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: WFA119753

Product Info

Date of Certification	May 18, 2022
Company	Google, Inc.
Product Name	GP4BC
Product Model Variant	GP4BC
Model Number	GP4BC
Category	Phones
Sub-category	Phone, multi-mode (Wi-Fi and other)

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Applications & Services	Voice-Enterprise Wi-Fi Aware™
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™
Security	Protected Management Frames

CLASSIFICATION	CERTIFICATION
Security	WPA2™-Enterprise 2018-04
	WPA2™-Personal 2021-01
	WPA3™-Enterprise 2020-02
	WPA3™-Personal 2020-02
	WPA3™-Personal 2020-12
Spectrum & Regulatory Features	Spectrum & Regulatory

Wi-Fi CERTIFIED™ Certificate

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Wi-Fi Components

Wi-Fi Component Operating System

Android

Wi-Fi Component Firmware

20.25.485.7

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

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

WMM®

WPA2™-Personal 2021-01

WPA3™-Personal 2020-02

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU
LDPC Rx
LDPC Tx
MCS 8-9 Rx
MCS 8-9 Tx

Wi-Fi CERTIFIED 6® (continued)

Operating mode indication
SU-MIMO

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

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

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

OBSS on Extension Channel
Short Guard Interval
A-MPDU Tx

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Wi-Fi Components

Wi-Fi Component Operating System

Android

Wi-Fi Component Firmware

20.25.485.7

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 AKA
    EAP AKA Prime
    EAP SIM
    EAP TLS
    EAP TTLS
    PEAPv0
    PEAPv1

WPA2™-Personal 2021-01

WPA3™-Enterprise 2020-02

EAP methods

    EAP AKA

    EAP AKA Prime

    EAP SIM

    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

Server Certificate Validation

WPA3™-Personal 2020-12

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 Aware™

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Beamforming sounding

BSRP Trigger frame

DL MU PPDU multi-tone

DL MU-MIMO

Wi-Fi CERTIFIED 6® (continued)

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 indication

SU beamformee

SU-MIMO

UL OFDMA

UL TB PPDU multi-tone

Wi-Fi 6E

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

Extended 5 GHz Channel Support

A-MPDU with A-MSDU

DL MU-MIMO

LDPC Rx

MCS 8-9 Rx

Short Guard Interval

LDPC Tx

SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA119753

Wi-Fi CERTIFIED™ n

A-MPDU Tx

OBSS on Extension Channel

Short Guard Interval

Wi-Fi Direct®

Wi-Fi Enhanced Open™ 2021-01

Wi-Fi Protected Setup™

Pushbutton