

# WUBM-273ACN

## 802.11ac/abgn Dual-Band

## 2T2R USB Module



### Wireless USB Module for Embedded Solution

The WUBM-273ACN is powered by MediaTek radio chip and features 2x2 11ac technology for higher throughput performance, reliability and range. It is designed to meet the demanding performance requirements of critical embedded applications.

#### Embedded Application :

Applications include medical devices, security systems, industrial, PoS, digital signs, Gaming machine, Medical equipment, industrial tablet PC's, handheld devices, thin client devices, and many more.

#### Key Feature :

- MediaTek MT7612U
- Antenna: U.FL \* 2 for 2T2R
- Data Rates: allows link speeds up to 867Mbps.
- Support Windows XP, Win7, Win8.1, Linux driver

#### Specification :

<b>Standards:</b>	IEEE 802.11ac/abgn (2T2R)
<b>Chipset:</b>	MediaTek MT7612U
<b>Data Rate:</b>	802.11b: 11Mbps / 802.11a/g: 54Mbps / 802.11n: 300Mbps / 802.11ac: 867Mbps
<b>Operating Frequency:</b>	IEEE 802.11 ac/abgn ISM Band, 2.400GHz ~ 2.4835GHz, 5.150MHz ~ 5.825MHz *Subject to local regulations
<b>Interface:</b>	USB Type A or 12-pin wafer connector
<b>Form Factor:</b>	USB
<b>Antenna:</b>	2 x UFL connector or printed antenna for 2T2R
<b>Modulation:</b>	802.11b: DSSS (DBPSK, DQPSK, CCK) 802.11a/g: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11n: OFDM (BPSK, QPSK, 16-QAM, 64-QAM) 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM)
<b>Operating Voltage:</b>	5V
<b>Operating Temperature Range:</b>	0°C ~ +50°C (Operating) / -20°C ~ +70°C (Storage)
<b>Humidity (Non-Condensing):</b>	Operating Humidity (non-condensing): 10% ~ 85% Storage Humidity (non-condensing): 5% ~ 90%
<b>Power Consumption:</b>	Continue TX: 460mA / Continue RX: 390mA
<b>Dimension (in mm):</b>	55 x 25 x 4.2 mm (±0.5mm)
<b>Weight (g):</b>	≤ 7g
<b>Driver Support:</b>	Windows XP, Win7, Win8.1, Linux
<b>Security</b>	64/128-bits WEP, WPA, WPA2, 802.1x

OUTPUT POWER & SENSITIVITY		
802.11g		
Data Rate	Tx $\pm$ 2dBm	Rx Sensitivity
54Mbps	13dBm	$\leq$ -65dBm

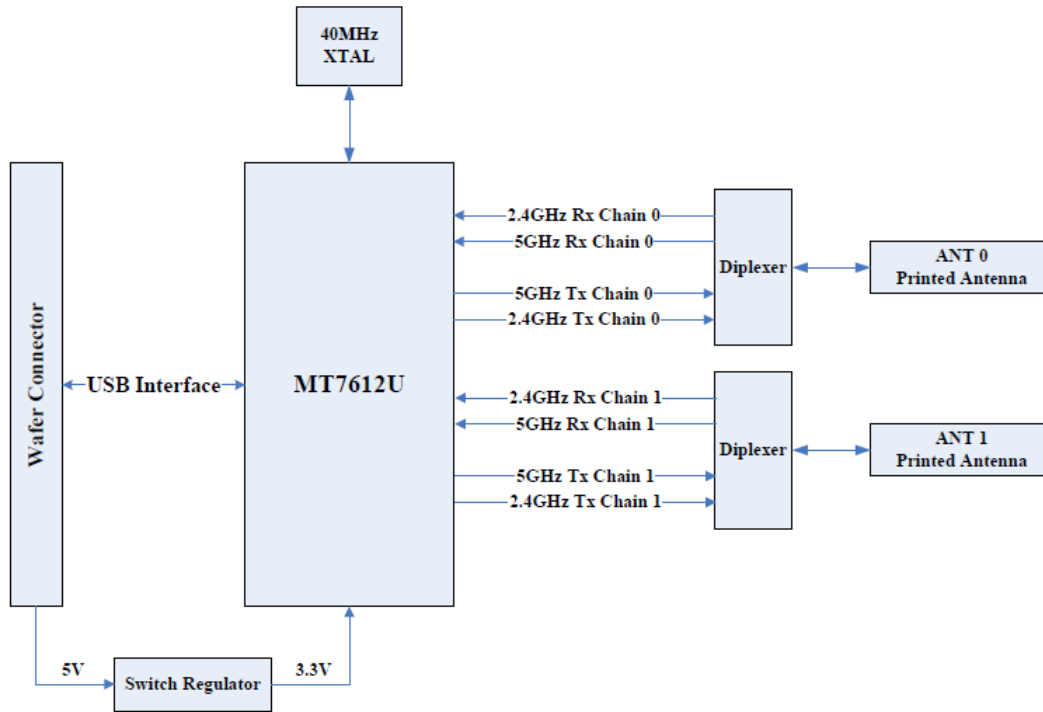
802.11n / 2.4GHz				
	Data Rate	Tx $\pm$ 2dBm (1TX)	Tx $\pm$ 2dBm (2TX)	Rx Sensitivity
HT20	MCS7	12dBm	15dBm	$\leq$ -64dBm
HT40	MCS7	12dBm	15dBm	$\leq$ -61dBm

802.11a		
Data Rate	Tx $\pm$ 2dBm	Rx Sensitivity $\pm$ 2dBm
54Mbps	12dBm	$\leq$ -65dBm

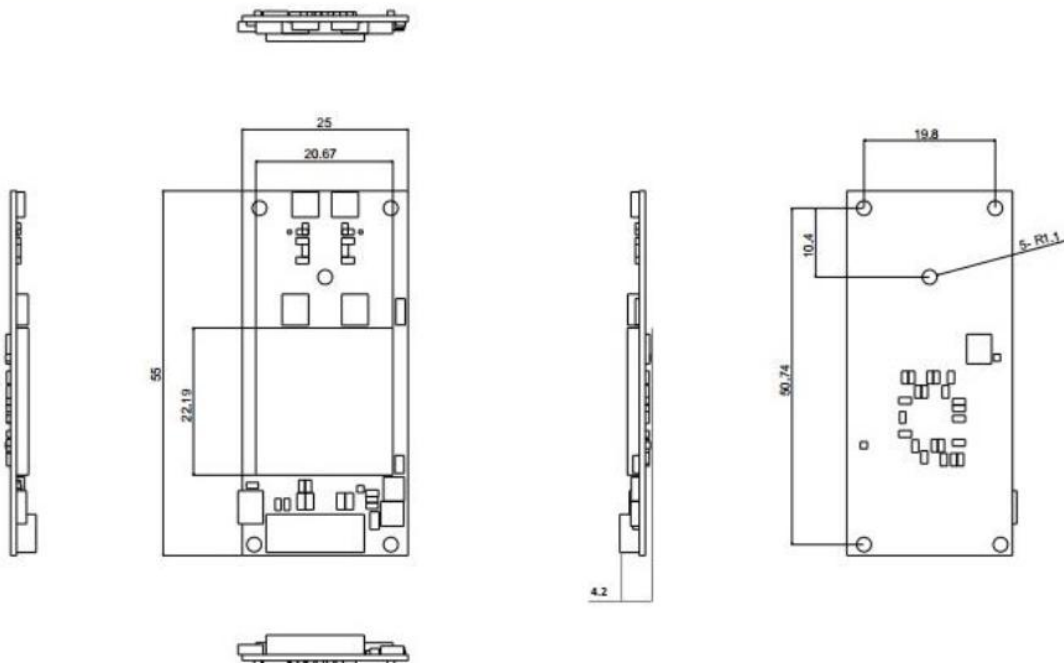
802.11n / 5GHz				
	Data Rate	Tx $\pm$ 2dBm (1TX)	Tx $\pm$ 2dBm (2TX)	Rx Sensitivity
HT20	MCS7	11dBm	14dBm	$\leq$ -64dBm
HT40	MCS7	11dBm	14dBm	$\leq$ -61dBm

802.11ac				
	Data Rate	Tx $\pm$ 2dBm (1TX)	Tx $\pm$ 2dBm (2TX)	Rx Sensitivity
HT80	MCS9	10dBm	13dBm	$\leq$ -51dBm

### Block Diagram



### Mechanical Dimension (mm)



## Pin Assignment

Pin#	Pin Name	Description	Pin#	Pin Name	Description
1	RF_Option(OPT)	Input and active low signal. This signal is used by the system to disable radio operation on add-in card that implement radio frequency applications. When implemented, this signal requires a pull-up resistor on the card	2	WL_LED indicator	Output and open drain active low signal. This signal is used to allow the USB module add-in card to provide status indicators via LED devices that will be provided by the system
3	Reserve	-	4	Reserve	-
5	Reserve	-	6	Reserve	-
7	USB_D+	USB serial data	8	GND	GND
9	USB_D-	USB serial data	10	Reserve	-
11	+5V	+5V	12	Reserve	-

\*NA→No active, OPT →Optional