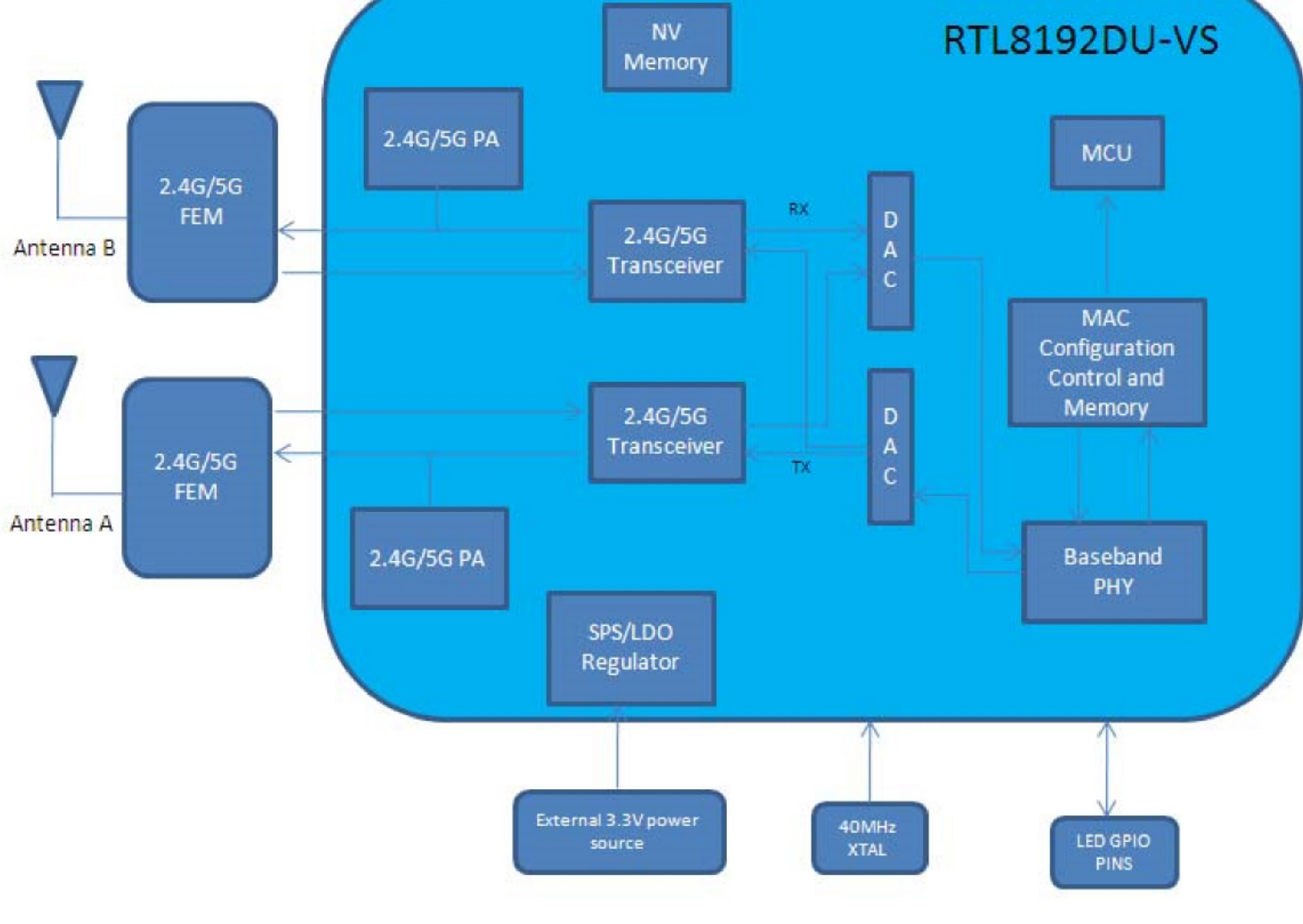


1. General Description

IS-8192RD1 product is designed base on Realtek RTL8192DU chipset .It combines CMOS MAC, Baseband PHY, along with a single chip for IEEE 802.11a/b/g/n compatible. It supports IEEE802.11i safety protocol, along with IEEE 802.11e standard service quality. It supports the new data encryption on 64/128 bit WEP and safety mechanism on WPA-PSK/WPA2-PSK, WPA/WPA2. 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 FunctionBlockDiagram



2.2 Electricaland Performance Specification

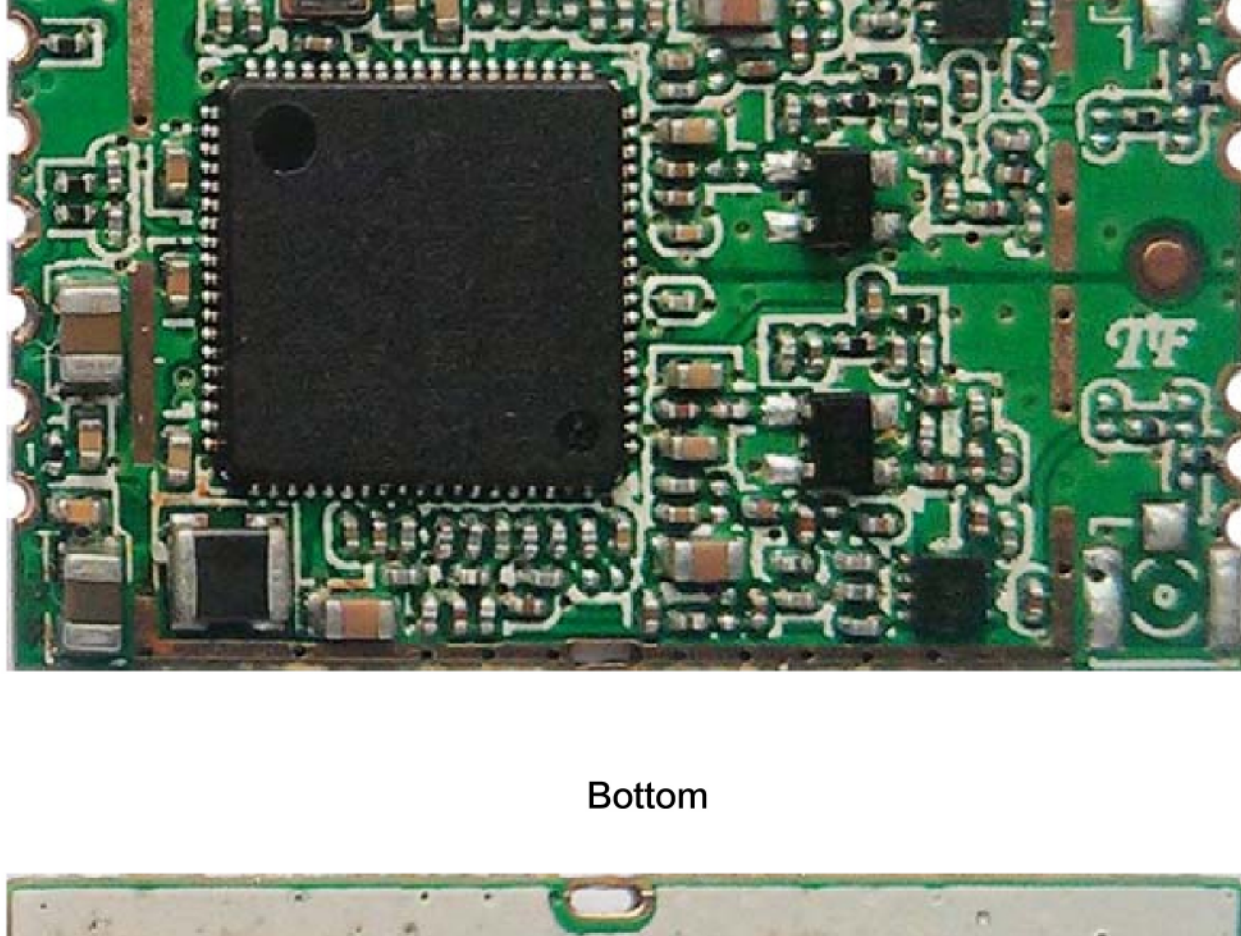
Item	Description
Product Name	IS-8192RD1
Major Chipset	RTL8192DU-VS
Host Interface	USB2.0
Standard	IEEE 802.11a, IEEE 802.11b, IEEE 802.11g,IEEE 802.11n,
Frequency Range	2.4GHz~2.4835GHz 5.15GHz~5.845GHz
Modulation Type	802.11b: CCK, DQPSK, DBPSK 802.11a/g: 64-QAM,16-QAM, QPSK, BPSK 802.11n: 64-QAM,16-QAM, 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
RF Power	< 18dBm@11b,< 14dBm@11g,< 13dBm@11n,< 12dBm@11a
Antenna type	Connect to the external antenna through the half hole
The transmit distance	Indoor 100M, Outdoor 300M, according the local environment
Dimension(L*W*H)	27.0 x 17.7 x 2.5mm (LxWxH) ;Tolerance: +0.2mm
Power supply	3.3V +/-0.2V
Power Consumption	standby mode 203mA@3.3V , TX mode 381mA@3.3V
Clock source	40MHz
Working Temperature	-20°C to +70°C
Storage temperature	-55°C ~ +125°C

2.3 DC Characteristic

Symbol	Parameter	Minimum	Typical	Maximum	Units
VD33A, VD33D	3.3V I/O Supply Voltage	3.135	3.3	3.465	v
VD12A, VD12D	1.2V Core Supply Voltage	1.10	1.2	1.32	v
VD15A, VD15D	1.5V Supply Voltage	1.425	1.5	1.575	v

2.4 Product Photo

TOP

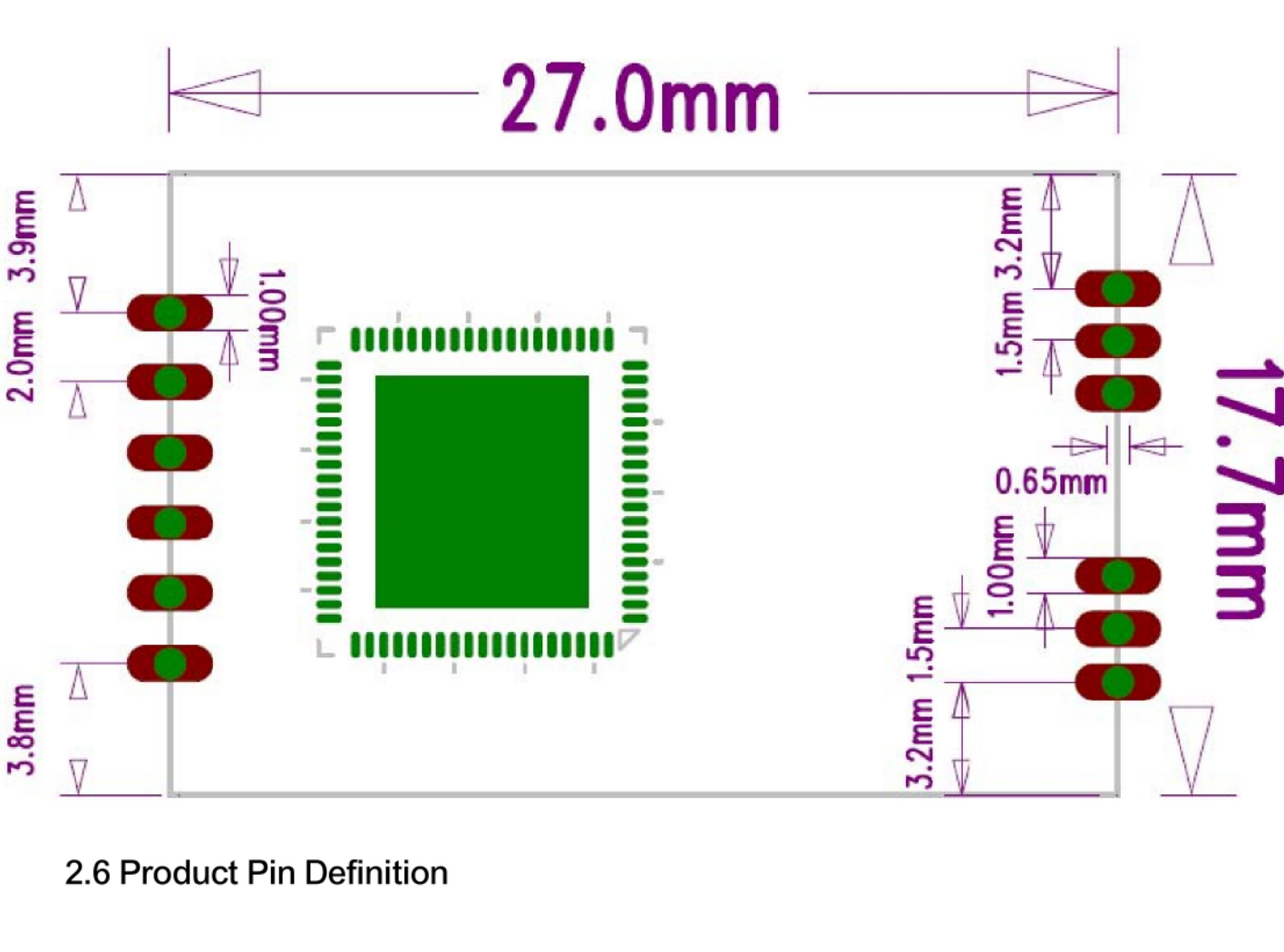


Bottom



2.5 Mechanical Specification

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



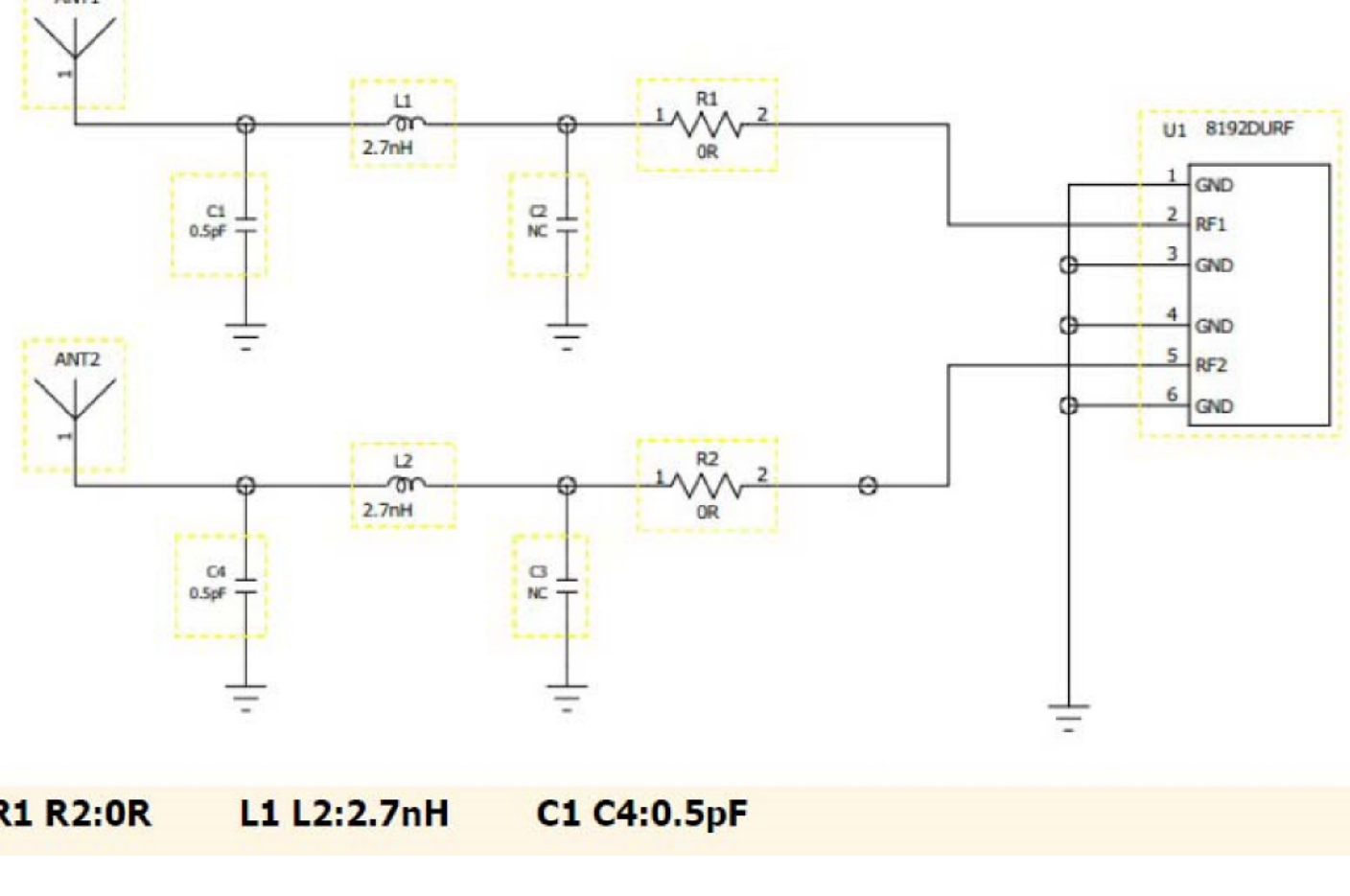
2.6 Product Pin Definition



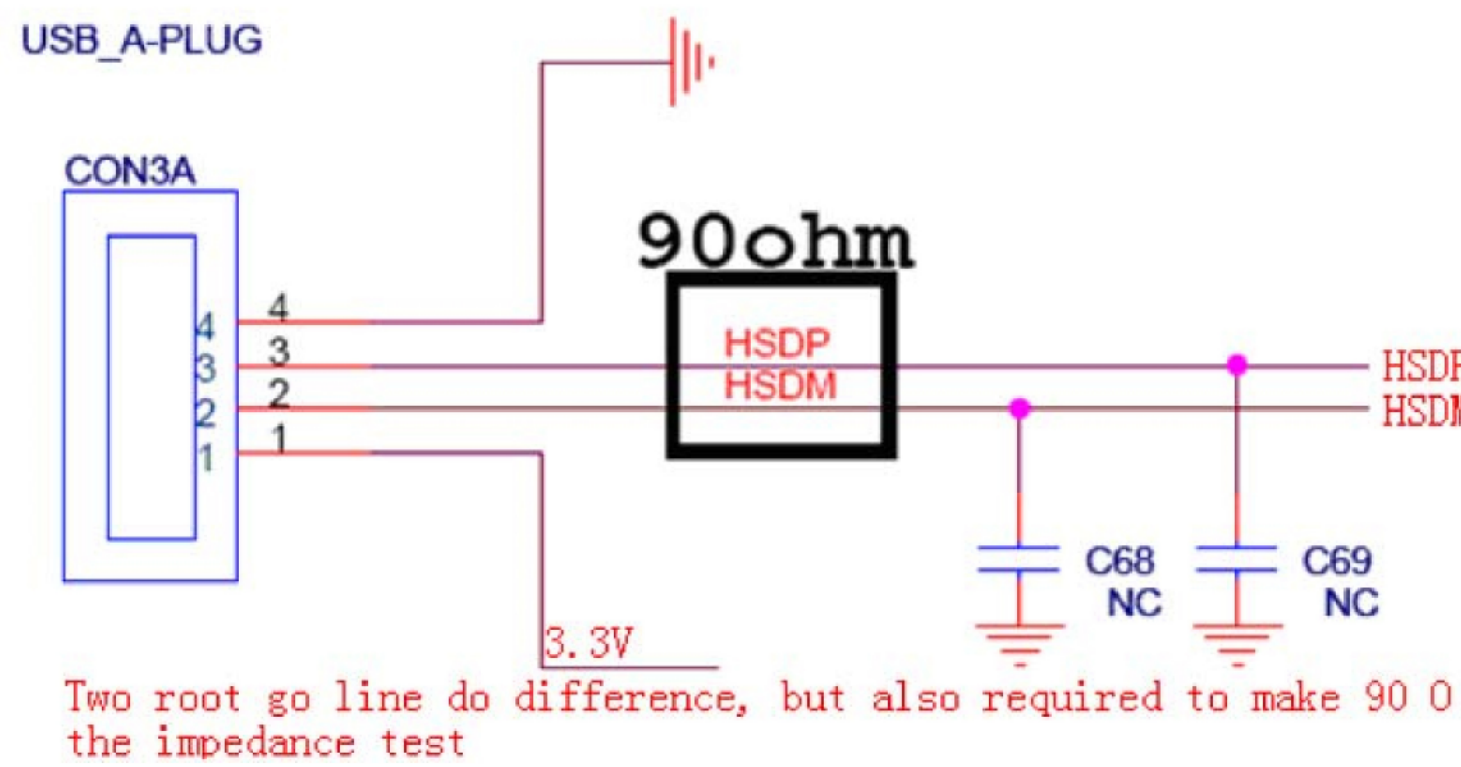
3. Supported platform

Operating System	CPU Framework	Driver
WIN2000/XP/VISTA/WIN7	X86 Platform	Enable
LINUX2.4/2.6	ARM, MIPSII	Enable
WINCE5.0/6.0	ARM ,MIPSII	Enable

4. Peripheral Schematic Reference Design



4.2 USB Interface Electrical Characteristic



5. Typical Solder Reflow Profile

