



User Manual / User Guide

Model name:HR8192ERP5

Brand name:N/A

1. Introduction

1.1 Overview

HR8192ERP5-W1 is a highly integrated and excellent performance Wireless LAN (WLAN) PCIe interface device. High-speed wireless connection up to 300 Mbps.

The general hardware for the module is shown in Figure 1. This WLAN Module design is based on Realtek RTL8192ER. It is a highly integrated single-chip 2*2 MIMO (Multiple In Multiple Out) Wireless LAN (WLAN) PCIe network interface controller complying with the 802.11n specification. It combines a MAC, a 2T2R capable baseband, and RF in a single chip. It is designed to provide excellent performance with low power Consumption and enhance the advantages of robust system and cost-effective.

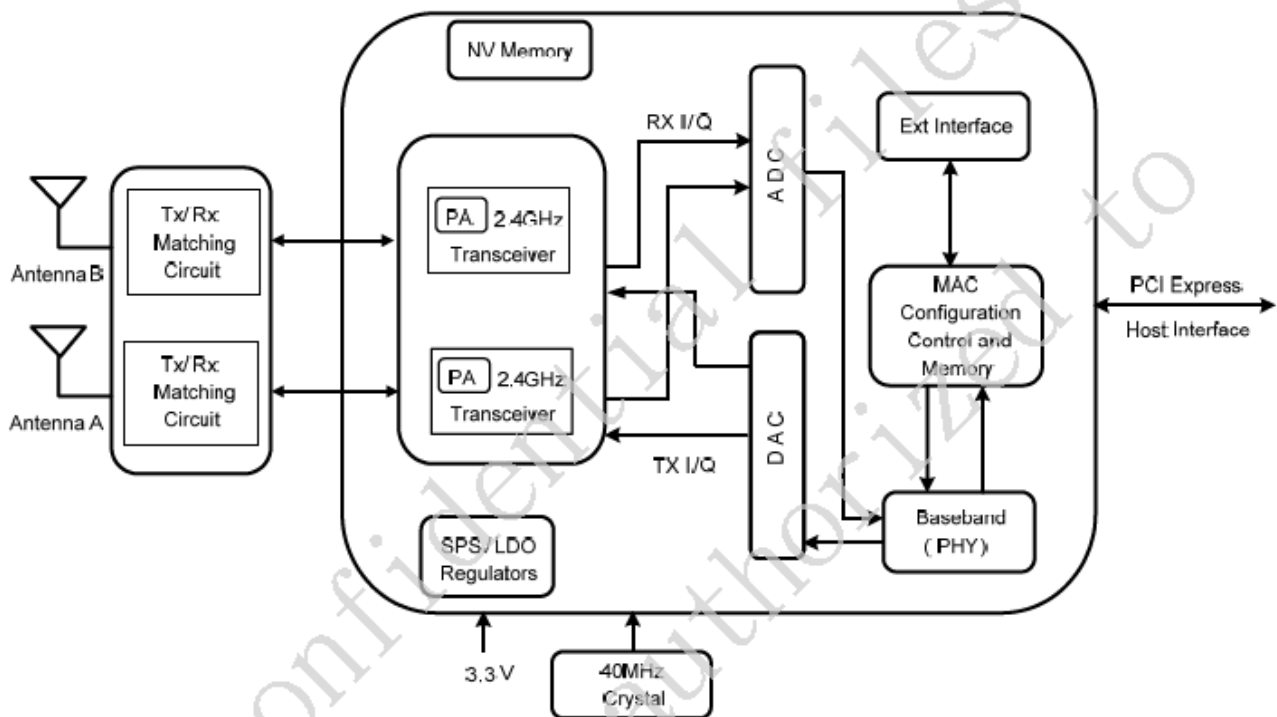


Figure 1. Single-Band 11n (2x2) Solution

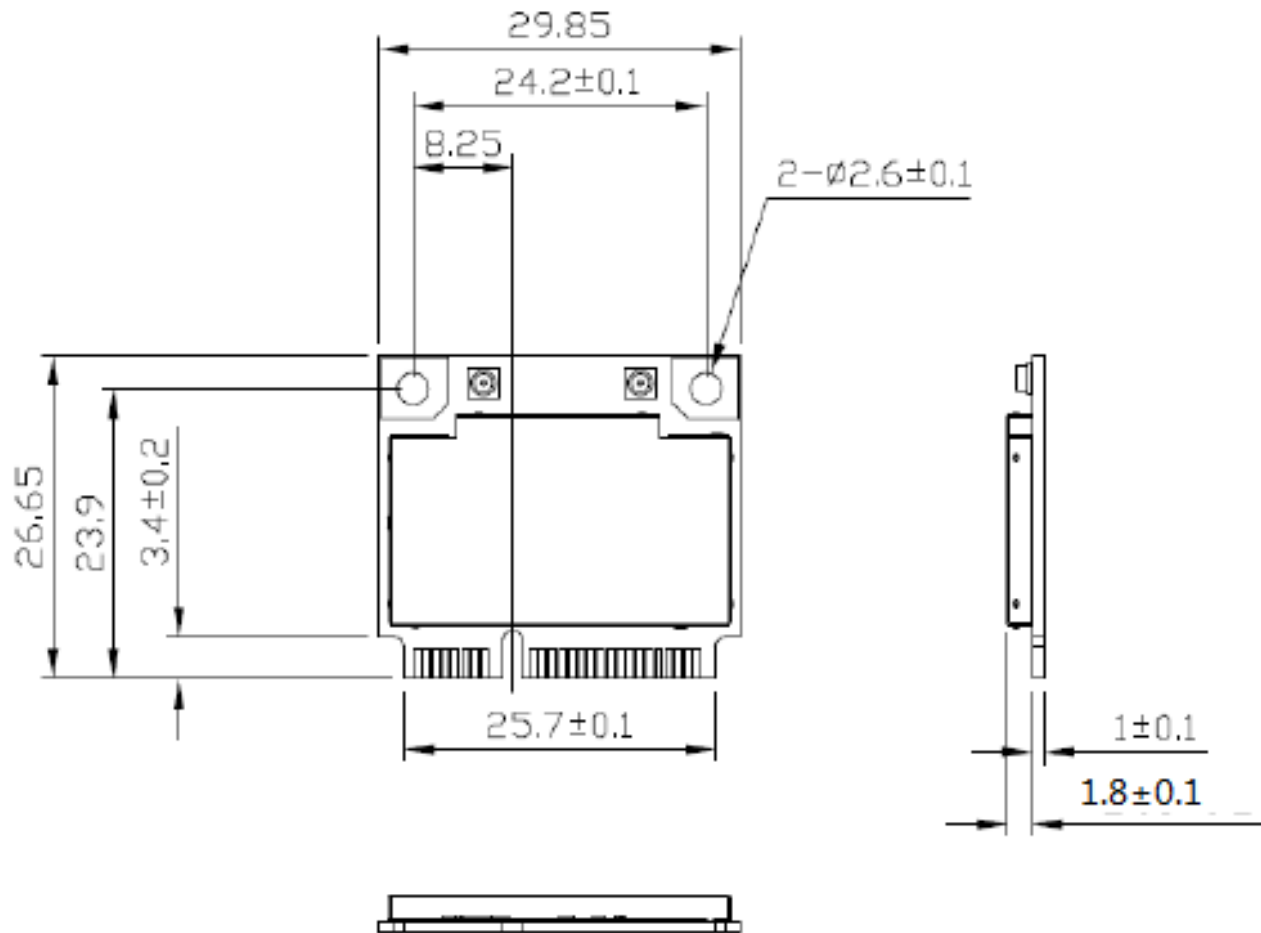
1.2 Specification Reference

This specification is based on additional references listed as below.

IEEE 802.11b
IEEE 802.11g
IEEE 802.11n

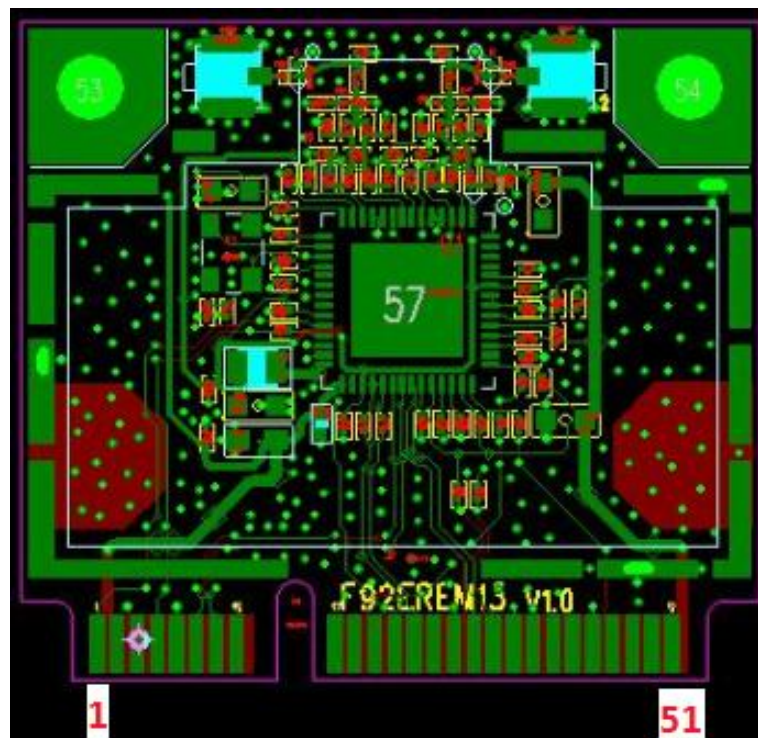
2. Mechanical Specification

2.1 Outline Drawing



Tolerances unless otherwise specified : $\pm 0.1\text{mm}$

2.2 Connector Pin Definition



Pin #	Name	Descriptions
1	WAKE	Power management event : open drain, active low Use to reactivate the PCI Express slot's main power rails and reference clocks. Connected internally to RTL8188EE. S/W not support. Not support the function.
2	3.3V/3.3AUX	3.3V/3.3AUX power supply (Use 3.3AUX for WOWL supporting)
3	NC	Floating Pin, No connect to anything.
4	GND	GROUND
5	ND	Floating Pin, No connect to anything.
6	ND	Floating Pin, No connect to anything.
7	CLKREQ_L	Reference clock request
8	NA	Floating Pin, No connect to anything.
9	GND	GROUND
10	NC	Floating Pin, No connect to anything.
11	REFCLK	Differential reference clock.
12	NC	Floating Pin, No connect to anything.
13	REFCLK	Differential reference clock.
14	NC	Floating Pin, No connect to anything.
15	GND	GROUND
16	NC	Floating Pin, No connect to anything.
17	NC	Floating Pin, No connect to anything.
18	GND	GROUND
19	NC	Floating Pin, No connect to anything.
20	W_DISABLE_L	WLAN disable control.
21	GND	GROUND
22	PERST_L	PCI express fundamental reset.
23	PERNO	Differential transmit.
24	NC	Floating Pin, No connect to anything.
25	PERPO	Differential transmit.
26	GND	GROUND
27	GND	GROUND
28	NC	Floating Pin, No connect to anything.
29	GND	GROUND
30	NC	Floating Pin, No connect to anything.
31	PETNO	Differential receive.
32	NC	Floating Pin, No connect to anything.
33	PETPO	Differential receive.
34	GND	GROUND
35	GND	GROUND
36	NC	Floating Pin, No connect to anything.
37	GND	GROUND
38	NC	Floating Pin, No connect to anything.
39	NC	Floating Pin, No connect to anything.

40	NC	Floating Pin, No connect to anything.
41	NC	Floating Pin, No connect to anything.
42	NC	Floating Pin, No connect to anything.
43	GND	GROUND
44	LED_WLAN_L	Active low signal. The signal is used to provide status indicators via LED.
45	NC	Floating Pin, No connect to anything.
46	NC	Floating Pin, No connect to anything.
47	NC	Floating Pin, No connect to anything.
48	NC	Floating Pin, No connect to anything.
49	NC	Floating Pin, No connect to anything.
50	GND	GROUND
51	NC	Floating Pin, No connect to anything.
52	3.3V/3.3AUX	3.3V/3.3AUX power supply (Use 3.3AUX for WOWL supporting)

3. Antenna Specification

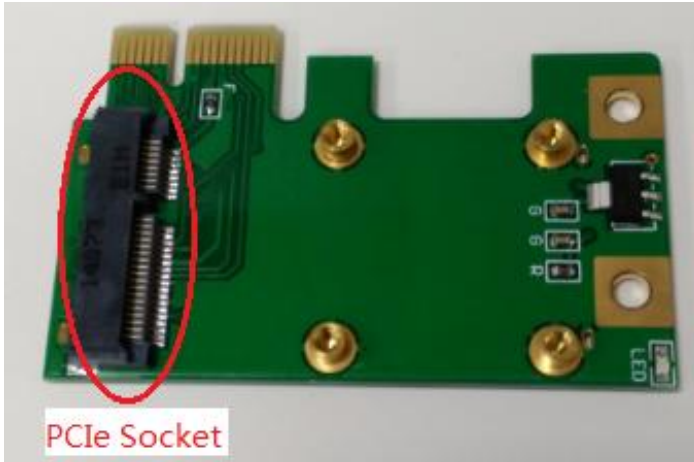
Antenna plate	FPC antenna
Antenna gain	0dBi
Frequency range	2.4GHZ-2.483GHZ
POWER	0dBm
Connector type	external antenna

4. Installation Guide

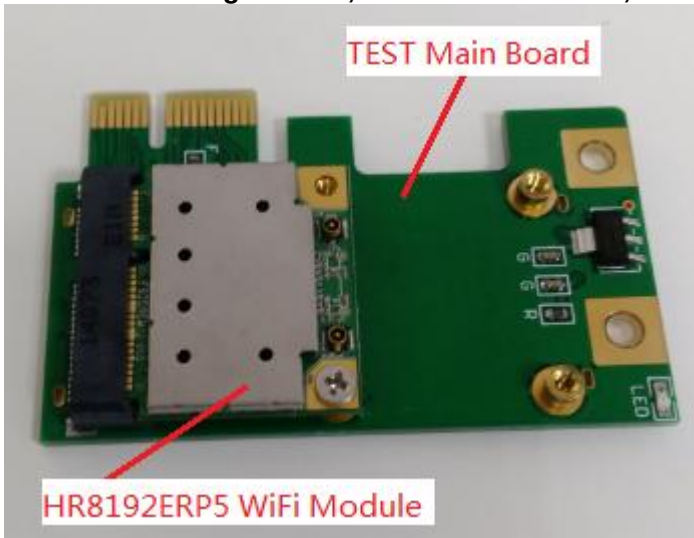
4.1 Check HR8192ERP5 Module connection pin is clean for soldering.



4.2 Place the Module on the Master PCB. Then insert it.



4.3 After inserting module, install on the screw, Check all pads are well connected.



FCC Caution.

§ 15.19 Labelling requirements.

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 including interference that may cause undesired operation.

§ 15.21 Changes or modification warning

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

§ 15.105 Information to the user.

Note: 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 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.

* RF warning for Portable device:

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

Warning statement

The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Only those antenna(s) tested with the device or similar antenna(s) with equal or lesser gain may be used with this transmitter.

The 2.4G WiFi module is designed to comply with the FCC statement. The host system using 2.4G WiFi module should have label indicated it contain modular's FCC ID 2ADV3-HR8192ERP5