

IO_MUX

| Pin No. | Power Supply Pin | Analog Pin | Digital Pin | Power Domain | Analog Function1 | Analog Function2 | Analog Function3 | RTC Function1 | RTC Function2 | Function1 | Type | Function2 | Type | Function3 | Type | Function4 | Type | Function5 | Type | Function6 | Type | Drive Strength (2'd2: 20 mA) | At Reset | After Reset |
|--------------|------------------|-------------|-------------|------------------------|------------------|------------------|------------------|---------------|---------------|-----------|--------|-----------|-------|-----------|-------|------------|--------|-----------|--------|------------------|------|------------------------------|-----------------|-----------------|
| 1 | VDDA | | | VDDA supply in | | | | | | | | | | | | | | | | | | | | |
| 2 | | LNA_IN | | VDD3P3 | | | | | | | | | | | | | | | | | | | | |
| 3 | VDD3P3 | | | VDD3P3 supply in | | | | | | | | | | | | | | | | | | | | |
| 4 | VDD3P3 | | | VDD3P3 supply in | | | | | | | | | | | | | | | | | | | | |
| 5 | | SENSOR_VP | | VDD3P3_RTC | ADC_H | ADC1_CH0 | | RTC_GPIO0 | | GPIO36 | I | | | GPIO36 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 6 | | SENSOR_CAPP | | VDD3P3_RTC | ADC_H | ADC1_CH1 | | RTC_GPIO1 | | GPIO37 | I | | | GPIO37 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 7 | | SENSOR_CAPN | | VDD3P3_RTC | ADC_H | ADC1_CH2 | | RTC_GPIO2 | | GPIO38 | I | | | GPIO38 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 8 | | SENSOR_VN | | VDD3P3_RTC | ADC_H | ADC1_CH3 | | RTC_GPIO3 | | GPIO39 | I | | | GPIO39 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 9 | | CHIP_PU | | VDD3P3_RTC | | | | | | | | | | | | | | | | | | | | |
| 10 | | VDET_1 | | VDD3P3_RTC | | ADC1_CH6 | | RTC_GPIO4 | | GPIO34 | I | | | GPIO34 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 11 | | VDET_2 | | VDD3P3_RTC | | ADC1_CH7 | | RTC_GPIO5 | | GPIO35 | I | | | GPIO35 | I | | | | | | | | oe=0, ie=0 | oe=0, ie=0 |
| 12 | | 32K_XP | | VDD3P3_RTC | XTAL_32K_P | ADC1_CH4 | TOUCH9 | RTC_GPIO9 | | GPIO32 | I/O/T | | | GPIO32 | I/O/T | | | | | | | 2'd2 | oe=0, ie=0 | oe=0, ie=0 |
| 13 | | 32K_XN | | VDD3P3_RTC | XTAL_32K_N | ADC1_CH5 | TOUCH8 | RTC_GPIO8 | | GPIO33 | I/O/T | | | GPIO33 | I/O/T | | | | | | | 2'd2 | oe=0, ie=0 | oe=0, ie=0 |
| 14 | | | GPIO25 | VDD3P3_RTC | DAC_1 | ADC2_CH8 | | RTC_GPIO6 | | GPIO25 | I/O/T | | | GPIO25 | I/O/T | | | | | EMAC_RXD0 | I | 2'd2 | oe=0, ie=0 | oe=0, ie=0 |
| 15 | | | GPIO26 | VDD3P3_RTC | DAC_2 | ADC2_CH9 | | RTC_GPIO7 | | GPIO26 | I/O/T | | | GPIO26 | I/O/T | | | | | EMAC_RXD1 | I | 2'd2 | oe=0, ie=0 | oe=0, ie=0 |
| 16 | | | GPIO27 | VDD3P3_RTC | | ADC2_CH7 | TOUCH7 | RTC_GPIO17 | | GPIO27 | I/O/T | | | GPIO27 | I/O/T | | | | | EMAC_RX_DV | I | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 17 | | | MTMS | VDD3P3_RTC | | ADC2_CH6 | TOUCH6 | RTC_GPIO16 | | MTMS | I0 | HSPICLK | I/O/T | GPIO14 | I/O/T | HS2_CLK | O | SD_CLK | I0 | EMAC_TXD2 | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 18 | | | MTDI | VDD3P3_RTC | | ADC2_CH5 | TOUCH5 | RTC_GPIO15 | | MTDI | I1 | HSPIQ | I/O/T | GPIO12 | I/O/T | HS2_DATA2 | I1/O/T | SD_DATA2 | I1/O/T | EMAC_TXD3 | O | 2'd2 | oe=0, ie=1, wpd | oe=0, ie=1, wpd |
| 19 | VDD3P3_RTC | | | VDD3P3_RTC supply in | | | | | | | | | | | | | | | | | | | | |
| 20 | | | MTCK | VDD3P3_RTC | | ADC2_CH4 | TOUCH4 | RTC_GPIO14 | | MTCK | I1 | HSPID | I/O/T | GPIO13 | I/O/T | HS2_DATA3 | I1/O/T | SD_DATA3 | I1/O/T | EMAC_RX_ER | I | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 21 | | | MTDO | VDD3P3_RTC | | ADC2_CH3 | TOUCH3 | RTC_GPIO13 | I2C_SDA | MTDO | O/T | HSPICCS0 | I/O/T | GPIO15 | I/O/T | HS2_CMD | I1/O/T | SD_CMD | I1/O/T | EMAC_RXD3 | I | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 22 | | | GPIO2 | VDD3P3_RTC | | ADC2_CH2 | TOUCH2 | RTC_GPIO12 | I2C_SCL | GPIO2 | I/O/T | HSPWP | I/O/T | GPIO2 | I/O/T | HS2_DATA0 | I1/O/T | SD_DATA0 | I1/O/T | | | 2'd2 | oe=0, ie=1, wpd | oe=0, ie=1, wpd |
| 23 | | | GPIO0 | VDD3P3_RTC | | ADC2_CH1 | TOUCH1 | RTC_GPIO11 | I2C_SDA | GPIO0 | I/O/T | CLK_OUT1 | O | GPIO0 | I/O/T | | | | | EMAC_TX_CLK | I | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 24 | | | GPIO4 | VDD3P3_RTC | | ADC2_CH0 | TOUCH0 | RTC_GPIO10 | I2C_SCL | GPIO4 | I/O/T | HSPHID | I/O/T | GPIO4 | I/O/T | HS2_DATA1 | I1/O/T | SD_DATA1 | I1/O/T | EMAC_TX_ER | O | 2'd2 | oe=0, ie=1, wpd | oe=0, ie=1, wpd |
| 25 | | | GPIO16 | VDD_SDIO | | | | | | GPIO16 | I/O/T | | | GPIO16 | I/O/T | HS1_DATA4 | I1/O/T | U2RXD | I1 | EMAC_CLK_OUT | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 26 | VDD_SDIO | | | VDD_SDIO supply out/in | | | | | | | | | | | | | | | | | | | | |
| 27 | | | GPIO17 | VDD_SDIO | | | | | | GPIO17 | I/O/T | | | GPIO17 | I/O/T | HS1_DATA5 | I1/O/T | U2TXD | O | EMAC_CLK_OUT_180 | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 28 | | | SD_DATA_2 | VDD_SDIO | | | | | | SD_DATA2 | I1/O/T | SPIHD | I/O/T | GPIO9 | I/O/T | HS1_DATA2 | I1/O/T | U1RXD | I1 | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 29 | | | SD_DATA_3 | VDD_SDIO | | | | | | SD_DATA3 | I0/O/T | SPIWP | I/O/T | GPIO10 | I/O/T | HS1_DATA3 | I1/O/T | U1TXD | O | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 30 | | | SD_CMD | VDD_SDIO | | | | | | SD_CMD | I1/O/T | SPICCS0 | I/O/T | GPIO11 | I/O/T | HS1_CMD | I1/O/T | U1RTS | O | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 31 | | | SD_CLK | VDD_SDIO | | | | | | SD_CLK | I0 | SPICLK | I/O/T | GPIO6 | I/O/T | HS1_CLK | O | U1CTS | I1 | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 32 | | | SD_DATA_0 | VDD_SDIO | | | | | | SD_DATA0 | I1/O/T | SPIQ | I/O/T | GPIO7 | I/O/T | HS1_DATA0 | I1/O/T | U2RTS | O | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 33 | | | SD_DATA_1 | VDD_SDIO | | | | | | SD_DATA1 | I1/O/T | SPID | I/O/T | GPIO8 | I/O/T | HS1_DATA1 | I1/O/T | U2CTS | I1 | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 34 | | | GPIO5 | VDD3P3_CPU | | | | | | GPIO5 | I/O/T | VSPICCS0 | I/O/T | GPIO5 | I/O/T | HS1_DATA6 | I1/O/T | | | EMAC_RX_CLK | I | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 35 | | | GPIO18 | VDD3P3_CPU | | | | | | GPIO18 | I/O/T | VSPICLK | I/O/T | GPIO18 | I/O/T | HS1_DATA7 | I1/O/T | | | | | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 36 | | | GPIO23 | VDD3P3_CPU | | | | | | GPIO23 | I/O/T | VSPID | I/O/T | GPIO23 | I/O/T | HS1_STROBE | I0 | | | | | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 37 | VDD3P3_CPU | | | VDD3P3_CPU supply in | | | | | | | | | | | | | | | | | | | | |
| 38 | | | GPIO19 | VDD3P3_CPU | | | | | | GPIO19 | I/O/T | VSPIQ | I/O/T | GPIO19 | I/O/T | U0CTS | I1 | | | EMAC_TXD0 | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 39 | | | GPIO22 | VDD3P3_CPU | | | | | | GPIO22 | I/O/T | VSPWP | I/O/T | GPIO22 | I/O/T | U0RTS | O | | | EMAC_TXD1 | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 40 | | | U0RXD | VDD3P3_CPU | | | | | | U0RXD | I1 | CLK_OUT2 | O | GPIO3 | I/O/T | | | | | | | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 41 | | | U0TXD | VDD3P3_CPU | | | | | | U0TXD | O | CLK_OUT3 | O | GPIO1 | I/O/T | | | | | EMAC_RXD2 | I | 2'd2 | oe=0, ie=1, wpu | oe=0, ie=1, wpu |
| 42 | | | GPIO21 | VDD3P3_CPU | | | | | | GPIO21 | I/O/T | VSPHID | I/O/T | GPIO21 | I/O/T | | | | | EMAC_TX_EN | O | 2'd2 | oe=0, ie=0 | oe=0, ie=1 |
| 43 | VDDA | | | VDDA supply in | | | | | | | | | | | | | | | | | | | | |
| 44 | | XTAL_N | | VDDA | | | | | | | | | | | | | | | | | | | | |
| 45 | | XTAL_P | | VDDA | | | | | | | | | | | | | | | | | | | | |
| 46 | VDDA | | | VDDA supply in | | | | | | | | | | | | | | | | | | | | |
| 47 | | CAP2 | | VDDA | | | | | | | | | | | | | | | | | | | | |
| 48 | | CAP1 | | VDDA | | | | | | | | | | | | | | | | | | | | |
| Total Number | 8 | 14 | 26 | | | | | | | | | | | | | | | | | | | | | |

Notes:

- wpu: weak pull-up;
- wpd: weak pull-down;
- ie: input enable;
- oe: output enable;
- Please see Table: Notes on ESP32 Pin Lists for more information. (请参考表：管脚清单说明。)