Wi-Fi CERTIFIED™ Certificate

This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs

Certification ID: WFA133712

Product Info

Date of Certification	February 24, 2025
Company	MediaTek Inc.
Product Name	MediaTek 2x2 WiFi 7 - MT7990NIC
Product Model Variant	MediaTek 2x2 WiFi 7 - MT7990NIC
Model Number	MediaTek 2x2 WiFi 7 - MT7990NIC
Category	Other
Sub-category	Embedded Module

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 3 Wi-Fi Protected Setup™
Network management	WMM® WMM®-Power Save Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2024-10 Wi-Fi Enhanced Open™ 2023-12
Wi-Fi (MAC/PHY)	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Spectrum & Regulatory Wi-Fi CERTIFIED 6® Release 2 Wi-Fi CERTIFIED 7™ Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g

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CLASSIFICATION	CERTIFICATION
Wi-Fi (MAC/PHY)	Wi-Fi CERTIFIED™ n

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Wi-Fi Components

Wi-Fi Component Operating System
Linux

Wi-Fi Component Firmware
8.3.1.1

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	2	2
5 GHz	2	2

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 GHz
40 MHz Channel Width in 2.4 GHz

5 GHz Spectrum Capabilities

20 MHz Channel Width in 5 GHz
40 MHz Channel Width in 5 GHz
80 MHz Channel Width in 5 GHz
160 MHz Channel Width in 5 GHz

Passpoint® Release 3

Roaming Consortium Selection
Terms and Conditions
Venue Information

Protected Management Frames

Spectrum & Regulatory

802.11d
802.11h

WMM®

WMM®-Power Save

Legacy Power Save
Unschedule auto PS

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods
192-bit security
Fast Transition OTA on WPA3-Enterprise
Fast Transition OTA on WPA3-Enterprise transition mode

WPA3™-Personal 2024-10

AKM 24
AKM 25

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WPA3™-Personal 2024-10 (continued)

Fast Transition OTA on WPA3-Personal

Fast Transition OTA on WPA3-Personal transition mode

Beacon Protection

SAE-Public Key

Operating Channel Validation

Wi-Fi Agile Multiband™

Automatically populate BSS Transition candidate list

Cellular Data aware

Fast Transition OTA on WPA2-Personal

Wi-Fi CERTIFIED 6® Release 2

A-MPDU with A-MSDU

Basic Trigger frame in HE MU PPDU

Beamforming sounding

BSRP Trigger frame

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL MU-MIMO

DL OFDMA

Individual Target Wake Time

LDPC Rx

LDPC Tx

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

MU EDCA Parameter Set element

MU-BAR Trigger frame

MU-RTS Trigger frame

M-BSSID

Operating mode subfield in A-Control field

Operating mode indication

Wi-Fi CERTIFIED 6® Release 2 (continued)

Operating mode UL MU Rx

SU beamformer

SU-MIMO

TXOP RTS Threshold

UL OFDMA

Wi-Fi 6 Release 2 features

- UL MU-MIMO
- UL MU Control
- UL Extended Range
- Target Wake Time information frames
- Broadcast Target Wake Time
- Dynamic MU SMPS
- M-BSSID control frames
- Preamble Puncturing

Wi-Fi CERTIFIED 7™

Advertised TID-to-link mapping

A-MPDU with A-MSDU

Beamforming sounding

BSRP Trigger frame

BSS critical update

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

Compressed Block Ack Rx (buffer size 512)

Compressed Block Ack Tx (buffer size 512)

DL MU-MIMO

DL OFDMA

Dynamic MU SMPS

EMLSR (Enhanced Multilink Single-Radio)

EPCS (Emergency Preparedness Communications Services) priority access

LDPC Rx

LDPC Tx

Load Balancing in MLO

Wi-Fi CERTIFIED 7™ (continued)

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

MCS 12-13 Rx

MCS 12-13 Tx

Multi-link reconfiguration – AP removal

Multi-link reconfiguration – AP restart

Multi-RU

MU-RTS Trigger frame

Operating mode indication

Static puncturing

STR (Simultaneous Transmit and Receive)

SU-MIMO

Triggered uplink access optimization

UL MU-MIMO

UL OFDMA

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU

DL MU-MIMO

Extended 5 GHz Channel Support

LDPC Rx

LDPC Tx

MCS 8 Rx

MCS 8-9 Rx

RTS with BW Signaling

Short Guard Interval

STBC

SU beamformer

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx

HT Duplicate Mode

OBSS on Extension Channel

RIFS

Short Guard Interval

STBC

Wi-Fi Enhanced Open™ 2023-12

Wi-Fi Protected Setup™

PIN

Pushbutton