

Radio Test Report

Report No.: RJBARR-WTW-P21100969H

Test Model: MT7902

Received Date: 2022/9/28

Issued Date: 2022/10/6

Applicant: MediaTek Inc.

Address: No. 1, Dusing 1st Rd., Hsinchu Science Park, Hsinchu City, 30078 Taiwan

Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Hsin Chu Laboratory

Lab Address: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,
Taiwan



This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.

Table of Contents

Release Control Record	3
1 Certificate of Conformity	4
2 General Information	5
2.1 General Description of EUT	5
Appendix - Information of the Testing Laboratories	11

Release Control Record

Issue No.	Description	Date Issued
RJBARR-WTW-P21100969H	Original release	2022/10/6

1 Certificate of Conformity

Product: 1TX 11ax (WiFi6E) BW160 + BT/BLE Combo Card

Brand: MediaTek

Test Model: MT7902

Applicant: MediaTek Inc.

Standards: ARIB STD-T66 (V3.7),
MIC No.88(2004) Test method of specified radio equipments
Annex no. 43 Article 2 paragraph 1 item (19)

RCR STD-33 (V5.4),
MIC No.88(2004) Test method of specified radio equipments
Annex no. 44 Article 2 paragraph 1 item (19)-2

Certification Ordinance Article 2-1-19-3

Measurement was conducted by the temporary test method which TELEC submitted to the Minister for Internal Affairs and Communications based on the Ordinance Concerning Technical Regulations Conformity Certification etc. of Specified Radio Equipment in Annex 1, the Ministry of Internal Affairs and Communication notification in Article 88, Paragraph 2

This report is issued as a supplementary report. This report shall be used combined together with its original report.

Prepared by : Vivian Huang , **Date:** 2022/10/6
Vivian Huang / Specialist

Approved by : May Chen , **Date:** 2022/10/6
May Chen / Manager

2 General Information

2.1 General Description of EUT

Product	1TX 11ax (WiFi6E) BW160 + BT/BLE Combo Card
Brand	MediaTek
Test Model	MT7902
Nominal Voltage	3.3Vdc from host equipment
Modulation Type	<p>For WLAN CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM 256QAM for OFDM in 11ac mode and VHT in 2.4GHz 1024QAM for OFDMA in 11ax mode</p> <p>For BT-EDR: GFSK, $\pi/4$-DQPSK, 8DPSK For BT-LE: GFSK</p>
Modulation Technology	<p>For WLAN: DSSS, OFDM, OFDMA For BT-EDR: FHSS For BT-LE: DTS</p>
Transfer Rate	<p>For WLAN: 802.11b: up to 11 Mbps 802.11a/g: up to 54 Mbps 802.11n: up to 150 Mbps 802.11ac: up to 866.7 Mbps 802.11ax: up to 1201.0 Mbps For BT-EDR: Up to 3 Mbps For BT-LE: Up to 2 Mbps</p>
Operating Frequency	<p>For WLAN: 2.4GHz: 802.11b: 2412 ~ 2484 MHz 802.11g/n (HT20), VHT20, 802.11ax (HE20): 2412 ~ 2472 MHz 802.11n (HT40), VHT40, 802.11ax (HE40): 2422 ~ 2462 MHz 5GHz: 802.11a/n/ac/ax (W52+W53): 5150 ~ 5350MHz 802.11a/n/ac/ax (W56): 5470 ~ 5730MHz For BT: 2402 ~ 2480 MHz</p>
Number of Channel	<p>For WLAN 2.4GHz: 802.11b: 14 802.11g/n (HT20), VHT20, 802.11ax (HE20): 13 802.11n (HT40), VHT40, 802.11ax (HE40): 9 5GHz: (W52+W53) 802.11a/n (HT20)/ac (VHT20), 802.11ax (HE20): 8 802.11n (HT40)/ac (VHT40), 802.11ax (HE40): 4 802.11ac (VHT80), 802.11ax (HE80): 2 802.11ac (VHT160), 802.11ax (HE160): 1 5GHz: (W56) 802.11a/n (HT20)/ac (VHT20), 802.11ax (HE20): 12 802.11n (HT40)/ac (VHT40), 802.11ax (HE40): 6 802.11ac (VHT80), 802.11ax (HE80): 3 802.11ac (VHT160), 802.11ax (HE160): 1 For BT-EDR: 79 For BT-LE: 40</p>

Antenna Type	Refer to note
Antenna Connector	Refer to note
Accessory Device	NA
Data Cable Supplied	NA

Note:

1. This report is issued as a supplementary report to BV CPS report as below test report:

Function	Report No.
WLAN_2.4GHz	RJBARR-WTW-P21100969-2
WLAN_5GHz	RJBARR-WTW-P21100969-3
BT-EDR	RJBARR-WTW-P21100969-1
BT-LE	RJBARR-WTW-P21100969

2. The difference compared with original report is adding antennas and according to EUT's specification by the customer judgement, there is no additional tested.

Original								
Antenna No.	RF Chain NO.	Brand	Model	Antenna Net Gain (dBi)	Frequency range (GHz)	Antenna Type	Connector Type	Cable Length
1	Chain0	PSA	RFMTA340718EMLB302	3.18	2.4~2.4835	PIFA	i-pex(MHF)	200mm
				4.92	5.15~5.85			
2	Chain0	PSA	RFMTA311020EMMB301	1.71	2.4~2.4835	PIFA	i-pex(MHF)	200mm
				4.82	5.15~5.85			
				4.76	5.925~6.425			
				4.29	6.425~6.525			
				4.61	6.525~6.875			
4.09	6.875~7.125							

Newly

Ant. No.	Brand	Main/Aux	Model	Peak gain with cable loss	Cable Loss (dB)	Antenna Type	Connector Type	Cable Length (mm)
3	High-Tek Electronics Co., Ltd	Main	DQ60ACQD0E0	-1.15 dBi @2.4GHz 0.76 dBi @5GHz 1.39 dBi @5.925~6.425GHz 0.38 dBi @6.425~6.525GHz 1.63 dBi @6.525~6.875GHz 1.24 dBi @6.875~7.125GHz	1.28 dB @2.4GHz 1.98 dB @5GHz 2.06 dB @5.925~6.425GHz 2.09 dB @6.425~6.525GHz 2.14 dB @6.525~6.875GHz 2.26 dB @6.875~7.125GHz	PIFA	I-PEX	422
4	High-Tek Electronics Co., Ltd	Main	DQ60ACQD0E1	-0.26 dBi @2.4GHz 1.87 dBi @5GHz 1.24 dBi @5.925~6.425GHz 2.43 dBi @6.425~6.525GHz 2.54 dBi @6.525~6.875GHz -0.65 dBi @6.875~7.125GHz	1.28 dB @2.4GHz 1.82 dB @5GHz 2.06 dB @5.925~6.425GHz 2.09 dB @6.425~6.525GHz 2.14 dB @6.525~6.875GHz 2.26 dB @6.875~7.125GHz	PIFA	I-PEX	422

Ant. No.	Brand	Main/Aux	Model	Peak gain with cable loss	Cable Loss (dB)	Antenna Type	Connector Type	Cable Length (mm)
5	INPAQ	Main	DQ600500401 (WA-P-LE-05-004)	2.90 dBi @2.4GHz 2.91 dBi @5GHz 2.92 dBi @5.925~6.425GHz 1.45 dBi @6.425~6.525GHz 2.96 dBi @6.525~6.875GHz 2.96 dBi @6.875~7.125GHz	1.17 dB @2.4GHz 1.83 dB @5GHz 1.91 dB @5.925~6.425GHz 1.95 dB @6.425~6.525GHz 2.00 dB @6.525~6.875GHz 2.06 dB @6.875~7.125GHz	PIFA	IPEX MHF-4L	422
6	INPAQ	Main	DQ600500700 (WA-P-LE-05-007)	2.99 dBi @2.4GHz 2.93 dBi @5GHz 2.48 dBi @5.925~6.425GHz 0.92 dBi @6.425~6.525GHz 2.77 dBi @6.525~6.875GHz 2.84 dBi @6.875~7.125GHz	1.17 dB @2.4GHz 1.74 dB @5GHz 1.91 dB @5.925~6.425GHz 1.95 dB @6.425~6.525GHz 2.00 dB @6.525~6.875GHz 2.06 dB @6.875~7.125GHz	PIFA	IPEX MHF-4L	422

Ant. No.	Brand	Main/Aux	Model	Peak gain with cable loss	Cable Loss (dB)	Antenna Type	Connector Type	Cable Length (mm)
7	High-Tek Electronics Co., Ltd	Main	DQ60ACQD0D6	2.30 dBi @2.4GHz -0.14 dBi @5GHz -1.07 dBi @5.925~6.425GHz -1.43 dBi @6.425~6.525GHz -1.27 dBi @6.525~6.875GHz -1.20 dBi @6.875~7.125GHz	1.73 dB @2.4GHz 2.60 dB @5GHz 2.89 dB @5.925~6.425GHz 2.92 dB @6.425~6.525GHz 3.00 dB @6.525~6.875GHz 3.15 dB @6.875~7.125GHz	PIFA	Caimei	462
8	High-Tek Electronics Co., Ltd	Main	DQ60ACQD0D7	1.65 dBi @2.4GHz -0.09 dBi @5GHz -0.98 dBi @5.925~6.425GHz -1.01 dBi @6.425~6.525GHz -0.96 dBi @6.525~6.875GHz -1.07 dBi @6.875~7.125GHz	1.73 dB @2.4GHz 2.68 dB @5GHz 2.89 dB @5.925~6.425GHz 2.92 dB @6.425~6.525GHz 3.00 dB @6.525~6.875GHz 3.15 dB @6.875~7.125GHz	PIFA	I-PEX	462

Ant. No.	Brand	Main/Aux	Model	Peak gain with cable loss	Cable Loss (dB)	Antenna Type	Connector Type	Cable Length (mm)
9	INPAQ	Main	DQ601100101	2.52 dBi @2.4GHz 2.80 dBi @5GHz 2.59 dBi @5.925~6.425GHz 2.56 dBi @6.425~6.525GHz 2.66 dBi @6.525~6.875GHz 2.79 dBi @6.875~7.125GHz	1.71 dB @2.4GHz 2.60 dB @5GHz 2.80 dB @5.925~6.425GHz 2.87 dB @6.425~6.525GHz 2.94 dB @6.525~6.875GHz 3.04 dB @6.875~7.125GHz	PIFA	IPEX MHF-4L	462
10	INPAQ	Main	DQ601100200	2.32 dBi @2.4GHz 2.68 dBi @5GHz 2.63 dBi @5.925~6.425GHz 2.36 dBi @6.425~6.525GHz 2.41 dBi @6.525~6.875GHz 2.76 dBi @6.875~7.125GHz	1.71 dB @2.4GHz 2.65 dB @5GHz 2.80 dB @5.925~6.425GHz 2.87 dB @6.425~6.525GHz 2.94 dB @6.525~6.875GHz 3.04 dB @6.875~7.125GHz	PIFA	IPEX MHF-4L	462

3. The above EUT information is declared by manufacturer and for more detailed features description, please refers to the manufacturer's specifications or user's manual.
4. Detail antenna specification please refer to antenna datasheet and/or antenna measurement report.

Appendix - Information of the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

Lin Kou EMC/RF Lab

Tel: 886-2-26052180

Fax: 886-2-26051924

Hsin Chu EMC/RF/Telecom Lab

Tel: 886-3-6668565

Fax: 886-3-6668323

Hwa Ya EMC/RF/Safety Lab

Tel: 886-3-3183232

Fax: 886-3-3270892

Email: service.adt@tw.bureauveritas.com

Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

--- END ---