

LCX801 UART WIFI Module

(2.4GHz/150Mbps 802.11 b/g/n)



General Information

LCX801 consists of MT7681 chip, power amplifier, low noise amplifier through 1T1R technology, and operates in 2.4 GHz band, adopts IEEE802.11b/g/n. It is a module with more effective power management, reliable WIFI connect is assured while as less as technology is used. LCX801 is a high performance, low cost, low power consumption, simple wifi module which assures speed of transmission and information reliability. Compliant TCP/IP, UDP protocol.

Applications

- Home Automation
- Controller
- RC Switch
- Wireless Sensor
- LED Control

Features:

2.4GHz, support 802.11b/g/n Client and AP

Control function of internal MCU

Smart configuration of WIFI connection

UART and GPIO interface

WEP, WPA2

RF On/Off, power management in sleep mode

PCB antenna or External antenna is supported

Diagram of External Antenna

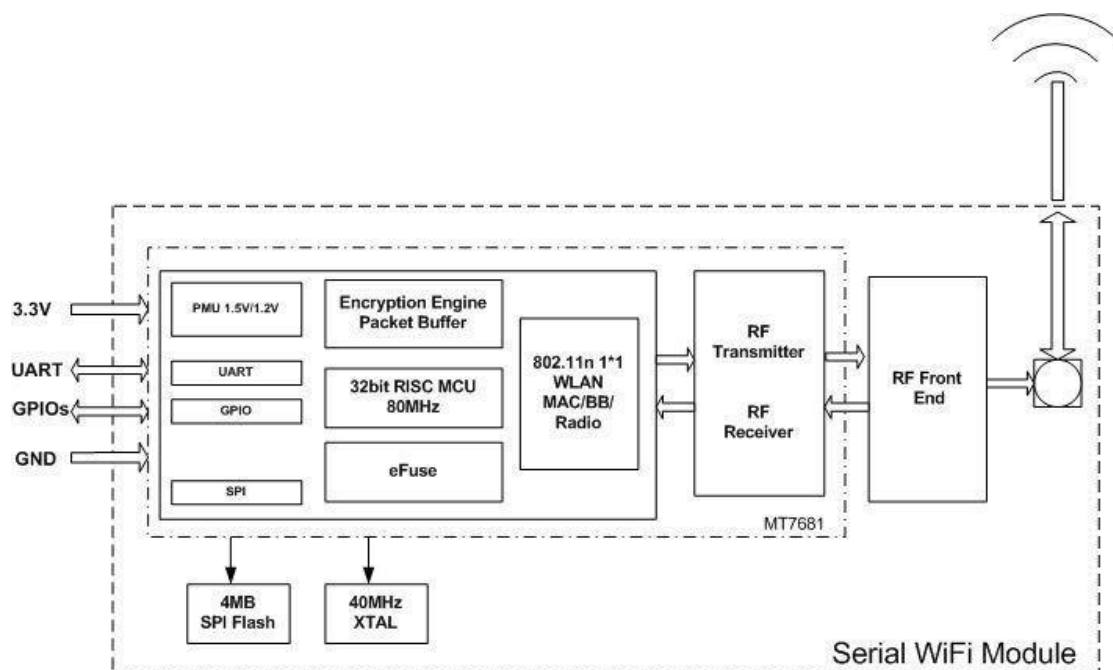
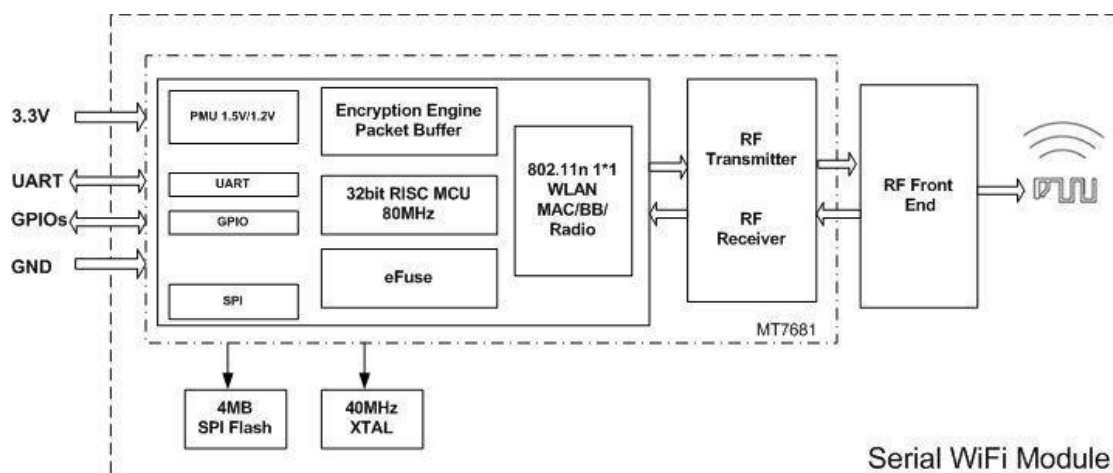


Diagram of PCB Antenna

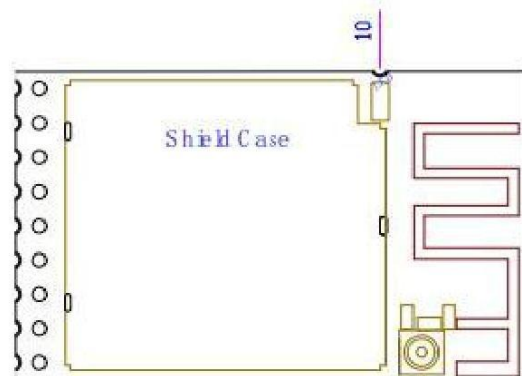
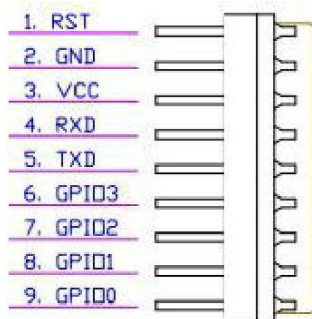


Features	
WiFi Protocol	IEEE 802.11b/g/n
Interface	1 UART: 115200bps
I/O	1 GPIO (configure work mode)
LED	LED flash, WiFi not connected; LED stays on, WiFi connected.

Add-on Flash	8Mbit
WiFi work mode	Client / Soft AP
Encrypted Form	WPA2-PSK, WEP
Frequency	ISM band, 2412~2483.5MHz.
Transmit Power	802.11b (CCK) 11Mbps: 19+/-1dBm
	802.11g (OFDM) 54Mbps: 16+/-1dBm
	802.11n (HT20@MCS7), 15+/-1dBm
	802.11n (HT40@MCS15), 15+/-1dBm
Receive Sensitivity	802.11b: -86+/-1dBm;
	802.11g: -72+/-1dBm,
	802.11n (HT20), -68+/-1dBm;
	802.11n (HT40), -65+/-1dBm

Supply Power VCC	3.3 ±0.05 V DC	
Supply Current	1.1mA	Sleep mode
	6mA	RX Listening mode
	15mA	RX Power down mode, DTIM=1
	70mA	RX 工作、HT40、MCS7
	220mA	802.11g (OFDM) 54Mbps
	210mA	802.11n (HT20@MCS7)
	210mA	802.11n (HT40@MCS7)
	245mA	802.11b (CCK) 11Mbps
Operate Temperature	-10°C to +60°C	
Storage temperature	-20°C to +80°C	
Operate Humidity	20% to 80%	
Dimensions	30*18mm	
Weight	2.4g	

Pin Assignment



Pin Description

NO.	Name	Function	Description
1	RST	Reset	low level reset input
2	GND	Ground	GND
3	VCC	Power Ground	3.3V
4	RXD	Data input	UART_RXD
5	TXD	Data output	UART_TXD
6	GPI03	GPI03	GPI03
7	GPI02	GPI02	GPI02
8	GPI01	GPI01	GPI01
9	GPI00	GPI00	GPI00
10	NC	NC	NOT CONNECT

Note: 1、GPIO 0-3 must pull up or pull down, DO NOT float.
2、LCX801 support UART/GPIO interface only
3、GPI01 for AT command mode switch, low level is AT command mode, high is data mode