DJ-WF8266 V1.0 WIFI Module Specifications

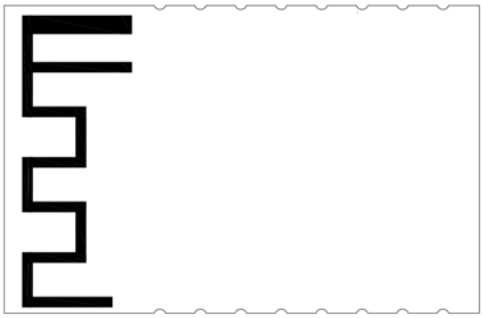

Figure 1 Top Side, Top View

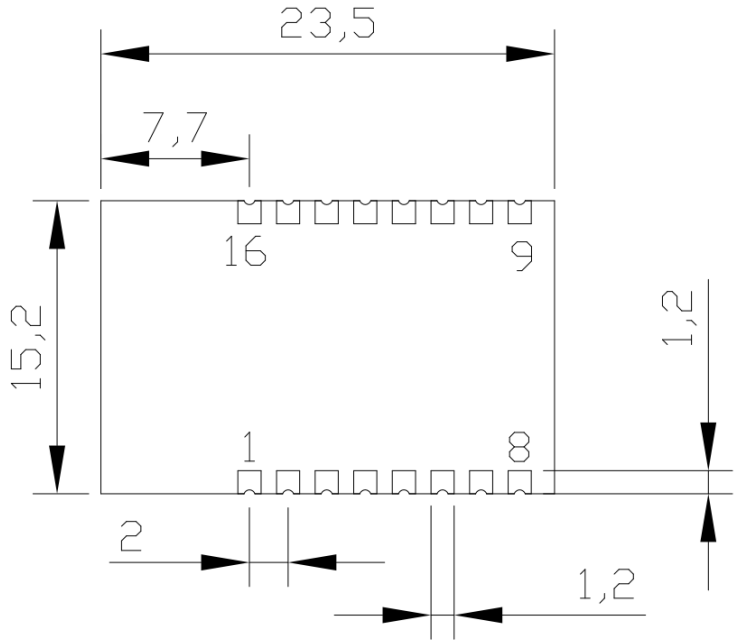

Figure 2 Bottom Side, Top View

Unit: mm

Features：

a：802.11 b/g/n protocol

b：WIFI @2.4 GHz, support WPA/WPA2 PSK

c：Integrated 10 bit analog ADC

d：Integrated TCP/IP protocol stack

e：Integrated TR switch, balun, LNA, power amplifier and matching network

f：Integrated PLL, regulators and power management units

g：+18.5dBm output power in 802.11b mode

h：Supports antenna diversity

i：Power down leakage current of < 10uA

j：Integrated low power 32-bit MCU

k：Wake up and transmit packets in < 2ms

l：Standby power consumption of < 1.0mW (DTIM3)

m：Working temperature -40 ~ 125℃

n：4Mbyte SPI Flash

Module Parameter：

WIFI Parameter	WiFi Protocles	802.11 b/g/n
	Frequency Range	2.4G-2.5G(2400M-2483.5M)
	Tx Power	802.11 b: 18.5dBm 802.11 g: 16dBm 802.11 n: 13dBm
	Rx Sensitivity	802.11 b: (11Mbps) -91 dBm 802.11 g: (54Mbps) -75 dBm 802.11 n: (MCS7) -72 dBm
Hardware Parameter	Peripheral Bus	UART、PWM、IIC、GPIO
	Operating Voltage	3.0~3.6V
	Operating Current	MAX 230mA
	Operating Temperature Range	-40°~ 125°
Software Parameter	WIFI Mode	station/softAP/SoftAP+station
	Network Protocol	IPv4， TCP/UDP/HTTP/FTP
	Security	WPA/WPA2
	Encryption	WEP/TKIP/AES
	Firmware Upgrade	Local UART Download/ OTA via network

Definition of Pins：

Pin	Name	Function
1	TOUT	ADC Pin
2	CHIP_EN	Chip Enable. High: On, chip works properly; Low: Off, small current
3	XPD	Deep-Sleep Wakeup；GPIO16
4	MTMS	GPIO14; HSPI_CLK
5	MTDI	GPIO12; HSPI_MISO
6	MTCK	GPIO13; HSPI_MOSI; UART0_CTS
7	MTDO	GPIO15; HSPI_CS; UART0_RTS
8	GPIO2	UART Tx during flash programming; GPIO2
9	GPIO0	GPIO0; SPI_CS2
10	GPIO4	GPIO4
11	VCC3V3	Power 3.0V ~ 3.6V
12	GND	Power Ground
13	GPIO5	GPIO5
14	U0RXD	UART Rx; GPIO3
15	U0TXD	UART Tx; GPIO1; SPI_CS1
16	RSTB	External reset signal (Low voltage level: Active)

Note:

Boot Mode	GPIO15	GPIO0	GPIO2
UART download	Pull-down or floating	Pull-down	Pull-up or floating
Flash Boot	Pull-down or floatin	Pull-up or floating	Pull-up or floating

Applications:

This module is adapted to master control as well as data unvarnished transmission and simple control, for example, socket, LED, sensors etc. UART communication protocol can be customized according to the manufacturers demands.

Notice:

You can add π-type filter circuit to do the filtering process. Additionally, you can use a large capacitor with 47uF to meet the current the chip emit needs instantly. Module should be placed preferably away from interference sources, such as: transformers, inductors, clock lines, crystal and so on.

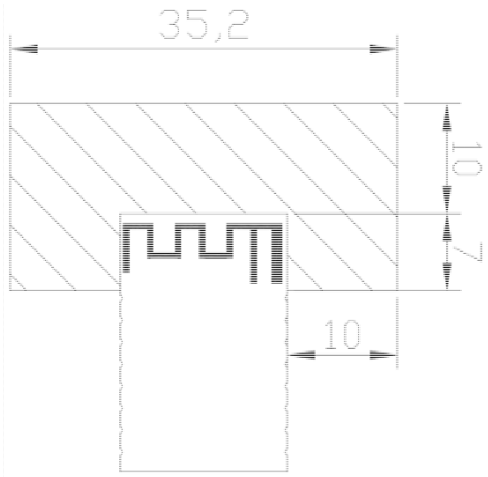

Figure 3 Clearance between the module and interference sources
Unit: mm

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.

FCC Radiation Exposure Statement
This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.

To satisfy FCC exterior labeling requirements, the following text must be placed on the exterior of the end product.
“Contains Transmitter module FCC ID: 2AILPDJ-WF8266”