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: WFA127787

Product Info

Date of Certification	January 5, 2024
Company	Broadcom Corporation
Product Name	BCM4398
Product Model Variant	Wi-Fi 7
Model Number	BCM4398
Category	Other
Sub-category	Embedded Module

Summary of Certifications

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

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CLASSIFICATION	CERTIFICATION
Spectrum & Regulatory Features	Spectrum & Regulatory

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Wi-Fi Components

Wi-Fi Component Operating System
Linux

Wi-Fi Component Firmware
24.10.691.9-r-1044003:01-b4951bab

RF Architecture

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

Certifications

2.4 GHz Spectrum Capabilities

20 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

6 GHz Spectrum Capabilities

20 MHz Channel Width in 6 GHz
40 MHz Channel Width in 6 GHz
80 MHz Channel Width in 6 GHz
160 MHz Channel Width in 6 GHz
320 MHz channel width in 6 GHz

Protected Management Frames

Spectrum & Regulatory

Spectrum & Regulatory (continued)

802.11d
802.11h

WMM®

WPA2™-Enterprise 2018-04

EAP methods
    EAP TLS
    EAP TTLS
    PEAPv0
    PEAPv1

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods
    EAP TLS
    EAP TTLS
    PEAPv0
    PEAPv1

WPA3™-Enterprise 2022-12 (continued)

Fast Transition OTA on WPA3-Enterprise
Fast Transition OTA on WPA3-Enterprise transition mode
Fast Transition OTDS on WPA3-Enterprise
Server Certificate Validation

WPA3™-Personal 2023-12

AKM 24
AKM 25
Fast Transition OTA on WPA3-Personal
Fast Transition OTA on WPA3-Personal transition mode
Fast Transition OTDS on WPA3-Personal
Beacon Protection

Wi-Fi Agile Multiband™

ANQP
ANQP-based Neighbor report
Beacon Report Measurement Active Mode
Beacon Report Measurement Passive Mode
BTM Query
Cellular Data capable
Fast Transition OTA on WPA2-Personal
Fast Transition OTA on WPA2-Enterprise

Wi-Fi CERTIFIED 6® Release 2

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
HE NDP

Wi-Fi CERTIFIED 6® Release 2 (continued)

LDPC Tx
LDPC Rx
Individual Target Wake Time
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
MU-RTS Trigger frame
M-BSSID
Operating mode control field
Operating mode indication
SU beamformee
SU-MIMO
UL OFDMA
Wi-Fi 6E
     Multiple M-BSSID
Wi-Fi 6 Release 2 features
     UL MU-MIMO
     UL MU Control
     UL Extended Range
     M-BSSID control frames
     Preamble Puncturing

Wi-Fi CERTIFIED 7™

Advertised TID-to-link mapping
A-MPDU with A-MSDU
Beamforming sounding
BSS critical update
Compressed Block Ack Rx (buffer size 256)
Compressed Block Ack Tx (buffer size 256)
DL MU-MIMO
EMLSR (Enhanced Multilink Single-Radio)

Wi-Fi CERTIFIED 7™ (continued)

LDPC Rx
LDPC Tx
Load Balancing in MLO
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
Operating mode indication
    Operating mode indication for 320 MHz
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

Extended 5 GHz Channel Support
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
OBSS on Extension Channel
Power Management
Short Guard Interval

Wi-Fi Enhanced Open™ 2023-12

Wi-Fi QoS Management™

Default DSCP to UP mapping
DSCP QoS Map
DSCP Policy
Mirrored Stream Classification Service
    MSCS setup at association
Stream Classification Service
    SCS with QoS characteristics