



## SPECIFICATIONS

**802.11 b/g/n Wireless USB module**

**LR802UKN**

Ver. 1A

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**Approved by :**

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## **Device Overall Description**

The LR802UKN is designed to provide wireless LAN function on a small form factor with USB interface. The wireless LAN function is based on Ralink RT2770 MAC/BBP, RT2720 transceiver and high gain power amplifier, fully comply with current draft IEEE 802.11n and IEEE 802.11 b/g standards.

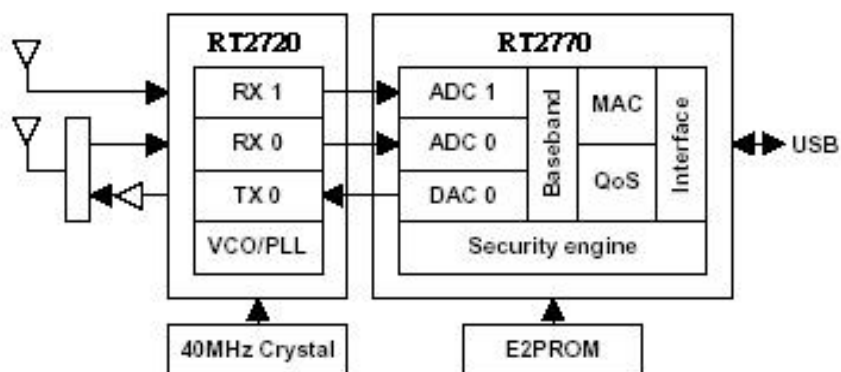
## **Features**

- Ralink RT2770 MAC/BBP with RT2720 Transceiver
- 1T2R Modes
- 11b: 1,2,5.5,11Mbps
- 11g: 6,9,12,24,36,48,54Mbps
- 11n: Legacy, Mixed and Green Field Modes , Support  
20/40MHz Bandwidth MCS0-7(150Mbps PHY Rate Support)
- RTS/CTS
- MSDU/PSDU aggregation
- Block Ack
- Reverse Direction Data Flow
- Link Adaptation
- Hardware WEP, TKIP, AES Engines
- EAP – TLS, TTLS, LEAP, PEAP
- WPA1/2 – PSK (WPA Home)
- WPA1/2 – 802.1x (WPA Enterprise)
- Roaming

## 802.11 Wireless LAN Block Diagram

**RT2770:** Ralink, Wireless LAN Integrated Medium Access Controller with Baseband Processor

**RT2720:** Ralink, 2.4GHz Single chip Transceiver



## Channel Assignment

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**

- WHQL
- Cisco CCX
- Wi-Fi Certification: 802.11 b/g, 802.11n, WPA, WPA2, WMM, WMM-PS

**Software & OS support**

Operating System	Driver
Windows 98SE	Available
Windows Me	Available
Windows 2000 / XP	Available
Windows Vista	Available
Linux 2.6.x	Available
MAC OS 10.3 & 10.4	Available
Wince 5.0 & 6.0	Available

**Operating Conditions**

Voltage Range	3.3V +-0.3V
Operating Temperature Range	0°C - 65°C
Storage Temperature Range	-20°C - 85°C
Relative Humidity during Operating	Max. 95% (Non-Condensing)
Relative Humidity during Storage	Max. 95% (Non-Condensing)

**Antenna Connector**

Connector	Vendor	Part#
Antenna *2	Hirose	CL331-0471-0-10 (U.FL-R-SMT), or compliance

**Host Interface Pin Definition And Mechanical Drawing**

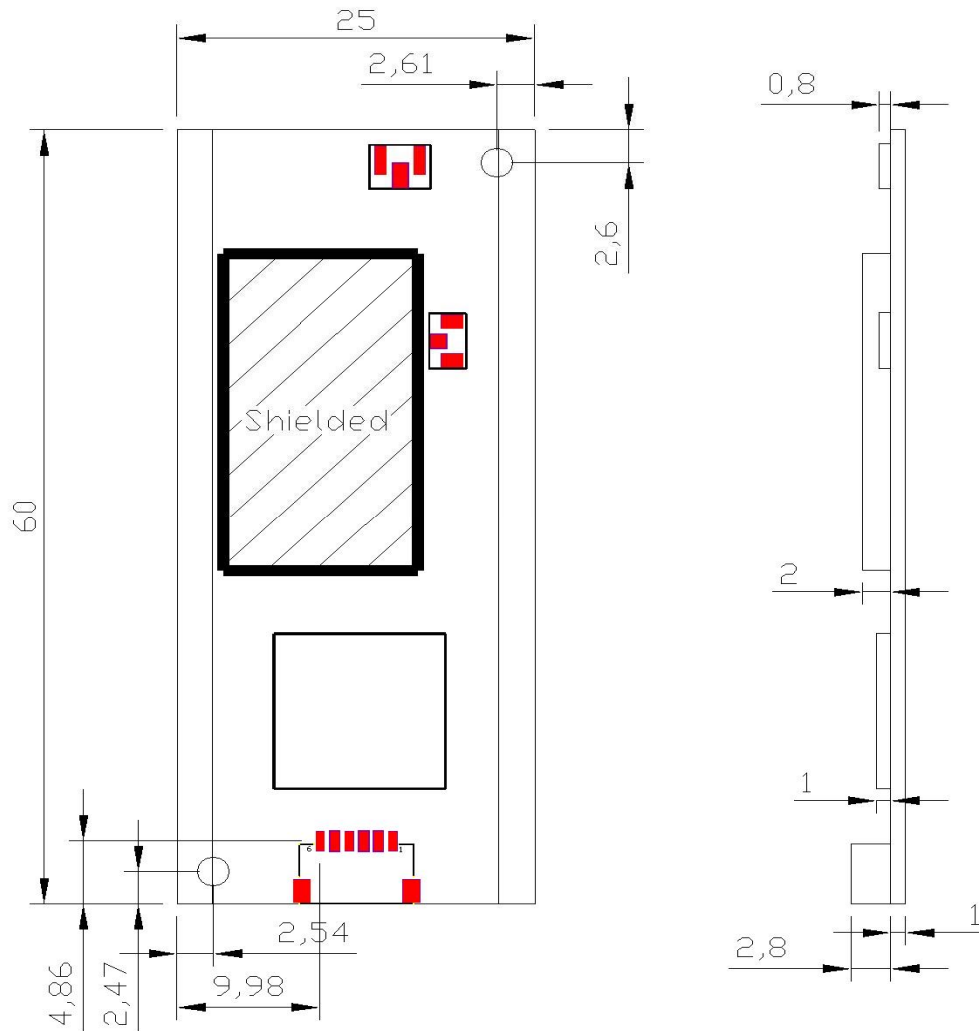
- Host Interface Connector : 6 pin SMT Male USB Connector

- Connector Product Number (Male): 87213-0600 (Connector Vender Aces Electronic CO., LTD.)

**Pin Definition**

1	VCC 5.0	2	DATA -
3	DATA +	4	GND
5	LINK	6	FAA

**Mechanical Drawing**



**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