



# 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](http://www.wi-fi.org/certification/programs)

**Certification ID: WFA109650**

## Product Info

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

## Summary of Certifications

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



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## Summary of Certifications (continued)

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### CLASSIFICATION

### CERTIFICATION

Security

WPA3™-Enterprise 2020-02

WPA3™-Personal 2020-02



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Role: Access Point

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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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Role: Station

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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



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Role: Station

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## WPA3™-Personal 2020-02

### 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  
Operating mode control field  
Operating mode subfield in A-Control field  
Operating mode indication  
SU beamformee

### Wi-Fi CERTIFIED 6® (continued)

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 Easy Connect™

Bootstrapping methods  
QR code responder



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## Wi-Fi Easy Connect™ (continued)

Public Key Exchange (PKEX)

## Wi-Fi Enhanced Open™ 2021-01

## Wi-Fi Protected Setup™

Pushbutton



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Role: Configurator

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## Wi-Fi Components

### Wi-Fi Component Operating System

Android Version 11

### Wi-Fi Component Firmware

VXXR0XXPCle

### 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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Role: Source

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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