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: WFA121553

Product Info

Date of Certification	September 12, 2024
Company	NXP Semiconductors
Product Name	Aw690
Product Model Variant	AW690-R10.12
Model Number	AW690
Category	Other
Sub-category	Reference Design

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED 6® Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Direct® Wi-Fi Enhanced Open™ 2023-12
Optimization	WMM® Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2023-12

Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA121553

CLASSIFICATION	CERTIFICATION
Spectrum & Regulatory Features	Spectrum & Regulatory

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Wi-Fi Components

Wi-Fi Component Operating System

Linux

Wi-Fi Component Firmware

p149.50

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

WMM®

Max Throughput

WPA2™-Personal 2021-01

WPA3™-Personal 2023-12

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU
LDPC Rx
LDPC Tx
MCS 8-9 Rx
MCS 8-9 Tx
MCS 10-11 Rx
MCS 10-11 Tx
SU-MIMO
TXOP RTS Threshold

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

Wi-Fi CERTIFIED™ n

HT Duplicate Mode
OBSS on Extension Channel
Short Guard Interval
A-MPDU Tx

Wi-Fi Enhanced Open™ 2023-12

Wi-Fi Protected Setup™

PIN
Pushbutton

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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

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 2023-12

Wi-Fi Agile Multiband™

ANQP

ANQP-based Neighbor report

BTM Query

Cellular Data capable

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Beamforming sounding

BSRP Trigger frame

Compressed Block Ack Rx (buffer size 256)

Compressed Block Ack Tx (buffer size 256)

DL MU-MIMO

DL MU PPDU multi-tone

HE NDP

LDPC Tx

LDPC Rx

MCS 10-11 Rx

MCS 10-11 Tx

MCS 8-9 Rx

MCS 8-9 Tx

MU EDCA Parameter Set element

MU-BAR Trigger frame

Wi-Fi CERTIFIED 6® (continued)

MU-RTS Trigger frame

Operating mode control field

SU beamformee

SU-MIMO

UL OFDMA

UL TB PPDU multi-tone

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