Name	No.	Type	Power Domain	Function			
GPIO3	8	I/O/T	VDD3P3_RTC	**GPIO3**,	ADC1_CH3		
MTMS	9	I/O/T	VDD3P3_RTC	GPIO4,	ADC1_CH4	FSPIHD	**MTMS**
MTDI	10	I/O/T	VDD3P3_RTC	GPIO5,	ADC2_CH0	FSPIWP	**MTDI**
VDD3P3_RTC	11	P_D	—	Input power supply for RTC			
MTCK	12	I/O/T	VDD3P3_CPU	GPIO6,		FSPICLK	**MTCK**
MTDO	13	I/O/T	VDD3P3_CPU	GPIO7,		FSPID	**MTDO**
GPIO8	14	I/O/T	VDD3P3_CPU	**GPIO8**			
GPIO9	15	I/O/T	VDD3P3_CPU	**GPIO9**			
GPIO10	16	I/O/T	VDD3P3_CPU	**GPIO10**,		FSPICS0	
VDD3P3_CPU	17	P_D	—	Input power supply for CPU IO			
VDD_SPI 7	18	I/O/T/P_D	VDD3P3_CPU	**GPIO11**,	**output power supply for flash[6]**		
SPIHD	19	I/O/T	VDD3P3_CPU	**GPIO12**,	SPIHD		
SPIWP	20	I/O/T	VDD3P3_CPU	**GPIO13**,	SPIWP		
SPICS0	21	I/O/T	VDD3P3_CPU	GPIO14,	**SPICS0**		
SPICLK	22	I/O/T	VDD3P3_CPU	GPIO15,	**SPICLK**		
SPID	23	I/O/T	VDD3P3_CPU	GPIO16,	**SPID**		
SPIQ	24	I/O/T	VDD3P3_CPU	GPIO17,	**SPIQ**		
GPIO18	25	I/O/T	VDD3P3_CPU	GPIO18,	**USB_D-**		
GPIO19	26	I/O/T	VDD3P3_CPU	GPIO19,	**USB_D+**		
U0RXD	27	I/O/T	VDD3P3_CPU	GPIO20,	**U0RXD**		
U0TXD	28	I/O/T	VDD3P3_CPU	GPIO21,	**U0TXD**		
XTAL_N	29	—	—	External crystal output			
XTAL_P	30	—	—	External crystal input			
VDDA	31	P_A	—	Analog power supply			
VDDA	32	P_A	—	Analog power supply			
GND	33	G	—	Ground			

[1] P_A: analog power supply; P_D: power supply for RTC IO; I: input; O: output; T: high impedance.

[2] Pin functions in bold font are the default pin functions in SPI boot mode.

[3] Ports of embedded flash correspond to pins of ESP32-C3FN4 and ESP32-C3FH4 as follows:

- CS# = SPICS0
- IO0/DI = SPID
- IO1/DO = SPIQ
- CLK = SPICLK
- IO2/WP# = SPIWP
- IO3/HOLD# = SPIHD

These pins are not recommended for other uses.

[4] For the data port connection between ESP32-C3 and external flash please refer to Section 3.4.2 *Serial Peripheral Interface (SPI)*.

[5] The pin function in this table refers only to some fixed settings and do not cover all cases for signals that can be input and output through the GPIO matrix. For more information on the GPIO matrix, please refer to Chapter IO MUX and GPIO Matrix (GPIO, IO_MUX) in *ESP32-C3 Technical Reference Manual*.

[6] By default VDD_SPI is the power supply pin for embedded flash or external flash. It can only be used as GPIO11 only when the chip is connected to an external flash, and this flash is powered by an external power supply.

[7] For ESP32-C3FH4AZ, pins within the frame (namely pin 19 ~ pin 24) are not bonded, and are labelled as "not connected".