

ESP-12F

Operating Voltage 2.5V-3.6V  
IO MAX output current is 12mA  
Power consumption 20uA to 170mA depending status (deep-sleep to emitting)  
Power off 0.5uA  
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

ESP8266X pin name & function

ESP8266X I2C

ESP8266X General SPI

ESP8266X HSPI

ESP8266X I2C software \*\* assignment pins only

ESP8266X I2C

ESP8266X UART0 74880bds default

ESP8266X UART1

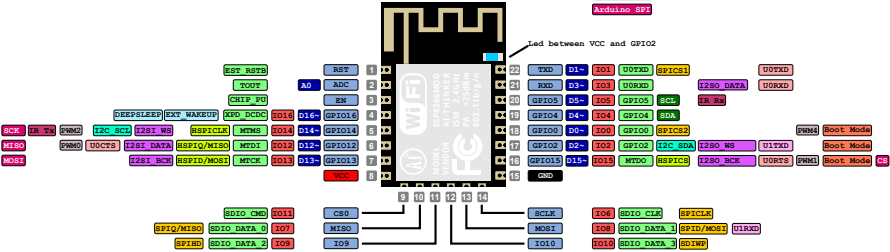
ESP8266EX PPM

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