



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

Certification ID: WFA136162

Product Info

Date of Certification October 20, 2025

Company NXP Semiconductors

Product Name AW590

Product Model Variant AW590_R-10.21

Model Number AW590

Category Other

Sub-category Reference Design

Summary of Certifications

CLASSIFICATION CERTIFICATION

Access Wi-Fi Protected Setup™

Alternative topologies Wi-Fi Direct®

Network management WMM®

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™ a
Wi-Fi CERTIFIED™ b
Wi-Fi CERTIFIED™ g
Wi-Fi CERTIFIED™ n



Certification ID: WFA136162



Role: Access Point Page 2 of 5

W	li-	Fi	Co	m	noa	nents
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Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

p149.81

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

802.11d 802.11h

WPA3™-Personal 2024-10

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU

Extended 5 GHz Channel Support

LDPC Rx

LDPC Tx

MCS 8 Rx

MCS 8-9 Rx

RTS with BW Signaling

Short Guard Interval

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

WMM®

Max Throughput

WPA2[™]-Personal 2021-01

Wi-Fi CERTIFIED™ n

HT Duplicate Mode
OBSS on Extension Channel

Short Guard Interval

A-MPDU Tx







Role: Access Point	Page 3 of 5
Wi-Fi Enhanced Open™ 2023-12	
Wi-Fi Protected Setup™	
PIN Pushbutton	



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Role: Station Page 4 of 5

Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

p149.81

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
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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

802.11d 802.11h

WMM®

Max Throughput

WPA2[™]-Enterprise 2018-04

WPA2™-Enterprise 2018-04 (continued)

EAP methods

EAP AKA

EAP AKA Prime

EAP FAST-GTC

EAP FAST-MSCHAPv2

EAP SIM

EAP TLS

EAP TTLS

PEAPv0

PEAPv1

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods

EAP AKA

EAP AKA Prime

EAP FAST-MSCHAPv2

EAP FAST-GTC

EAP SIM

EAP TLS

EAP TTLS

PEAPv0



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Role: Station Page 5 of 5

WPA3™-Enterprise 2022-12 (continued)

PEAPv1

192-bit security

192-bit security RSA 3K with the

TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 cipher suite

192-bit security RSA 3K with the

TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384

cipher suite

Server Certificate Validation

WPA3™-Personal 2024-10

Wi-Fi Agile Multiband™

ANQP

ANQP-based Neighbor report

BTM Query

Cellular Data capable

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

LDPC Rx

MCS 8 Rx

MCS 8-9 Rx

Short Guard Interval

LDPC Tx

SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx

HT Duplicate Mode

OBSS on Extension Channel

Power Management

Short Guard Interval

Wi-Fi Direct®

Wi-Fi Direct with WPA2

Wi-Fi Enhanced Open™ 2023-12

Wi-Fi Protected Setup™

PIN

Pushbutton