



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: WFA83133

Product Info

Date of Certification	July 24, 2019
Company	Google, Inc.
Product Name	G020J
Product Model Variant	2019-07-24 (WFA83133 - merged)
Model Number	G020J
Category	Phones
Sub-category	Smartphone

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 Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Direct®
Optimization	TDLS WMM® WMM®-Admission Control WMM®-Power Save
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04 WPA3™-Enterprise 2018-04



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA83133



Summary of Certifications (continued)

Page 2 of 5

CLASSIFICATION

CERTIFICATION

Security

WPA3™-Personal 2019-04

WPA™-Enterprise

WPA™-Personal

Spectrum & Regulatory Features

Spectrum & Regulatory



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA83133



Role: Access Point

Page 3 of 5

Wi-Fi Components

Wi-Fi Component Operating System

Android, version:Q

Wi-Fi Component Firmware

3.2.0.60.0

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
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

802.11h

WMM®

WPA2™-Personal 2018-04

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

Wi-Fi CERTIFIED™ ac (continued)

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

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

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



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA83133



Role: Station

Page 4 of 5

Wi-Fi Components

Wi-Fi Component Operating System

Android, version:Q

Wi-Fi Component Firmware

3.2.0.60.0

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
40 MHz Channel Width in 2.4 GHz

WMM®-Power Save

Legacy Power Save
Unschedule auto PS

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

WPA2™-Enterprise 2018-04

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

Protected Management Frames

Spectrum & Regulatory

802.11h

WPA2™-Personal 2018-04

TDLS

WPA3™-Enterprise 2018-04

Voice-Enterprise

WMM®

EAP methods
EAP AKA
EAP AKA Prime
EAP SIM
EAP TLS

WMM®-Admission Control



Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA83133



Role: Station

Page 5 of 5

WPA3™-Enterprise 2018-04 (continued)

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

WPA3™-Personal 2019-04

WPA™-Enterprise

WPA™-Personal

Wi-Fi Aware™

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
STBC
LDPC Tx
SU beamformee

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

Wi-Fi CERTIFIED™ n (continued)

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

Wi-Fi Direct®

Wi-Fi Protected Setup™

PIN
Pushbutton