



Pin	Name	Alternate Functions	Notes
1	GND		(Pin 1 is in the corner close to the crystal and away from antenna)
2	NC		
3	UTXD	SPICS1, GPIO1, CLK_RTC	Typically used as serial uart0 TX
4	URXD	I2SO_DATA, GPIO3, CLK_XTAL	Typically used as serial uart0 RX
5	GPIO16	XPD_DCDC, RTC_GPIO0, EXT_WAKEUP, DEEPSLEEP	Connected to XPD_DCDC ESP pin, can also be connected to ESP EXT_RSTB (reset) pin by closing jumper near pin 8; Reset pin is active low and has an internal weak pull-up; Connecting jumper is required to wake-up ESP from deep-sleep: RTC produces pulse on XPD_DCDC pin that needs to be fed into EXT_RSTB pin
6	CH_PD		Power-down: low input powers down chip, high powers up; tie high for normal operation or module will not function
7	ANT		Wifi Antenna, do not connect
8	VCC		3.3V input (pin 8 is between antenna and ESP chip)
9	GPIO14	MTMS, I2SI_WS, SP_CLK	
10	GPIO12	MTDI, I2SI_DATA, MISO	
11	GPIO13	MTCK,	

Pin	Name	Alternate Functions	Notes
		I2SI_BCK, MOSI	
12	GPIO15	MTDO, I2SO_BCK, SP_CS	At boot: must be low to enter flash or normal boot (high enters special boot modes)
13	GPIO2	I2SO_WS, U1TXD, U0TXD	At boot: must be high to enter flash or normal boot (low enters special boot modes); Typically is used as uart1 TX for debug logging
14	GPIO0	SPICS2, CLK_OUT	At boot: low causes bootloader to enter flash upload mode; high causes normal boot