | PB13 | I/O | FT_u | - | TIM1_CH1N, LPTIM2_OUT, SPI2_SCK/I2S2_CK, DFSDM_CKIN1, USART3_CTS_NSS, CAN2_TX, OTG_HS_ULPI_D6, ETH_MII_TXD1/ETH_RM II_TXD1, UART5_TX, EVENTOUT | OTG_HS_ VBUS |
| 53 | H10 | 75 | N13 | R14 | 94 | 106 | U15 | PB14 | I/O | FT_u | - | TIM1_CH2N, TIM12_CH1, TIM8_CH2N, USART1_TX, SPI2_MISO/I2S2_SDI, DFSDM_DATIN2, USART3_RTS, UART4_RTS, SDMMC2_D0, OTG_HS_DM, EVENTOUT | - |
| 54 | G10 | 76 | M13 | R15 | 95 | 107 | T15 | PB15 | I/O | FT_u | - | RTC_REFIN, TIM1_CH3N, TIM12_CH2, TIM8_CH3N, USART1_RX, SPI2_MOSI/I2S2_SDO, DFSDM_CKIN2, UART4_CTS, SDMMC2_D1, OTG_HS_DP, EVENTOUT | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 55 | K9 | 77 | M12 | P15 | 96 | 108 | U16 | PD8 | I/O | FT_h | - | DFSDM_CKIN3, SAI3_SCK_B, USART3_TX, SPDIFRX_IN1, FMC_D13/FMC_DA13, EVENTOUT | - |
| 56 | J9 | 78 | K11 | P14 | 97 | 109 | T17 | PD9 | I/O | FT_h | - | DFSDM_DATIN3, SAI3_SD_B, USART3_RX, CAN2_RXFD, FMC_D14/FMC_DA14, EVENTOUT | - |
| 57 | H9 | 79 | K12 | N15 | 98 | 110 | T16 | PD10 | I/O | FT_h | - | DFSDM_CKOUT, SAI3_FS_B, USART3_CK, CAN2_TXFD, FMC_D15/FMC_DA15, LCD_B3, EVENTOUT | - |
| - | - | - | N7 | - | - | - | N12 | VDD | S | - | - | - | - |
| - | - | - | - | F9 | - | - | U17 | VSS | S | - | - | - | - |
| 58 | G9 | 80 | J10 | N14 | 99 | 111 | R15 | PD11 | I/O | FT_h | - | LPTIM2_IN2, I2C4_SMBA, USART3_CTS_NSS, QUADSPI_BK1_IO0, SAI2_SD_A, FMC_A16, EVENTOUT | - |
| 59 | K10 | 81 | K13 | N13 | 100 | 112 | R16 | PD12 | I/O | FT_fh | - | LPTIM1_IN1, TIM4_CH1, LPTIM2_IN1, I2C4_SCL, USART3_RTS, QUADSPI_BK1_IO1, SAI2_FS_A, FMC_A17, EVENTOUT | - |
| 60 | J10 | 82 | J11 | M15 | 101 | 113 | R17 | PD13 | I/O | FT_fh | - | LPTIM1_OUT, TIM4_CH2, I2C4_SDA, QUADSPI_BK1_IO3, SAI2_SCK_A, FMC_A18, EVENTOUT | - |
| - | - | 83 | - | K8 | 102 | 114 | T12 | VSS | S | - | - | - | - |
| - | - | 84 | - | J13 | 103 | 115 | N11 | VDD | S | - | - | - | - |
| 61 | H8 | 85 | J13 | M14 | 104 | 116 | P16 | PD14 | I/O | FT_h | - | TIM4_CH3, SAI3_MCLK_B, UART8_CTS, FMC_D0/FMC_DA0, EVENTOUT | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 62 | G8 | 86 | J12 | L14 | 105 | 117 | P15 | PD15 | I/O | FT_h | - | TIM4_CH4, SAI3_MCLK_A, UART8_RTS, FMC_D1/FMC_DA1, EVENTOUT | - |
| - | - | - | - | - | - | 118 | N15 | PJ6 | I/O | FT | - | TIM8_CH2, LCD_R7, EVENTOUT | - |
| - | - | - | - | - | - | 119 | N14 | PJ7 | I/O | FT | - | TRGIN, TIM8_CH2N, LCD_G0, EVENTOUT | - |
| - | - | - | - | - | - | - | N10 | VDD | S | | - | | - |
| - | - | - | - | F10 | - | - | R8 | VSS | S | | - | | - |
| - | - | - | - | - | - | 120 | N13 | PJ8 | I/O | FT | - | TIM1_CH3N, TIM8_CH1, UART8_TX, LCD_G1, EVENTOUT | - |
| - | - | - | - | - | - | 121 | M14 | PJ9 | I/O | FT | - | TIM1_CH3, TIM8_CH1N, UART8_RX, LCD_G2, EVENTOUT | - |
| - | - | - | - | - | - | 122 | L14 | PJ10 | I/O | FT | - | TIM1_CH2N, TIM8_CH2, SPI5_MOSI, LCD_G3, EVENTOUT | - |
| - | - | - | - | - | - | 123 | K14 | PJ11 | I/O | FT | - | TIM1_CH2, TIM8_CH2N, SPI5_MISO, LCD_G4, EVENTOUT | - |
| - | - | - | - | - | - | 124 | N8 | VDD | S | | - | | - |
| - | - | - | - | G6 | - | 125 | U1 | VSS | S | - | - | - | - |
| - | - | - | - | - | - | - | N17 (1) | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | M16 (1) | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | M17 (1) | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | L7 | VSS | S | - | - | - | - |
| - | - | - | - | - | - | - | L16 ⁽¹⁾ | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | L17 ⁽¹⁾ | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | K16 (1) | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | K17 (1) | NC | - | - | - | - | - |
| - | - | - | - | - | - | - | L8 | VSS | S | - | - | - | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | - | - | - | - | 126 | J14 | PK0 | I/O | FT | - | TIM1_CH1N, TIM8_CH3, SPI5_SCK, LCD_G5, EVENTOUT | - |
| - | - | - | - | - | - | 127 | J15 | PK1 | I/O | FT | - | TIM1_CH1, TIM8_CH3N, SPI5_NSS, LCD_G6, EVENTOUT | - |
| - | - | - | - | - | - | 128 | H17 | PK2 | I/O | FT | - | TIM1_BKIN, TIM8_BKIN, TIM8_BKIN_COMP12, TIM1_BKIN_COMP12, LCD_G7, EVENTOUT | - |
| - | - | 87 | H9 | L15 | 106 | 129 | H16 | PG2 | I/O | FT_h | - | TIM8_BKIN, TIM8_BKIN_COMP12, FMC_A12, EVENTOUT | - |
| - | - | 88 | H10 | K15 | 107 | 130 | H15 | PG3 | I/O | FT_h | - | TIM8_BKIN2, TIM8_BKIN2_COMP12, FMC_A13, EVENTOUT | - |
| - | - | - | - | G7 | - | - | - | VSS | S | - | - | - | - |
| - | - | - | - | - | - | - | N7 | VDD | S | - | - | - | - |
| - | - | 89 | F8 | K14 | 108 | 131 | H14 | PG4 | I/O | FT_h | - | TIM1_BKIN2, TIM1_BKIN2_COMP12, FMC_A14/FMC_BA0, EVENTOUT | - |
| - | - | 90 | H11 | K13 | 109 | 132 | G14 | PG5 | I/O | FT_h | - | TIM1_ETR, FMC_A15/FMC_BA1, EVENTOUT | - |
| - | - | 91 | G9 | J15 | 110 | 133 | G15 | PG6 | I/O | FT_h | - | TIM17_BKIN, HRTIM_CHE1, QUADSPI_BK1_NCS, FMC_NE3, DCMI_D12, LCD_R7, EVENTOUT | - |
| - | - | 92 | G10 | J14 | 111 | 134 | F16 | PG7 | I/O | FT_h | - | HRTIM_CHE2, SAI1_MCLK_A, USART6_CK, FMC_INT, DCMI_D13, LCD_CLK, EVENTOUT | - |
| - | - | 93 | G11 | H14 | 112 | 135 | F15 | PG8 | I/O | FT_h | - | TIM8_ETR, SPI6_NSS, USART6_RTS, SPDIFRX_IN2, ETH_PPS_OUT, FMC_SDCLK, LCD_G7, EVENTOUT | - |
| - | - | 94 | - | G12 | 113 | 136 | - | VSS | S | - | - | - | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | - | G12 | - | - | - | G17 | VDD50 USB | S | - | - | - | - |
| - | F6 | 95 | G13 | H13 | 114 | 137 | F17 | VDD33 USB | S | - | - | - | - |
| - | - | - | - | - | - | - | M5 | VDD | S | - | - | - | - |
| 63 | F10 | 96 | F9 | H15 | 115 | 138 | F14 | PC6 | I/O | FT_h | - | HRTIM_CHA1, TIM3_CH1, TIM8_CH1, DFSDM_CKIN3, I2S2_MCK, USART6_TX, SDMMC1_D0DIR, FMC_NWAIT, SDMMC2_D6, SDMMC1_D6, DCM1_D0, LCD_HSYNC, EVENTOUT | SWPMI_IO |
| 64 | E10 | 97 | F10 | G15 | 116 | 139 | F13 | PC7 | I/O | FT_h | - | TRGIO, HRTIM_CHA2, TIM3_CH2, TIM8_CH2, DFSDM_DATIN3, I2S3_MCK, USART6_RX, SDMMC1_D123DIR, FMC_NE1, SDMMC2_D7, SWPMI_TX, SDMMC1_D7, DCM1_D1, LCD_G6, EVENTOUT | - |
| 65 | F9 | 98 | F12 | G14 | 117 | 140 | E13 | PC8 | I/O | FT_h | - | TRACED1, HRTIM_CHB1, TIM3_CH3, TIM8_CH3, USART6_CK, UART5_RTS, FMC_NE2/FMC_NCE, SWPMI_RX, SDMMC1_D0, DCM1_D2, EVENTOUT | - |
| 66 | E9 | 99 | F11 | F14 | 118 | 141 | E14 | PC9 | I/O | FT_fh | - | MCO2, TIM3_CH4, TIM8_CH4, I2C3_SDA, I2S_CKIN, UART5_CTS, QUADSPI_BK1_IO0, LCD_G3, SWPMI_SUSPEND, SDMMC1_D1, DCM1_D3, LCD_B2, EVENTOUT | - |
| - | - | - | - | G8 | - | - | - | VSS | S | - | - | | - |
| - | - | - | - | - | - | - | L5 | VDD | S | - | - | | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 67 | D9 | 100 | E12 | F15 | 119 | 142 | E15 | PA8 | I/O | FT_fha | - | MCO1, TIM1_CH1, HRTIM_CHB2, TIM8_BKIN2, I2C3_SCL, USART1_CK, OTG_FS_SOF, UART7_RX, TIM8_BKIN2_COMP12, LCD_B3, LCD_R6, EVENTOUT | - |
| 68 | C9 | 101 | E11 | E15 | 120 | 143 | D15 | PA9 | I/O | FT_u | - | TIM1_CH2, HRTIM_CHC1, LPUART1_TX, I2C3_SMBA, SPI2_SCK/I2S2_CK, USART1_TX, CAN1_RXFD, ETH_TX_ER, DCMI_D0, LCD_R5, EVENTOUT | OTG_FS_VBUS |
| 69 | D10 | 102 | E10 | D15 | 121 | 144 | D14 | PA10 | I/O | FT_u | - | TIM1_CH3, HRTIM_CHC2, LPUART1_RX, USART1_RX, CAN1_TXFD, OTG_FS_ID, MDIOS_MDIO, LCD_B4, DCMI_D1, LCD_B1, EVENTOUT | - |
| 70 | C10 | 103 | F13 | C15 | 122 | 145 | E17 | PA11 | I/O | FT_u | - | TIM1_CH4, HRTIM_CHD1, LPUART1_CTS, SPI2_NSS/I2S2_WS, UART4_RX, USART1_CTS_NSS, CAN1_RX, OTG_FS_DM, LCD_R4, EVENTOUT | - |
| 71 | B10 | 104 | E13 | B15 | 123 | 146 | E16 | PA12 | I/O | FT_u | - | TIM1_ETR, HRTIM_CHD2, LPUART1_RTS, SPI2_SCK/I2S2_CK, UART4_TX, USART1_RTS, SAI2_FS_B, CAN1_TX, OTG_FS_DP, LCD_R5, EVENTOUT | - |
| 72 | A10 | 105 | D11 | A15 | 124 | 147 | C15 | PA13(JTMS-SWDIO) | I/O | FT | - | JTMS-SWDIO, EVENTOUT | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 73 | E7 | 106 | D13 | F13 | 125 | 148 | D17 | VCAP2 | S | - | - | - | - |
| 74 | E5 | 107 | - | F12 | 126 | 149 | - | VSS | S | - | - | - | - |
| - | - | - | D12 | - | - | - | C17 | VDDLDO2 | | - | - | - | - |
| 75 | - | 108 | - | G13 | 127 | 150 | K5 | VDD | S | - | - | - | - |
| - | - | - | - | E12 | 128 | 151 | D16 | PH13 | I/O | FT_h | - | TIM8_CH1N, UART4_TX, CAN1_TX, FMC_D21, LCD_G2, EVENTOUT | - |
| - | - | - | - | E13 | 129 | 152 | B17 | PH14 | I/O | FT_h | - | TIM8_CH2N, UART4_RX, CAN1_RX, FMC_D22, DCMI_D4, LCD_G3, EVENTOUT | - |
| - | - | - | - | D13 | 130 | 153 | B16 | PH15 | I/O | FT_h | - | TIM8_CH3N, CAN1_TXFD, FMC_D23, DCMI_D11, LCD_G4, EVENTOUT | - |
| - | - | - | A13 | E14 | 131 | 154 | A16 | PI0 | I/O | FT_h | - | TIM5_CH4, SPI2_NSS/I2S2_WS, CAN1_RXFD, FMC_D24, DCMI_D13, LCD_G5, EVENTOUT | - |
| - | - | - | - | G9 | - | - | - | VSS | S | - | - | - | - |
| - | - | - | B13 | D14 | 132 | 155 | A15 | PI1 | I/O | FT_h | - | TIM8_BKIN2, SPI2_SCK/I2S2_CK, TIM8_BKIN2_COMP12, FMC_D25, DCMI_D8, LCD_G6, EVENTOUT | - |
| - | - | - | A6 | C14 | 133 | 156 | B15 | PI2 | I/O | FT_h | - | TIM8_CH4, SPI2_MISO/I2S2_SDI, FMC_D26, DCMI_D9, LCD_G7, EVENTOUT | - |
| - | - | - | B7 | C13 | 134 | 157 | C14 | PI3 | I/O | FT_h | - | TIM8_ETR, SPI2_MOSI/I2S2_SDO, FMC_D27, DCMI_D10, EVENTOUT | - |
| - | - | - | - | D9 | 135 | - | - | VSS | S | - | - | - | - |
| - | - | - | - | C9 | 136 | 158 | - | VDD | S | - | - | - | - |
| 76 | A9 | 109 | B12 | A14 | 137 | 159 | B14 | PA14 (JTCK-SWCLK) | I/O | FT | - | JTCK-SWCLK, EVENTOUT | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 77 | A8 | 110 | C11 | A13 | 138 | 160 | A14 | PA15 (JTDI) | I/O | FT | - | JTDI, TIM2_CH1/TIM2_ETR, HRTIM_FLT1, HDMI_CEC, SPI1_NSS/I2S1_WS, SPI3_NSS/I2S3_WS, SPI6_NSS, UART4_RTS, UART7_TX, EVENTOUT | - |
| 78 | B9 | 111 | A12 | B14 | 139 | 161 | A13 | PC10 | I/O | FT_ha | - | HRTIM_EEV1, DFSDM_CKIN5, SPI3_SCK/I2S3_CK, USART3_TX, UART4_TX, QUADSPI_BK1_IO1, SDMMC1_D2, DCMI_D8, LCD_R2, EVENTOUT | - |
| 79 | B8 | 112 | B11 | B13 | 140 | 162 | B13 | PC11 | I/O | FT_h | - | HRTIM_FLT2, DFSDM_DATIN5, SPI3_MISO/I2S3_SDI, USART3_RX, UART4_RX, QUADSPI_BK2_NCS, SDMMC1_D3, DCMI_D4, EVENTOUT | - |
| 80 | C8 | 113 | A11 | A12 | 141 | 163 | C12 | PC12 | I/O | FT_h | - | TRACED3, HRTIM_EEV2, SPI3_MOSI/I2S3_SDO, USART3_CK, UART5_TX, SDMMC1_CK, DCMI_D9, EVENTOUT | - |
| - | - | - | - | G10 | - | - | - | VSS | S | - | - | - | - |
| 81 | D8 | 114 | D10 | B12 | 142 | 164 | D13 | PD0 | I/O | FT_h | - | DFSDM_CKIN6, SAI3_SCK_A, UART4_RX, CAN1_RX, FMC_D2/FMC_DA2, EVENTOUT | - |
| 82 | E8 | 115 | C10 | C12 | 143 | 165 | E12 | PD1 | I/O | FT_h | - | DFSDM_DATIN6, SAI3_SD_A, UART4_TX, CAN1_TX, FMC_D3/FMC_DA3, EVENTOUT | - |
| 83 | B7 | 116 | E9 | D12 | 144 | 166 | D12 | PD2 | I/O | FT_h | - | TRACED2, TIM3_ETR, UART5_RX, SDMMC1_CMD, DCMI_D11, EVENTOUT | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 84 | C7 | 117 | D9 | D11 | 145 | 167 | B12 | PD3 | I/O | FT_h | - | DFSDM_CKOUT, SPI2_SCK/I2S2_CK, USART2_CTS_NSS, FMC_CLK, DCM1_D5, LCD_G7, EVENTOUT | - |
| 85 | D7 | 118 | C9 | D10 | 146 | 168 | A12 | PD4 | I/O | FT_h | - | HRTIM_FLT3, SAI3_FS_A, USART2_RTS, CAN1_RXFD, FMC_NOE, EVENTOUT | - |
| 86 | B6 | 119 | A9 | C11 | 147 | 169 | A11 | PD5 | I/O | FT_h | - | HRTIM_EEV3, USART2_TX, CAN1_TXFD, FMC_NWE, EVENTOUT | - |
| - | - | 120 | - | D8 | 148 | 170 | R4 | VSS | S | - | - | - | - |
| - | - | 121 | - | C8 | 149 | 171 | - | VDD | S | - | - | - | - |
| 87 | C6 | 122 | B9 | B11 | 150 | 172 | B11 | PD6 | I/O | FT_h | - | SAI1_D1, DFSDM_CKIN4, DFSDM_DATIN1, SPI3_MOSI/I2S3_SDO, SAI1_SD_A, USART2_RX, SAI4_SD_A, CAN2_RXFD, SAI4_D1, SDMMC2_CK, FMC_NWAIT, DCM1_D10, LCD_B2, EVENTOUT | - |
| 88 | D6 | 123 | D8 | A11 | 151 | 173 | C11 | PD7 | I/O | FT_h | - | DFSDM_DATIN4, SPI1_MOSI/I2S1_SDO, DFSDM_CKIN1, USART2_CK, SPDIFRX_IN0, SDMMC2_CMD, FMC_NE1, EVENTOUT | - |
| - | - | - | - | - | - | 174 | D11 | PJ12 | I/O | FT | - | TRGOUT, LCD_G3, LCD_B0, EVENTOUT | - |
| - | - | - | - | - | - | 175 | E10 | PJ13 | I/O | FT | - | LCD_B4, LCD_B1, EVENTOUT | - |
| - | - | - | - | - | - | 176 | D10 | PJ14 | I/O | FT | - | LCD_B2, EVENTOUT | - |
| - | - | - | - | - | - | 177 | B10 | PJ15 | I/O | FT | - | LCD_B3, EVENTOUT | - |
| - | - | - | - | H6 | - | - | - | VSS | S | - | - | - | - |
| - | - | - | A7 | - | - | - | - | VDD | S | - | - | - | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | 124 | C8 | C10 | 152 | 178 | A10 | PG9 | I/O | FT_h | - | SPI1_MISO/I2S1_SDI, USART6_RX, SPDIFRX_IN3, QUADSPI_BK2_IO2, SAI2_FS_B, FMC_NE2/FMC_NCE, DCMI_VSYNC, EVENTOUT | - |
| - | - | 125 | A8 | B10 | 153 | 179 | A9 | PG10 | I/O | FT_h | - | HRTIM_FLT5, SPI1_NSS/I2S1_WS, LCD_G3, SAI2_SD_B, FMC_NE3, DCMI_D2, LCD_B2, EVENTOUT | - |
| - | - | 126 | B8 | B9 | 154 | 180 | B9 | PG11 | I/O | FT_h | - | HRTIM_EEV4, SPI1_SCK/I2S1_CK, SPDIFRX_IN0, SDMMC2_D2, ETH_MII_TX_EN/ETH_R MII_TX_EN, DCMI_D3, LCD_B3, EVENTOUT | - |
| - | - | 127 | E8 | B8 | 155 | 181 | C9 | PG12 | I/O | FT_h | - | LPTIM1_IN1, HRTIM_EEV5, SPI6_MISO, USART6_RTS, SPDIFRX_IN1, LCD_B4, ETH_MII_TXD1/ETH_RM II_TXD1, FMC_NE4, LCD_B1, EVENTOUT | - |
| - | - | 128 | D7 | A8 | 156 | 182 | D9 | PG13 | I/O | FT_h | - | TRACED0, LPTIM1_OUT, HRTIM_EEV10, SPI6_SCK, USART6_CTS_NSS, ETH_MII_TXD0/ETH_RM II_TXD0, FMC_A24, LCD_R0, EVENTOUT | - |
| - | - | 129 | C7 | A7 | 157 | 183 | D8 | PG14 | I/O | FT_h | - | TRACED1, LPTIM1_ETR, SPI6_MOSI, USART6_TX, QUADSPI_BK2_IO3, ETH_MII_TXD1/ETH_RM II_TXD1, FMC_A25, LCD_B0, EVENTOUT | - |
| - | - | 130 | - | D7 | 158 | 184 | - | VSS | S | - | - | - | - |
| - | - | 131 | - | C7 | 159 | 185 | - | VDD | S | - | - | - | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| - | - | - | - | - | - | 186 | C8 | PK3 | I/O | FT | - | LCD_B4, EVENTOUT | - |
| - | - | - | - | - | - | 187 | B8 | PK4 | I/O | FT | - | LCD_B5, EVENTOUT | - |
| - | - | - | - | - | - | 188 | A8 | PK5 | I/O | FT | - | LCD_B6, EVENTOUT | - |
| - | - | - | - | - | - | 189 | C7 | PK6 | I/O | FT | - | LCD_B7, EVENTOUT | - |
| - | - | - | - | - | - | 190 | D7 | PK7 | I/O | FT | - | LCD_DE, EVENTOUT | - |
| - | - | - | - | H7 | - | - | - | VSS | S | - | - | - | - |
| - | - | 132 | E7 | B7 | 160 | 191 | D6 | PG15 | I/O | FT_h | - | USART6_CTS_NSS, FMC_SDNCAS, DCMI_D13, EVENTOUT | - |
| 89 | A7 | 133 | F7 | A10 | 161 | 192 | C6 | PB3(JTDO /TRACES WO) | I/O | FT | - | JTDO/TRACESWO, TIM2_CH2, HRTIM_FLT4, SPI1_SCK/I2S1_CK, SPI3_SCK/I2S3_CK, SPI6_SCK, SDMMC2_D2, UART7_RX, EVENTOUT | - |
| 90 | A6 | 134 | B6 | A9 | 162 | 193 | B7 | PB4(NJTR ST) | I/O | FT | - | NJTRST, TIM16_BKIN, TIM3_CH1, HRTIM_EEV6, SPI1_MISO/I2S1_SDI, SPI3_MISO/I2S3_SDI, SPI2_NSS/I2S2_WS, SPI6_MISO, SDMMC2_D3, UART7_TX, EVENTOUT | - |
| 91 | C5 | 135 | C6 | A6 | 163 | 194 | A5 | PB5 | I/O | FT | - | TIM17_BKIN, TIM3_CH2, HRTIM_EEV7, I2C1_SMBA, SPI1_MOSI/I2S1_SDO, I2C4_SMBA, SPI3_MOSI/I2S3_SDO, SPI6_MOSI, CAN2_RX, OTG_HS_ULPI_D7, ETH_PPS_OUT, FMC_SDCKE1, DCMI_D10, UART5_RX, EVENTOUT | - |
| - | - | - | - | H8 | - | - | - | VSS | S | - | - | - | - |

Table 8. STM32H743xl pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|---|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 92 | B5 | 136 | A5 | B6 | 164 | 195 | B5 | PB6 | I/O | FT_f | - | TIM16_CH1N, TIM4_CH1, HRTIM_EEV8, I2C1_SCL, HDMI_CEC, I2C4_SCL, USART1_TX, LPUART1_TX, CAN2_TX, QUADSPI_BK1_NCS, DFSDM_DATIN5, FMC_SDNE1, DCM1_D5, UART5_TX, EVENTOUT | - |
| 93 | A5 | 137 | D6 | B5 | 165 | 196 | C5 | PB7 | I/O | FT_fa | - | TIM17_CH1N, TIM4_CH2, HRTIM_EEV9, I2C1_SDA, I2C4_SDA, USART1_RX, LPUART1_RX, CAN2_TXFD, DFSDM_CKIN5, FMC_NL, DCM1_VSYNC, EVENTOUT | PVD_IN |
| 94 | D5 | 138 | E6 | D6 | 166 | 197 | E8 | BOOT0 | I | B | - | - | VPP |
| 95 | B4 | 139 | B5 | A5 | 167 | 198 | D5 | PB8 | I/O | FT_fh | - | TIM16_CH1, TIM4_CH3, DFSDM_CKIN7, I2C1_SCL, I2C4_SCL, SDMMC1_CKIN, UART4_RX, CAN1_RX, SDMMC2_D4, ETH_MII_TXD3, SDMMC1_D4, DCM1_D6, LCD_B6, EVENTOUT | - |
| 96 | A4 | 140 | C5 | B4 | 168 | 199 | D4 | PB9 | I/O | FT_fh | - | TIM17_CH1, TIM4_CH4, DFSDM_DATIN7, I2C1_SDA, SPI2_NSS/I2S2_WS, I2C4_SDA, SDMMC1_CDIN, UART4_TX, CAN1_TX, SDMMC2_D5, I2C4_SMBA, SDMMC1_D5, DCM1_D7, LCD_B7, EVENTOUT | - |

Table 8. STM32H743xI pin/ball definition (continued)

| Pin/ball name | | | | | | | | Pin name (function after reset) | Pin type | I/O structure | Notes | Alternate functions | Additional functions |
|---------------|----------|---------|----------|-------------|---------|---------|--------------|--|----------|---------------|-------|--|-------------------------|
| LQFP100 | TFBGA100 | LQFP144 | UFBGA169 | UFBGA176+25 | LQFP176 | LQFP208 | TFBGA240 +25 | | | | | | |
| 97 | D4 | 141 | D5 | A4 | 169 | 200 | C4 | PE0 | I/O | FT_h | - | LPTIM1_ETR, TIM4_ETR, HRTIM_SCIN, LPTIM2_ETR, UART8_RX, CAN1_RXFD, SAI2_MCK_A, FMC_NBL0, DCMI_D2, EVENTOUT | - |
| 98 | C4 | 142 | D4 | A3 | 170 | 201 | B4 | PE1 | I/O | FT_h | - | LPTIM1_IN2, HRTIM_SCOUT, UART8_TX, CAN1_TXFD, FMC_NBL1, DCMI_D3, EVENTOUT | - |
| - | - | - | - | - | - | - | A7 | VCAP3 | S | - | - | - | - |
| 99 | - | - | - | D5 | - | 202 | - | VSS | S | - | - | - | - |
| - | F7 | 143 | C4 | C6 | 171 | 203 | E7 | PDR_ON | S | - | - | - | - |
| - | F4 | - | B4 | - | - | - | A6 | VDDLDO3 | S | - | - | - | - |
| 100 | - | 144 | - | C5 | 172 | 204 | - | VDD | S | - | - | - | - |
| - | - | - | - | D4 | 173 | 205 | A4 | PI4 | I/O | FT_h | - | TIM8_BKIN, SAI2_MCK_A, TIM8_BKIN_COMP12, FMC_NBL2, DCMI_D5, LCD_B4, EVENTOUT | - |
| - | - | - | - | C4 | 174 | 206 | A3 | PI5 | I/O | FT_h | - | TIM8_CH1, SAI2_SCK_A, FMC_NBL3, DCMI_VSYNC, LCD_B5, EVENTOUT | - |
| - | - | - | A4 | C3 | 175 | 207 | A2 | PI6 | I/O | FT_h | - | TIM8_CH2, SAI2_SD_A, FMC_D28, DCMI_D6, LCD_B6, EVENTOUT | - |
| - | - | - | E2 | C2 | 176 | 208 | B3 | PI7 | I/O | FT_h | - | TIM8_CH3, SAI2_FS_A, FMC_D29, DCMI_D7, LCD_B7, EVENTOUT | - |
| - | - | - | - | H9 | - | - | - | VSS | S | - | - | - | - |
| - | - | - | - | K9 | - | - | - | VSS | S | - | - | - | - |
| - | - | - | - | K10 | - | - | - | VSS | S | - | - | - | - |

1. This ball should remain floating.

2. This ball should not remain floating. It can be connected to VSS or VDD. It is reserved for future use.