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BL-R8192RD3

Product Specification

IEEE 802.11a/b/g/n (2T2R) WLAN USB Module

Version: 1.1

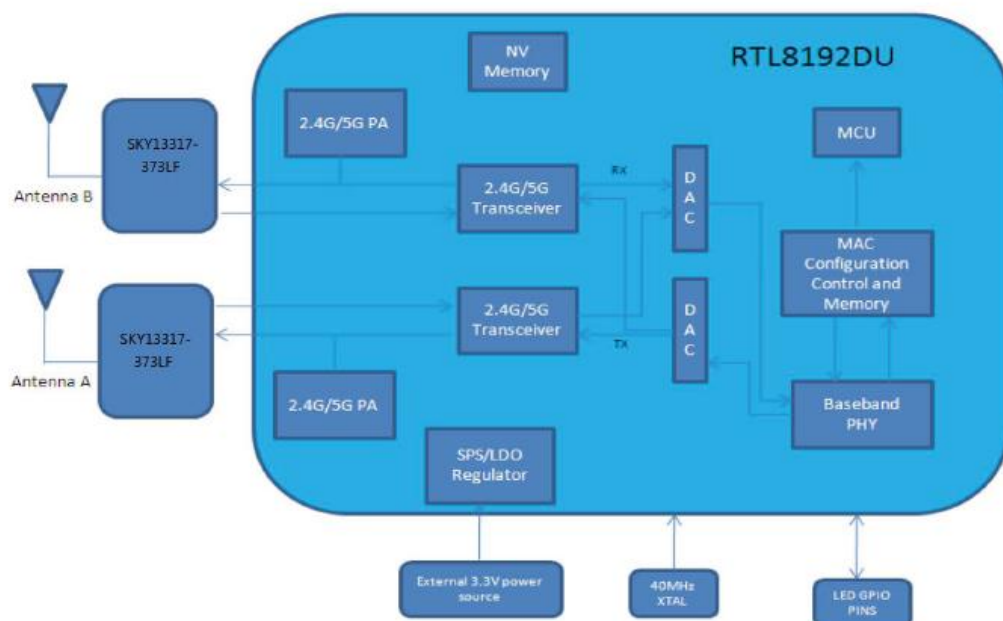
0. Revision History

Date	Document revision	Product revision	Change Description
2015/07/18	1.1	V1.1	Draft initial release

1. General Description

BL-R8192RD3 product is designed base on Realtek RTL8192DU chipset .It combines CMOS MAC, Baseband PHY and RF in a single chip for IEEE 802.11a/b/g/n compatible.It can implement the wireless network function on the laptop/desktop/MID and other wireless devices easily . This module has implemented some efficient mechanisms in its software and hardware to maximize the performance.

2. Product Specification



2.1 Electrical and Performance Specification

Item	Description
Product Name	BL-R8192RD3
Major Chipset	RTL8192DU
Host Interface	USB2.0
Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n,
Frequency Range	2.412GHz~2.462GHz 5.745GHz~5.825GHz
Modulation Type	802.11b: CCK, DQPSK, DBPSK 802.11a/g: 64-QAM, 16-QAM, QPSK, BPSK 802.11n: 64-QAM, 16-QAM, QPSK, BPSK
Working Mode	Infrastructure, Ad-Hoc
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90,120 and maximum of 300Mbps
Spread Spectrum	IEEE 802.11a: ISM(Industrial Scientific Medical) IEEE 802.11b: DSSS (Direct Sequence Spread Spectrum) IEEE 802.11g/n: OFDM (Orthogonal Frequency Division Multiplexing)
Sensitivity @PER	1M: -90dBm@8%PER 6M: -88dBm@10%PER 11M: -85dBm@8%PER 54/135M: -73dBm@10%PER
Antenna type	On board PIFA type pcb antenna
The transmit distance	Indoor 100M, Outdoor 300M, according the local environment
Dimension(L*W*H)	USB dongle size: 99x 26 x 12mm (LxWxH)
Power supply	3.3V +/-0.2V
Power Consumption	standby mode 203mA@3.3V ,
Clock source	TX mode 381mA@3.3V 40MHz
Working Temperature	-20°C to +70°C
Storage temperature	-55°C ~ +125°C

2.3 DC Characteristic

Terms	Contents			
Specification : IEEE802.11b				
Mode	DSSS / CCK			
Frequency	2412 – 2462MHz			
Data rate	1, 2, 5.5, 11Mbps			
DC Characteristics	min	Typ.	max.	unit
TX mode	380	392	405	mA
Rx mode	212	261	270	mA
Sleep mode	1.3	1.4	1.5	mA
Specification : IEEE802.11g				
Mode	OFDM			
Frequency	2412 - 2462MHz			
Data rate	6, 9, 12, 18, 24, 36, 48, 54Mbps			
DC Characteristics	min	Typ.	max.	unit
TX mode	342	357	362	mA
Rx mode	223	245	261	mA
Sleep mode	1.5	1.5	1.5	mA
Specification : IEEE802.11n				
Mode	OFDM			
Frequency	2412 - 2462MHz			
Data rate	6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps			
DC Characteristics	min	Typ.	max.	unit
TX mode	308	321	345	mA
Rx mode	205	232	245	mA
Sleep mode	1.1	1.3	1.5	mA
Specification : IEEE802.11a				
Mode	OFDM			
Frequency	5745MHz - 5825MHz			
Data rate	6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps			
DC Characteristics	min	Typ.	max.	unit
TX mode	315	331	350	mA
Rx mode	195	225	241	mA
Sleep mode	1.1	1.3	1.5	mA
Specification : IEEE802.11n				
Mode	OFDM			
Frequency	5745MHz - 5825MHz			

Data rate	6.5, 13, 19.5, 26, 39, 52, 58.5, 65Mbps			
DC Characteristics	min	Typ.	max.	unit
TX mode	308	324	340	mA
Rx mode	175	230	243	mA
Sleep mode	1.1	1.3	1.5	mA

2.3 Product Photo

TOP



Bottom



2.4 Mechanical Specification

Module dimension: Typical (W x L x H): 26mmx99mmx12mm





3. Supported platform

Operating System	CPU Framework	Driver
WIN2000/XP/VISTA/WIN7	X86 Platform	Enable
LINUX2.4/2.6	ARM, MIPSII	Enable

4. Product Assembly Instruction



FCC Statement

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.

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

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, 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,

- 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 RF Radiation Exposure Statement

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