



宏奇科技
i-Mobile Technology Corporation Inc.

料件承認書

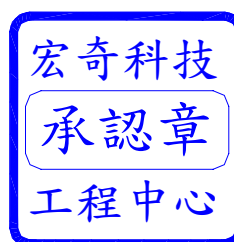
零件料號 C46-LRUKN300R

廠商料號: **LR802UKN3**

零件名稱: Wifi Module

供應廠商: QCOM

審 核: Arven Peng
May.08.2010



發行日期: Apr..08.2010

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APPROVAL SHEET

802.11 b/g/n Wireless USB Module

LR802UKN3

(USB Host Power supported 5V)

Ver. 1A

Date: 10/23/2009

Customer: I-Mobile Technology Corporation

Part Number: _____

Prepared by: Qcom Technology Inc.

Approved by: _____

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Device Overall Description

The LR802UKN3 is designed to provide wireless LAN function on a small form factor with USB interface. The wireless LAN function is based on Ralink RT3070 MAC/BBP/RF controller and high gain power amplifier, fully comply with current draft IEEE 802.11n and IEEE 802.11 b/g standards.

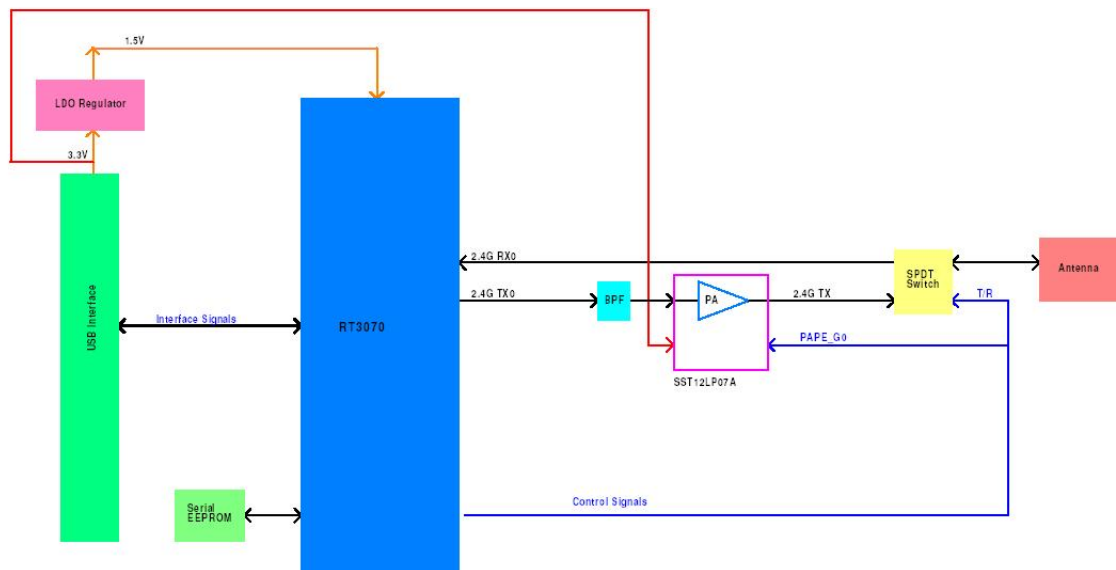
Features

- Ralink RT3070 MAC/BBP/RF Controller
- 1T1R Modes
- 11b: 1,2,5.5,11Mbps
- 11g: 6,9,12,18,24,36,48,54Mbps
- 11n: Legacy and High Throughput Modes, Support 20/40MHz Bandwidth MCS0~7(150Mbps PHY Rate Rate)
- Reverse Direction Data Flow and Frame Aggregation
- WEP 64/128, WPA, WPA2, TKIP, AES
- QoS-WMM, WMM-PS
- WPS, PIN, PBC
- Multiple BSSID Support
- Low Power with Advanced Power Management

Specification Compliance

- 802.11n Draft3.0
- 802.11b/g
- 802.11i
- 802.11e
- 802.11d
- 802.11h
- 802.11j
- USB2.0

Block Diagram



RT3070: Highly integrated MAC/BBP and 2.4GHz RF single chip

Channel Assignment

2.4GHz Channel Support

Channel	Frequency	FCC (US)	IC (CA)	ETSI (EU)	Japan (JP)
1	2412MHz	X	X	X	X
2	2417MHz	X	X	X	X
3	2422MHz	X	X	X	X
4	2427MHz	X	X	X	X
5	2432MHz	X	X	X	X
6	2437MHz	X	X	X	X
7	2442MHz	X	X	X	X
8	2447MHz	X	X	X	X
9	2452MHz	X	X	X	X
10	2457MHz	X	X	X	X
11	2462MHz	X	X	X	X
12	2467MHz			X	X
13	2472MHz			X	X
14	2484MHz				X

KEY:

US = United States, CA = Canada, EU = European Countries (except France and Spain)

JP = Japan

Many countries and region are currently revising the channel assignment.

X = Supported

Security

- Complete Security Features - WEP 64/128, WPA, WPA2, 802.1x, and 802.11i
- Cisco CCS Compliant

Certification

- Cisco CCX

Software & OS support

Operating System	Driver
Windows 2000	Available
Windows XP 32/64	Available
Windows Vista 32/64	Available
Linux	Available
MAC OS	Available

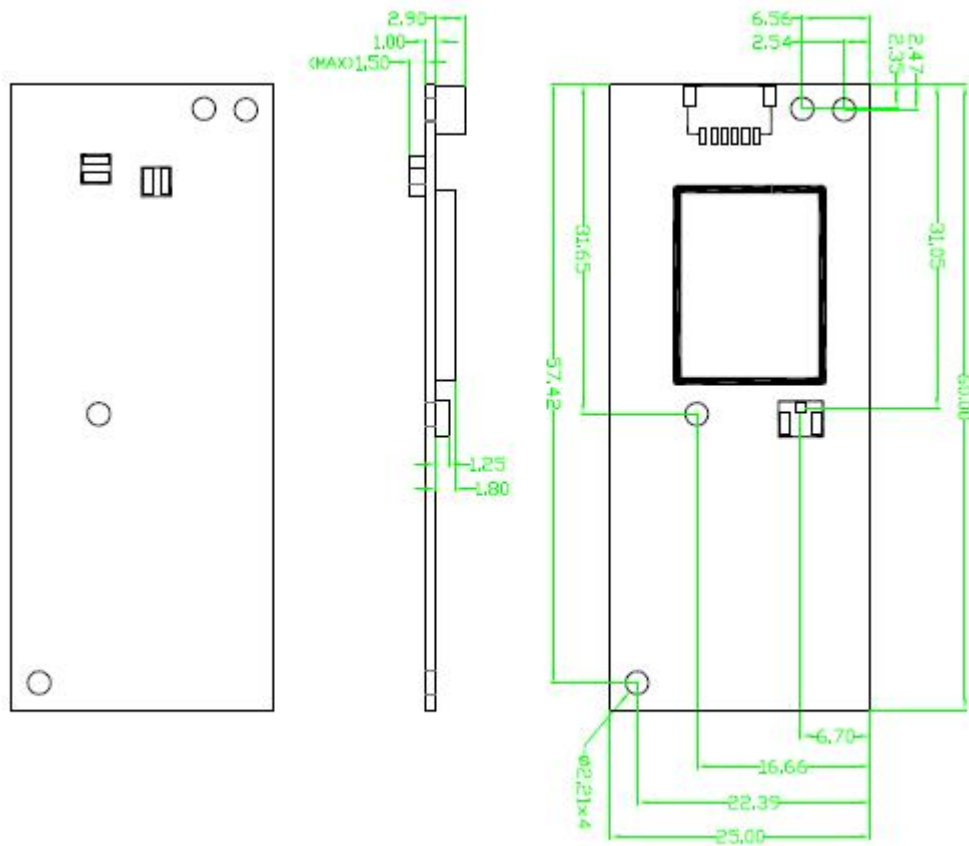
Operating Conditions

Voltage Range	5.0 +/-0.5V
Operating Temperature Range	-10°C - 65°C
Storage Temperature Range	-10°C - 85°C
Relative Humidity during Operating	Max. 95% (Non-Condensing)
Relative Humidity during Storage	Max. 95% (Non-Condensing)

RF Characteristics

RF Characteristics	Minimum	Typical	Maximum	Units
PC Interface		USB 2.0		
Internal Antenna Impedance		50		ohms
Operating Temperature Range	0		+65	°C
Storage Temperature Range	-20		+85	°C
Supply Voltage	4.7	5	5.3	V
RX Supply Current (11b 11Mbps)		TBD		mA
Power Consumption		TBD		mWatts
RX Supply Current (11g 54Mbps)		TBD		mA
Power Consumption		TBD		mWatts
RX Supply Current (11n 150Mbps)		TBD		mA
Power Consumption		TBD		mWatts
TX Supply Current (11b 1Mbps)		TBD		mA
Power Consumption		TBD		mWatts
TX Supply Current (11g 6Mbps)		TBD		mA
Power Consumption		TBD		mWatts
TX Supply Current (11n 15Mbps)		TBD		mA
Power Consumption		TBD		mWatts
Radio off Current		TBD		mA
Power Consumption		TBD		mWatts
RX Sensitivity(11b,11Mbps)		-86		dBm
RX Sensitivity(11g,54Mbps)		-71		dBm
RX Sensitivity (11n,150Mbps)		-63		dBm
TX Output Power(11b,11M)		17.5		dBm
TX Output Power(11g,54Mbps)		14		dBm
TX Output Power(11n,MCS0)		17.5		dBm
TX Output Power(11n,MCS7)		14		dBm
TX Spectral Mask (CCK)		PASS		
TX Spectral Mask (OFDM)		PASS		
TX Spectral Mask (11n,20M)		PASS		
TX Spectral Mask (11n,40M)		PASS		
Preamble Length		Long/Short		

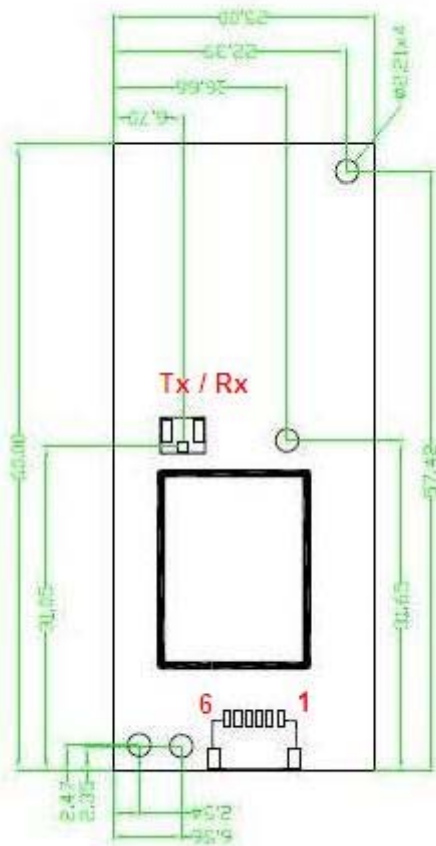
Mechanical Drawing



Antenna Connector

Connector	Vendor	Part#
Antenna *1	Hirose	CL331-0471-0-10 (U.FL-R-SMT), or compliance

Connector Status:



Host Interface Pin Definition

1	Vcc 5V	2	USB Data -
3	USB Data +	4	GND
5	WLAN LED LINK	6	FAA pin: WLAN RF Disable/Enable

- Host Interface Connector : 6 pin SMT Male USB Connector
- Connector Product Number (Male): 87213-0600L (Connector Vender Aces Electronic CO., LTD.)

Note:

Pin 5 is Low active for WLAN LED Link.
Pin 6 is Low voltage to disable RF function

LED Status:

LED status	WLAN card activity
LED on	Associated, and authenticated but not transmitting or receiving
LED Slow Blink	Scanning for AP
LED Intermittent Blink	Activity proportional to transmitting/receiving speed
LED off	Radio off

LR802UKN3 PTT Label Artwork



**Green Label
For RoHS**

