

# ESP-12F

Operating Voltage 2.5V-3.6V  
 IO MAX output current is 12mA  
 Power consumption 20µA to 170mA depending status (deep-sleep to emitting)  
 Power off 0.5µA  
 RTC clock is still running in deep-sleep mode  
 4MB of SPI flash

Boot Mode	GPIO 0	GPIO 2	GPIO 15
UART (Flashing)	low	high	low
Flash Boot (Run program)	high	high	low

## ESP-12F pin numbers

## ESP-12F pin names

## Arduino Pins

## ESP8266EX Pin name & function 1

## ESP8266EX IO

## ESP8266EX General SPI \*

## ESP8266EX HSPI

## ESP8266EX I2C software \*\* assignment pins only

## ESP8266EX I2S

## ESP8266EX UART0 74880bds default

## ESP8266EX UART1

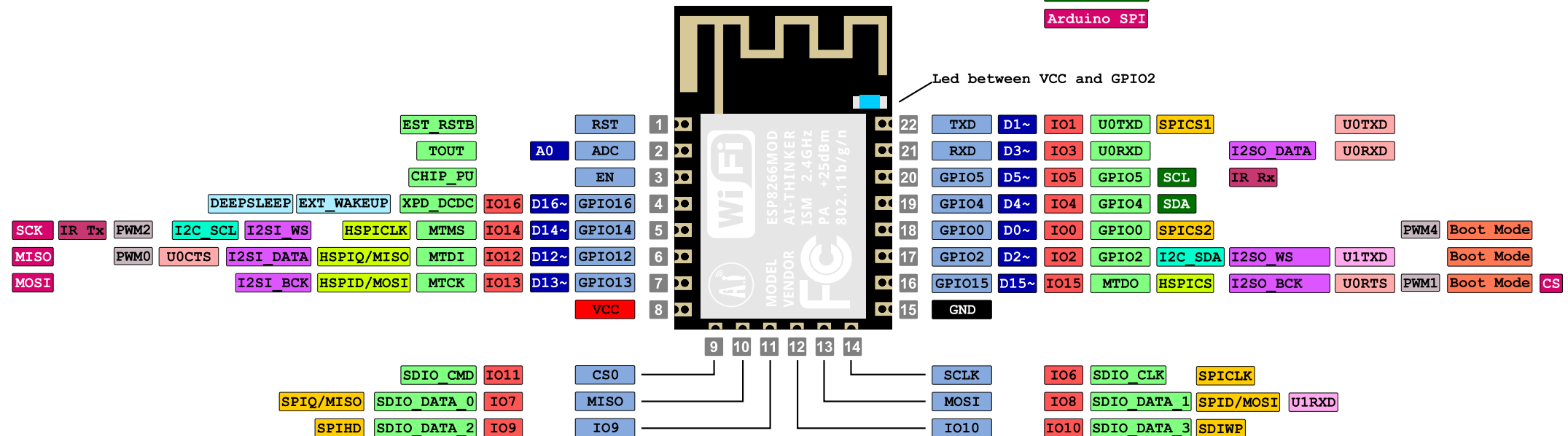
## ESP8266EX PWM

## ESP8266EX IR

## ESP8266EX Power functions

## Arduino I2C \*\*\* I2C is software, any pin can be selected

## Arduino SPI



\* SPI interface is used for SPI flash program memory  
 overlap mode can be used to use both SPI and HSPI on same IO lines  
 read chapter 5 in ESP8266 Technical reference