

HK NATER TECH LIMITED

NT-UW185EN-5372 模块 承认书

客户名称

Customer: _____

样品名称

Description: NT-UW185EN-5372 模块 V1.0

客户料号

Customer P/N: _____

日期

Date: _____

客户栏 Customer		
核准Approve	审核Auditing	承认Admit

供应商栏 Provider		
核准Approve	审核Auditing	承认Admit

客户名称:

公司地址:

电话:

传真:

联系人:

E-mail:

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尊敬的客户: 请收到我公司样品承认书三日内传首页, 谢谢!

SPECIFICATIONS

IEEE 802.11 b/g/n 2.4GHz 2T2R

Wi-Fi 2T2R Module

NT-UW185EN (USB module)

Version 1.0

1. Overview

The UW185EN is a highly integrated MAC/BBP and 2.4 GHz RF/PA/LNA single modul which supports a 300 Mbps PHY rate. It fully complies with IEEE 802.11n and IEEE 802.11 b/g standards, offering feature-rich wireless connectivity at a high standard, and delivering reliable, cost-effective throughput from an extended distance. Optimized RF architecture and baseband algorithms provide superb performance and low power consumption. Intelligent MAC design deploys a highly efficient DMA engine and hardware data processing accelerators without overloading the host processor. The UW185EN is designed to support standard-based features in the areas of security, quality of service and international regulations, giving end users the greatest performance anytime and in any circumstance.

2. Features

- CMOS Technology with an integrated PA, LNA, RF, Baseband, and MAC
- 2T2R Mode with support for a 300 Mbps Tx/Rx PHY Rate
- Legacy and High Throughput Modes
- 20 MHz/40 MHz Bandwidth
- Reverse Direction Grant Data Flow and Frame Aggregation
- WEP 64/128, WPA, WPA2, TKIP, AES, WAPI
- QoS-WMM, WMM-PS
- Multiple BSSID Support
- WPS/ WPS2.0: PIN, PBC
- USB 2.0
- Cisco CCX Support
- Bluetooth Co-existence
- Low Power with Advanced Power Management
- Operating Systems: Windows XP 32/64, 2000, Windows 7 32/64, Vista 32/64, Linux, Macintosh

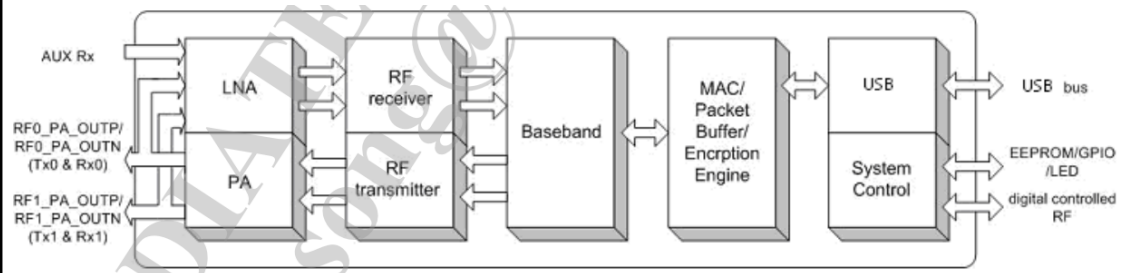
3. Applications

- USB 2.0 Wi-Fi Dongles
- IEEE 802.11 b/g/n wireless LANs

4. General Specification

Model	NT-UW185EN-5372-V1.0
Product Name	WLAN 11n USB module
MajorChipset	MT5372 (MTK/Ralink)
Standard	802.11b/g/n
Data Transfer Rate	1,2,5.5,6,11,12,18,22,24,30,36,48,54,60,90,120 and maximum of 300Mbps
Modulation Method	WEP 64/128, WPA, WPA2, TKIP, AES, WAPI
Frequency Band	2.4 ~ 2.4835 GHz ISM Band
RF Output Power	< 15dBm@11n, < 18dBm@11b, < 15dBm@11g
Operation Mode	Ad hoc, Infrastructure
Receiver Sensitivity	11Mbps -86dBm@8%, 135Mbps -73dBm@10%, 300Mbps -66dBm@10%
Operation Range	Up to 180 meters in open space
OS Support	Windows XP 32/64, 2000, Windows 7 32/64, Vista 32/64, Linux, Macintosh
Security	WPS/ WPS2.0: PIN, PBC
Interface	USB 2.0
Power Consumption	DC 5V
Operating Temperature	-10 ~ +70° C ambient temperature
Storage Temperature	-10 ~ 30°C ambient temperature
Humidity	5 to 90 % maximum (non-condensing)
Dimension	40 x 20 x 2.1mm (LxWxH) +-0.2MM

5. Block Diagram



6. Electrical Specifications

1) DC Characteristics

Current Consumption	Min.	Typ.	Max.	Unit
TX Mode	-	180	-	mA

2) RF Characteristics for IEEE802.11b (11Mbps mode unless otherwise specified)

Items	Contents			
Specification	IEEE802.11b			
Mode	CCK			
Channel frequency	2400 ~ 2483 MHz			
Data rate	1,2,5.5,11Mbps			
TX Characteristics	Min.	Typ.	Max.	Unit
Power Level	17	18	19	dBm

3) RF Characteristics for IEEE802.11g (54Mbps mode unless otherwise specified)

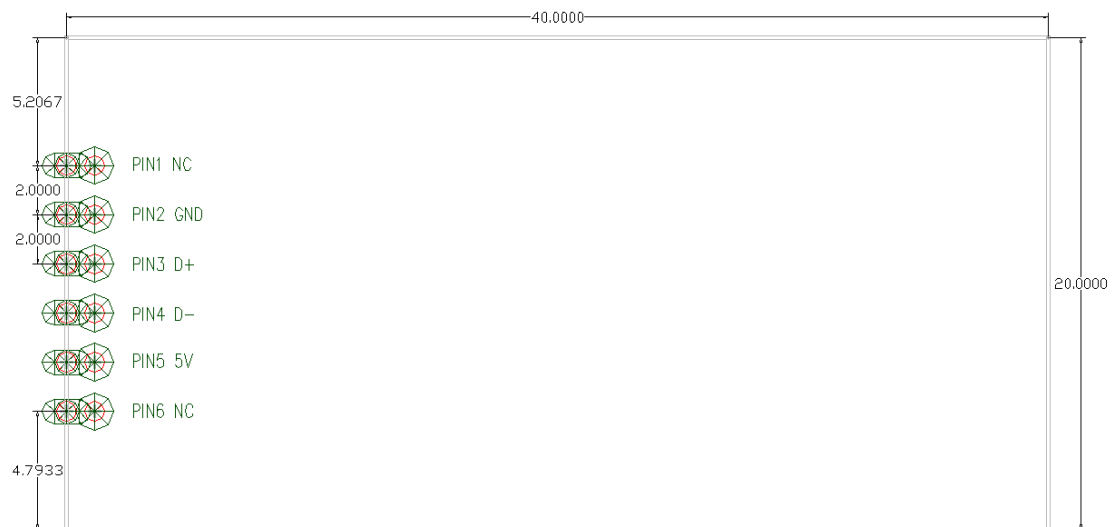
Items	Contents			
Specification	IEEE802.11g			
Mode	OFDM			
Channel frequency	2400 ~ 2483 MHz			
Data rate	6,9,12,18,24,36,48,54Mbps			
TX Characteristics	Min	Typ	Max	Unit
	14	15	16	dbm
RX Characteristics	Min	Typ	Max	Unit
Minimum Input Level Sens. (PER ≤ 10%)	-	-77		ppm
Maximum Input Level (PER ≤ 10%)	-20	-		ppm

4) RF Characteristics for IEEE802.11n (MCS7 mode unless otherwise specified)

Items	Contents			
Specification	IEEE802.11g			
Mode	OFDM			
Channel frequency	2400 ~ 2483 MHz			
Data rate	6,9,12,18,24,36,48,54Mbps			
TX Characteristics	Min	Typ	Max	Unit
	14	15	16	dbm
RX Characteristics	Min	Typ	Max	Unit
Minimum Input Level Sens. (PER ≤ 10%)	-	-71		ppm
Maximum Input Level (PER ≤ 10%)	-20	-		ppm

7. Pin Definition

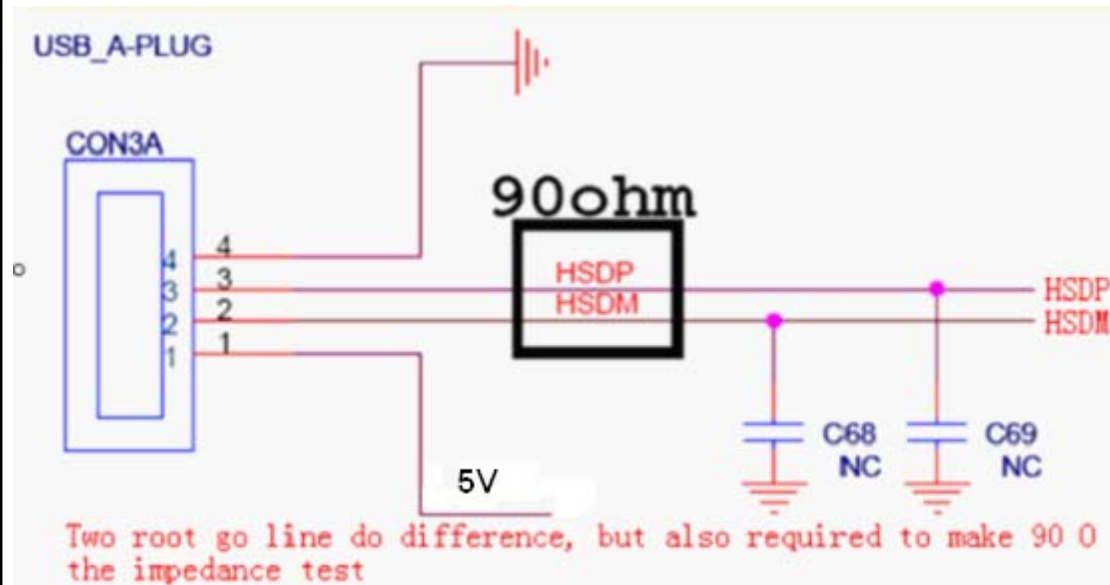
Pin	Definition	I/O	Power	Description
1	NC			
2	GND			GND (Corresponding to the four-in-one module PIN2)
3	DP			USB D+(Corresponding to the four-in-one module PIN3)
4	DM			USB D- (Corresponding to the four-in-one module PIN4)
5	5V			VDD5.0V \pm 0.1V (Corresponding to the four-in-one module PIN5)
6	NC			



Mechanical

Dimensions (mm)	Length	Width	Height
	40	20	2.1
	(Tolerance: \pm 0.2mm)	(Tolerance: \pm 0.2mm)	(Tolerance: \pm 0.2mm)

8.USB interface electrical characteristics



9. Storage Conditions

The calculated shelf life in a sealed bag is 12 months if stored between 0 °C and 40 °C at less than 90% relative humidity (RH). After the bag is opened, devices that are subjected to solder reflow or other high temperature processes must be handled in the following manner:

- Mounted within 168 hours of factory conditions, i.e. < 30 °C at 60% RH.
- Storage humidity needs to maintained at < 10% RH.
- Baking is necessary if the customer exposes the component to air for over 168 hrs, baking conditions: 125 °C for 8 hrs