

Compare IEEE 802.11 b/g/n WLAN – Mini PCI-E Product Specifications

Model: RT5390

VER:1.0

DATE:2011/02

1. Introduction

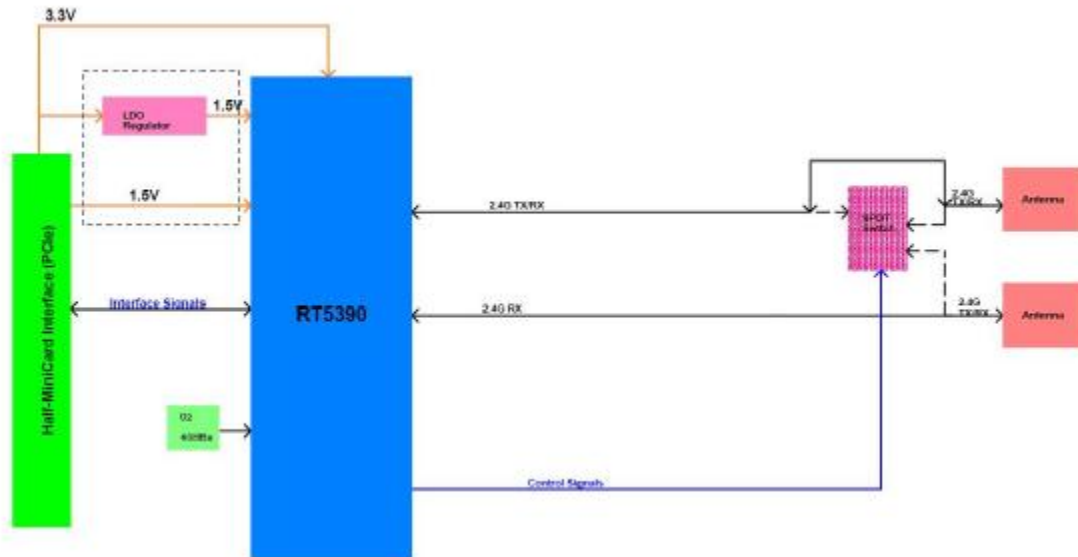
RT5390 is a Mini PCI Express wireless module supporting IEEE 802.11 b/g/n standards, This is a low cost compact WLAN module
Designed in the product with Notebook, netbook etc for the wireless connectivity.

2. Features

- 1T1R mode with 150Mbps with PHY rates for both transmit and receiving
Dynamic data rate: Maximum data rate up to 150Mbps. 11n: Legacy, Mixed and Green Field modes, 11g: 54/48/36/24/12/9/6 Mbps (Auto Sensing); 11b:11/5.5/2/1 Mbps (Auto Sensing)
- support 20MHz/40MHz Bandwidth
- Security support for 64/128 bit WEP, WPA/WPA2, WPA-PSK/WPA2-PSK (TKIP/AES)
- Supports 6, 9, 12, 18, 24, 36, 48, 54Mbps for OFDM; 5.5, 11Mbps for CCK;and 1,2 Mbps for Barker modulation.
- Operating Frequency 2.412GHz~ 2.484GHz
- Transmit Output Power: 802.11.g 14+/-1dBm; 11b 18+/-1dBm
- Receive Sensitivity 11b: -75dBm @ 11Mbps (Typical); 11g: -65dBm @ 54Mbps (Typical)
- Operating Voltage 3.3V/DC \pm 5%
- Bus Interface Mini PCI-E
- Antenna Port Impedance 50ohm

3 Hardware Information

Major Chipset RT5390



4 Operating System

Windows 2000 /XP/VISTA/WIN 7

Linux

Macintosh

5 Dimensions

Dimension 30mm X 26.5mm X 3.2mm (with shielding)

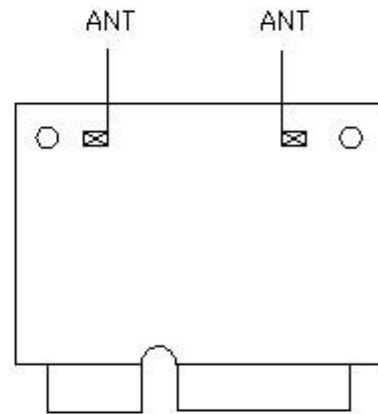
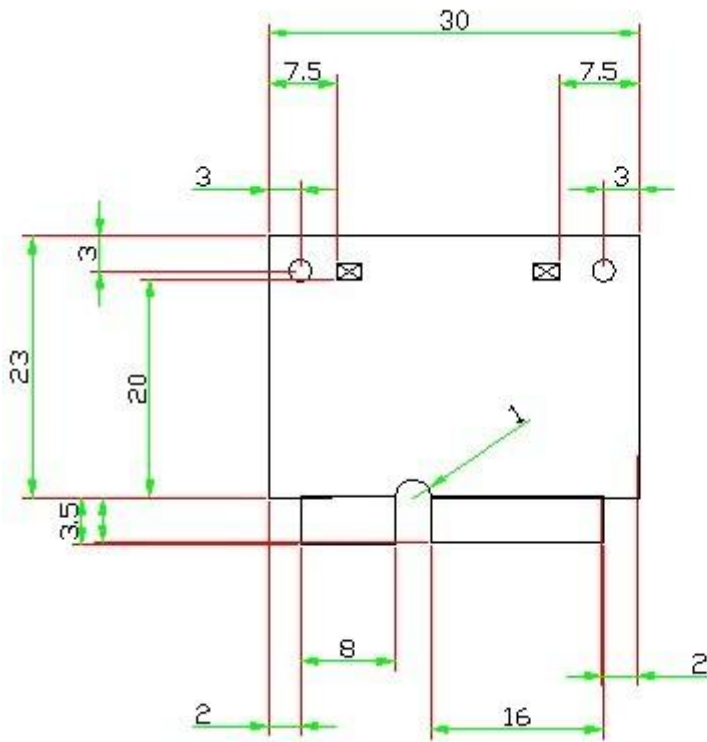
Antenna Interface connector

Harumoto

1: Main

2: auxiliary

Mechanical Drawing:



6. Pin Assignment

Pin No. Definition Basic Description Type

Pin #	Name	Pin #	Name
51	Reserved*	52	+3.3V
49	Reserved*	50	GND
47	Reserved*	48	+1.5V
45	Reserved*	46	LED_WPAN#
43	Reserved*	44	LED_WLAN#
41	Reserved*	42	LED_WWAN#
39	Reserved*	40	GND
37	Reserved*	38	USB_D+
35	GND	36	USB_D-
33	PETp0	34	GND
31	PETn0	32	SMB_DATA
29	GND	30	SMB_CLK
27	GND	28	+1.5V
25	PERp0	26	GND
23	PERn0	24	+3.3Vaux
21	GND	22	PERST#
19	Reserved*** (UIM_C4)	20	W_DISABLE#
17	Reserved*** (UIM_C8)	18	GND

Mechanical Key

15	GND	16	UIM_VPP
13	REFCLK+	14	UIM_RESET
11	REFCLK-	12	UIM_CLK
9	GND	10	UIM_DATA
7	CLKREQ#	8	UIM_PWR
5	Reserved**	6	1.5V
3	Reserved**	4	GND
1	WAKE#	2	3.3V

7 Environment

Operating Temperature	0°C~70°C
Operating Humidity	50%~90% non-condensing