



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: WFA16990

Product Info

Date of Certification	August 28, 2014
Company	Realtek Semiconductor Corporation
Product Name	Realtek RTL8812AE 2T2R 802.11ac/a/b/g/n miniCard
Product Model Variant	2014-08-28 (WFA16990 - 2201608)
Model Number	RTL8812AE
Category	Other
Sub-category	Embedded Module

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Applications & Services	Miracast®
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Direct®
Optimization	WMM®
Security	WPA2™-Enterprise WPA2™-Personal
Spectrum & Regulatory Features	Spectrum & Regulatory



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Role: Station

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Wi-Fi Components

Wi-Fi Component Operating System

Windows 7, version:Win7 x86

Wi-Fi Component Firmware

7010.8.321.2014

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

Spectrum & Regulatory

802.11h

WMM®

WPA2™-Enterprise

EAP methods
EAP TLS
PEAPv0

WPA2™-Personal

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
LDPC Rx
MCS 8-9 Rx
Short Guard Interval
STBC
LDPC Tx
SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx
RIFS
Short Guard Interval

Wi-Fi Direct®

Wi-Fi Direct Services



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Wi-Fi Direct® (continued)

- Wi-Fi Direct Send - Transmit
- Wi-Fi Direct Send - Receive
- Wi-Fi Direct for DLNA® - Receive
- Miracast - Display
- Miracast - Source
- Wi-Fi Direct Toolkit

Wi-Fi Protected Setup™

- PIN
- Pushbutton



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Role: Source

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Wi-Fi Component Firmware

7010.8.321.2014

RF Architecture

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

Certifications

Miracast®



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Role: Display

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Wi-Fi Components

Wi-Fi Component Operating System

Windows 7, version:Win7 x86

Wi-Fi Component Firmware

7010.8.321.2014

RF Architecture

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

Certifications

Miracast®