



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: WFA120000

Product Info

Date of Certification	November 8, 2022
Company	Zebra Technologies
Product Name	TC53
Product Model Variant	2022-11-09
Model Number	TC53
Category	Phones
Sub-category	Phone, multi-mode (Wi-Fi and other)

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Applications & Services	Voice-Enterprise
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 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™ 2021-01
Optimization	WMM® WMM®-Admission Control WMM®-Power Save Wi-Fi Agile Multiband™ Wi-Fi Optimized Connectivity™ 2020 Wi-Fi QoS Management™
Security	Protected Management Frames WPA2™-Enterprise 2018-04



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Summary of Certifications (continued)

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CLASSIFICATION

CERTIFICATION

Security

WPA2™-Personal 2021-01
WPA3™-Enterprise 2020-02
WPA3™-Personal 2020-12

Spectrum & Regulatory Features

Spectrum & Regulatory



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Role: Station

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Wi-Fi Components

Wi-Fi Component Operating System

Android, version:11

Wi-Fi Component Firmware

1.1.2.0.461.0

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

Protected Management Frames

Spectrum & Regulatory

802.11h

Voice-Enterprise

WMM®

WMM®-Admission Control

WMM®-Power Save

Legacy Power Save

Unschedule auto PS

WPA2™-Enterprise 2018-04

EAP methods

EAP TLS

EAP TTLS

PEAPv0

PEAPv1

WPA2™-Personal 2021-01

WPA3™-Enterprise 2020-02

EAP methods



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WPA3™-Enterprise 2020-02 (continued)

EAP TLS
EAP TTLS
PEAPv0
PEAPv1
192-bit security
192-bit security RSA 3K with the
TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
cipher suite
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 2020-12

Fast Transition OTA on WPA3-Personal
Fast Transition OTA on WPA3-Personal transition mode
Fast Transition OTDS on WPA3-Personal

Wi-Fi Agile Multiband™

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

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU
Beamforming sounding
BSRP Trigger frame
Compressed Block Ack Rx (buffer size 256)

Wi-Fi CERTIFIED 6® (continued)

Compressed Block Ack Tx (buffer size 256)
DL MU PPDU multi-tone
DL MU-MIMO
HE NDP
Individual Target Wake Time
LDPC Rx
LDPC Tx
MCS 8-9 Rx
MCS 8-9 Tx
MCS 10-11 Rx
MCS 10-11 Tx
MU EDCA Parameter Set element
MU-BAR Trigger frame
MU-RTS Trigger frame
Operating mode control field
Operating mode subfield in A-Control field
Operating mode indication
SU beamformee
SU-MIMO
UL OFDMA
UL TB PPDU multi-tone
Wi-Fi 6E
Multiple M-BSSID

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 8-9 Rx
Short Guard Interval



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Wi-Fi CERTIFIED™ ac (continued)

STBC
LDPC Tx
SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

STBC
A-MPDU Tx
OBSS on Extension Channel
Short Guard Interval

Wi-Fi Direct®

Wi-Fi Enhanced Open™ 2021-01

Wi-Fi Optimized Connectivity™ 2020

Active Scan
Fast Transition OTA on WPA2-Enterprise
Pushbutton
Probe Deferral and Suppression

Wi-Fi QoS Management™