

General Description

IRF303JU, Dual band triple mode Wireless LAN module, is compliant with 802.11a/b/g standard.

IRF303JU is designed for AV transmission, and it's high performance enable 54Mbps high-bit data rate communication.

Feature

- Support QoS
- Hardware-Based MAC Access Protocol
- Low packet error rate



Specifications

- Host Interface : Mini PCI Standard 1.0
- Standard : IEEE802.11a/b/g compliant
- Radio Signal Type : Direct Sequence Spread Spectrum (DSSS)
Orthogonal Frequency Division Multiplexing (OFDM)
- Wireless Data Rate : 802.11b=1/2/5.5/11Mbps
802.11g/a=6/9/12/18/24/36/48/54Mbps
- Frequency Band : 2400-2483.5MHz / 5150-5350MHz
- Channel Support : ch1-ch11 / ch36-ch64ch
- Data Modulation Techniques : BPSK (1Mbps), QPSK (2Mbps), CCK (5.5/11Mbps)
OFDM (6/9/12/18/24/36/48/54Mbps)
- Operating Range : 660ft (Outdoor, Line of sight)
100ft (Indoor)
- Media Access Protocol : Infrastructure
- Security : WEP (Key Length 40/128/256bit) / AES / WPA (PSK)
- Power Voltage : 3.3V (+/- 5%)
- Dimensions : 90.0 x 32.0 x 4.6mm
- Weight : Approx.12g
- Operating Temperature Range : -0C to +50C

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NOTIFICATION

This equipment 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 with 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 WARNING

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

For customers in the United States

This product contains mercury. Disposal of this product may be regulated if sold in the United States.

For disposal or recycling information, please contact your local authorities or the Electronics Industries Alliance (<http://eia.org>).

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

*This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

*When using the unit with 802.11a (5.15-5.25GHz), use in doors.

FCC Radiation Exposure Statement:

This equipment complies with FCC radiation exposure limits set forth for uncontrolled equipment.

This equipment should be installed and operated with minimum distance at least 20cm between the radiator and persons body (excluding extremities: hands, wrist, feet and legs) and must not be co-located or operated with any other transmitter.

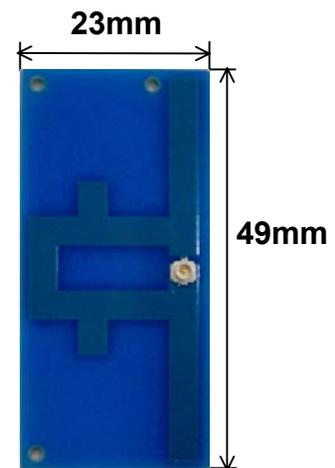
Electrical Characteristics

Vdd=3.3V, Ta=25C

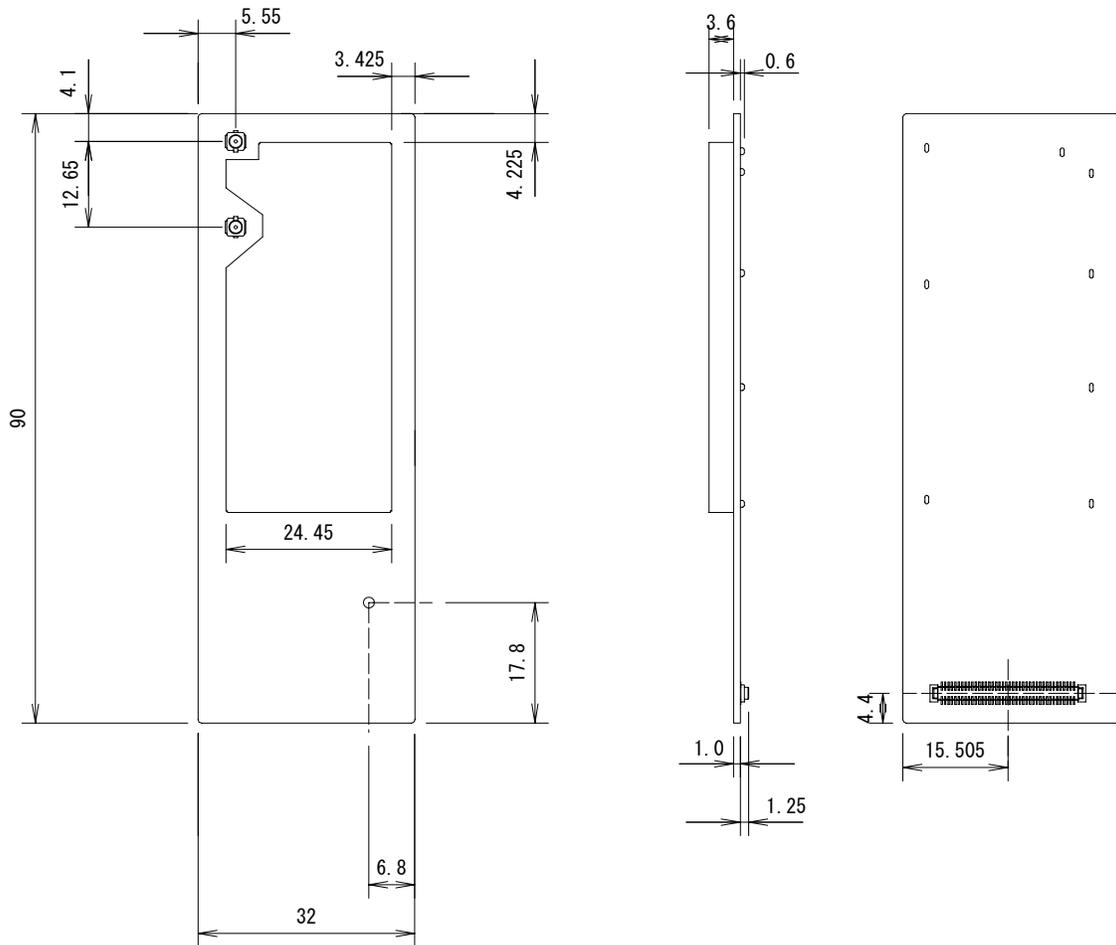
Parameter		Symbol	Min	Typ	Max	Units
Output power	2.4GHz (54Mbps)	Pout2	-	23.9	-	dBm
	5GHz (54Mbps)	Pout5	-	12.5	-	dBm
Supply current	Tx	2.4GHz	Iddtx2	650	-	mA
		5GHz	Iddtx5	760	-	mA
	Rx	Iddrx	-	370	400	mA
Center Frequency Tolerance		ftol	-10	0	+10	ppm
Modulation Accuracy (64QAM)	2.4GHz (54Mbps)	EVM2	-	4.3	-	%
	5GHz (54Mbps)	EVM5	-	5.0	-	%
Sensitivity	2.4GHz (54Mbps)	Rx_Sens2	-	-71	-	dBm
	5GHz (54Mbps)	Rx_Sens5	-	-70	-	dBm
Packet Error Rate (-65dBm input)	2.4GHz (54Mbps)	PER2	-	0	-	%
	5GHz (54Mbps)	PER5	-	0	-	%

Antenna

- Model Name : LFANT103
- Type : PCB Antenna
- Gain (Peak) : 2.4GHz_Band : +1.2dBi(Typ)
5GHz_Band : -0.5dBi(Typ)
- Connector Type : U.FL



Dimension



Pin Description

Pin	Signal	Pin	Signal
1	GROUND	2	GROUND
3	INTA#	4	3.3V
5	GROUND	6	GROUND
7	RST#	8	CLK
9	3.3V	10	GROUND
11	GNT#	12	REQ#
13	PME#	14	3.3V
15	GROUND	16	AD[31]
17	AD[30]	18	AD[29]
19	3.3V	20	GROUND
21	AD[28]	22	AD[27]
23	AD[26]	24	AD[25]
25	AD[24]	26	GROUND
27	IDSEL	28	C/BE[3]#
29	GROUND	30	AD[23]
31	AD[22]	32	GROUND
33	AD[20]	34	AD[21]
35	PAR	36	AD[19]
37	AD[18]	38	GROUND
39	AD[16]	40	AD[17]
41	GROUND	42	C/BE[2]#
43	FRAME#	44	IRDY#
45	TRDY#	46	3.3V
47	STOP#	48	CLKRUN#
49	3.3V	50	SERR#
51	DEVSEL#	52	GROUND
53	GROUND	54	PERR#
55	AD[15]	56	C/BE[1]#
57	AD[13]	58	AD[14]
59	AD[11]	60	GROUND
61	GROUND	62	AD[12]
63	AD[09]	64	AD[10]
65	C/BE[0]#	66	GROUND
67	3.3V	68	AD[08]
69	AD[06]	70	AD[07]
71	AD[04]	72	3.3V
73	AD[02]	74	AD[05]
75	AD[00]	76	AD[03]
77	MPCIACT	78	AD[01]
79	GROUND	80	GROUND

BOTTOM VIEW

