



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 ID: WFA67678

Product Info

Date of Certification	December 19, 2019
Company	Realtek Semiconductor Corporation
Product Name	Realtek RTL8821CE 1T1R 802.11ac/abgn plus BT Combo Module
Product Model Variant	2019-12-19 (WFA67678 - 10184000)
Model Number	RTL8821CE Module
Category	Other
Sub-category	Embedded Module

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Alternative topologies	Wi-Fi Direct®
Network management	WMM®
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04 WPA3™-Enterprise 2018-04 WPA3™-Personal 2019-08
Wi-Fi (MAC/PHY)	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Spectrum & Regulatory Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n

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Role: Station

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Wi-Fi Components

Wi-Fi Component Operating System

Windows 10

Wi-Fi Component Firmware

2023.34.0630.2016

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	1	1
5 GHz	1	1

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

Protected Management Frames

Spectrum & Regulatory

802.11h

WMM®

WPA2™-Enterprise 2018-04

EAP methods
EAP TLS
EAP TTLS

WPA2™-Enterprise 2018-04 (continued)

PEAPv0

WPA2™-Personal 2018-04

WPA3™-Enterprise 2018-04

EAP methods
EAP TLS
EAP TTLS
PEAPv0

WPA3™-Personal 2019-08

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

Extended 5 GHz Channel Support
RTS with BW Signaling
A-MPDU with A-MSDU
DL MU-MIMO
MCS 8-9 Rx
Short Guard Interval

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Wi-Fi CERTIFIED™ ac (continued)

LDPC Tx
SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx
OBSS on Extension Channel
Short Guard Interval

Wi-Fi Direct®

Wi-Fi Protected Setup™

PIN
Pushbutton

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