



# Specification For USB 80211ac/a/b/g/n WiFi Module TWR0073

Rev. 1.1

#### 2012-2017 Pulse(Suzhou) Wireless Products Co., Ltd

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### Overview

TWR0073 is 802.11 ac/a/b/g/n 2.4G/5G dual band 1T1R USB2.0 module. It run up to 433Mbps (MCS9) 5G and 150Mbps 2.4G and delivers superior WiFi output up to 16dBm. It use highly integrated SOC chip MT7610UN.

TWR0073 have small form factor and high performance design for wireless connection with popular USB interface. It is good choose for high throughput networking and multimedia application. In addition, it not only support WPS for easy connection, but also support security encryption through WPA, WPA2 ...and so on.







#### Feature:

- 1. Dual band 1T1R mode with support of 433Mbps PHY rate
- 2. IEEE 802.11 a/b/g/n and 802.11ac client
- 3. Transmit Beanforming and STBC
- 4. QOS: WFA WMM, WMM PS
- 5. Security : WFA WPA/WPA2 personal, WAPI, WPS2.0
- 6. Integrate high efficiency switching regulator
- 7. Supports 802.11w protected managed frames
- 8. Support WPS
- 9. Supports Wi-Fi Direct
- 10. Antenna: IPEX antenna
- 11. USB 2.0/1.1 USB-A type and 2.54-pitch 4 pin header (option)

interface

13. Support Windows XP, Vista, Win 7, Win8, Linux 2.6.x



## Application:

Desk-Top/Mini PC/Note-Book

Mobile, portable smart device

Set-top box/Media player

Tablet

Blue-ray Disk

## Property:

Main Chip	Mediatek MT7610U			
WiFi				
Standard	IEEE 802.11 a/b/g/n/ac			
Frequency	2.4~2.4835GHz			
	5.15GHx ~5.850GHz			
USB type	2.0/1.1			
Data Rates	11ac: MCS0 ~MCS9			
	11n: MCS0~MCS7			
	11a/g: 6~54 Mbps			
	11b:1~11 Mbps			
Modulation	802.11ac:OFDM(BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) 802.11a/n/g:(BPSK, QPSK, 16-QAM, 64-QAM)			
	802.11b:(DBSK,DQPSK,CCK)			
TX power	802.11ac HT20: 12+/-1.5dBm@MCS8			
	802.11ac HT40: 12+/-1.5dBm@MCS9			
	802.11ac HT80: 12+/-1.5dBm@MCS9			
	802.11a/g: 12 +/-1.5dBm@54Mbps			



#### TWR0073

	802.11gn HT20: 12+/-1.5dBm@MCS7		
	802.11gn HT40: 12+/-1.5dBm@MCS7		
	802.11an HT20: 12+/-1.5dBm@MCS7		
	802.11an HT20: 12+/-1.5dBm@MCS7		
	802.11b: 15+/-1.5dBm@11Mbps		
RX Sensitivity	802.11ac: -59dBm+/-2dBm @HT20 MCS8		
	802.11ac: -56dBm+/-2dBm @HT40 MCS9		
	802.11ac: -51dBm+/-2dBm @HT80 MCS9		
	802.11n: -66dBm+/-2dBm @HT20 MCS7		
	802.11n: -63dBm+/-2dBm @HT40 MCS7		
	802.11a/g:-67dBm+/-2dBm@54Mbps		
	802.11b:-73dBm+/-2dBm@11Mbps		
Power	Idle : 38mA		
	Continue RX: 240mA		
Consumption	Continue TX: 355mA		
Environment	Operation Temperature Range -5~50°C		
	Storing Temperature Range -10~70°C		
	Operation Humidity: 5% ~ 90%		
	Storing Humidity: 5% ~ 90%		

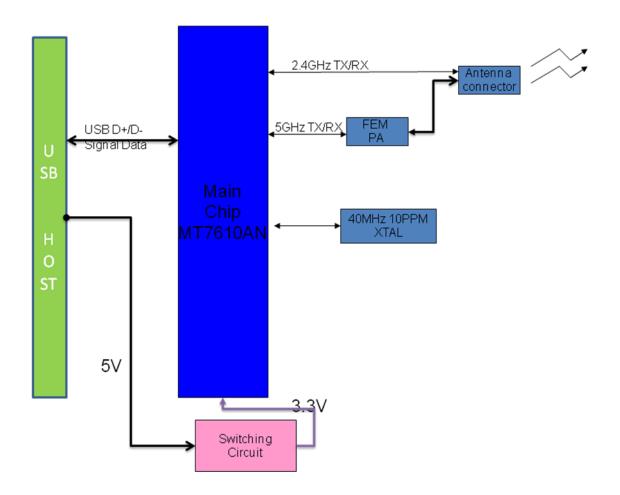
## Pin out:

Pin	Namo	In/Out/P/G	Function
no.	Name	in/Out/P/G	Function
1	DC	Р	5V power input
2	DM	I/O	USB D-
3	DP	I/O	USB D+
4	GND	G	Ground pin



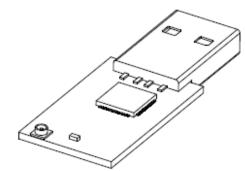
## Function Block Diag.

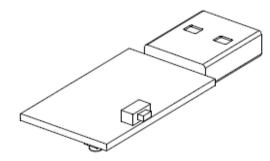
## UW2001 Module Function Block Diag.



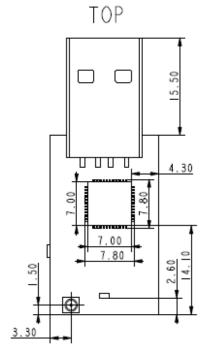
## Module PCB Dimension:

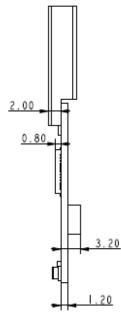
## USB A Type:

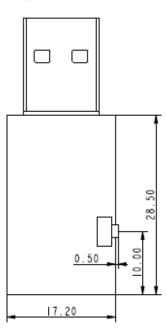




BOTTOM

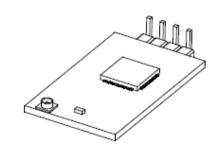


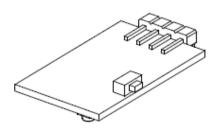




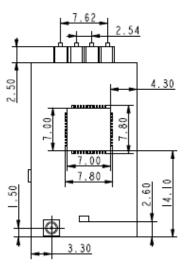


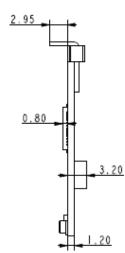
### **DIP-4 2.54 Type:**



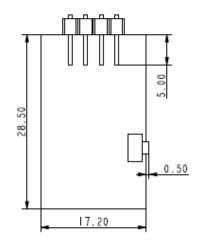


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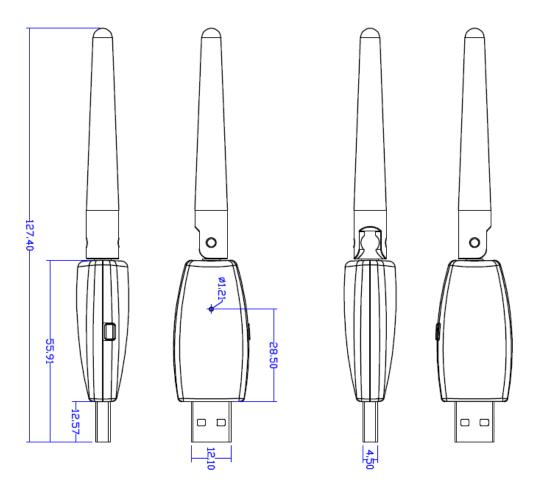


BOTTOM





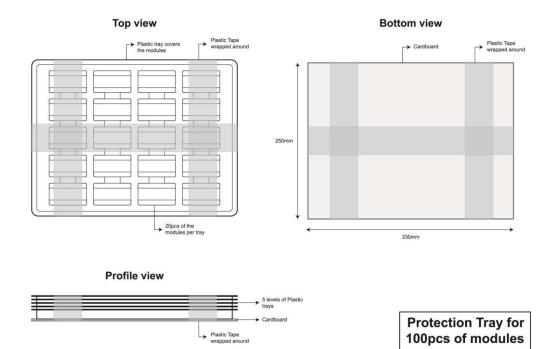
#### ME case dimension



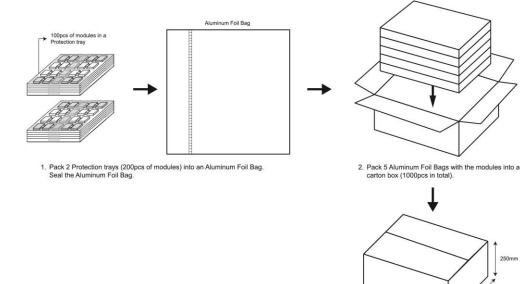




#### Module Packing





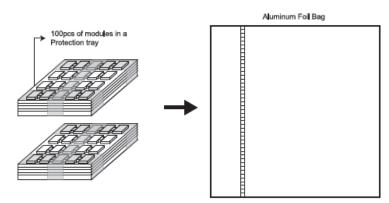


**Carton Box Packing Instruction** 

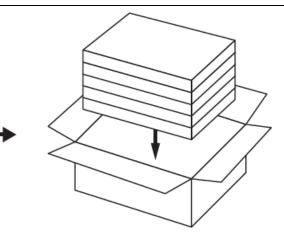
Carton Size: 471 x 321 x 250mm Q'TY: 1000 pcs

471mm

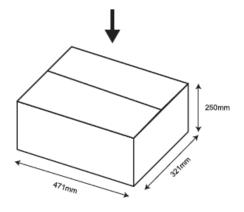
250mm



1. Pack 2 Protection trays (200pcs of modules) into an Aluminum Foil Bag. Seal the Aluminum Foil Bag.



2. Pack 5 Aluminum Foil Bags with the modules into a carton box (1000pcs in total).



Carton Size: 471 x 321 x 250mm Q'TY: 1000 pcs

Carton Box Packing Instruction



#### **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Pulse: TWR0073