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: WFA109650

Product Info

Date of Certification	March 17, 2021
Company	FCNT LLC
Product Name	F-51A
Product Model Variant	add features
Model Number	F-51A
Category	Phones
Sub-category	Smartphone

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 2 Wi-Fi Easy Connect™ Wi-Fi Protected Setup™
Applications & Services	Miracast®
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™ 2021-01
Optimization	WMM® Wi-Fi Agile Multiband™
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01

Wi-Fi CERTIFIED™ Certificate

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CLASSIFICATION	CERTIFICATION
Security	WPA3™-Enterprise 2020-02
	WPA3™-Personal 2020-02
	WPA™-Enterprise
	WPA™-Personal

Wi-Fi CERTIFIED™ Certificate

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Wi-Fi Components

Wi-Fi Component Operating System

Android Version 11

Wi-Fi Component Firmware

VXXR0XX

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 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

Protected Management Frames

WMM®

WPA2™-Personal 2021-01

WPA3™-Personal 2020-02

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU
Compressed Block Ack Rx (buffer size 256)
Compressed Block Ack Tx (buffer size 256)
MCS 8-9 Rx
MCS 8-9 Tx
MCS 10-11 Rx
MCS 10-11 Tx
Operating Mode indication
TXOP RTS Threshold

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

Short Guard Interval
STBC
A-MPDU Tx

Wi-Fi Enhanced Open™ 2021-01

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Wi-Fi Components

Wi-Fi Component Operating System

Android Version 11

Wi-Fi Component Firmware

VXXR0XX

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

Passpoint® Release 2

Network Icon support
Operating Class Indication
Online Sign Up and Policy provisioning

Protected Management Frames

WMM®

WPA2™-Enterprise 2018-04

EAP methods

WPA2™-Enterprise 2018-04 (continued)

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 2020-02

WPA™-Enterprise

WPA™-Personal

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®

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 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

Wi-Fi CERTIFIED 6® (continued)

OM Control field Tx
OM subfield in A-Control field
Operating Mode indication
SU beamformee
SU-MIMO
UL OFDMA
UL TB PPDU multi-tone

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

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

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

Wi-Fi Direct®

Wi-Fi CERTIFIED™ Certificate

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Wi-Fi Easy Connect™

Bootstrapping methods

QR code responder

Public Key Exchange (PKEX)

Wi-Fi Enhanced Open™ 2021-01

Wi-Fi Protected Setup™

Pushbutton

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Wi-Fi Components

Wi-Fi Component Operating System

Android Version 11

Wi-Fi Component Firmware

VXXR0XXPCIe

RF Architecture

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

Certifications

Wi-Fi Easy Connect™

Provisioning Configurator

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Wi-Fi Components

Wi-Fi Component Operating System

Android Version 11

Wi-Fi Component Firmware

VXXR0XX

RF Architecture

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

Certifications

Miracast®
HDCP Encryption