



# 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: WFA131717

### Product Info

<b>Date of Certification</b>	August 28, 2024
<b>Company</b>	Samsung Electronics
<b>Product Name</b>	SM-F958N
<b>Product Model Variant</b>	2024-08-26
<b>Model Number</b>	SM-F958N
<b>Category</b>	Phones
<b>Sub-category</b>	Smartphone

### Summary of Certifications

CLASSIFICATION	CERTIFICATION
<b>Applications &amp; Services</b>	Voice-Enterprise Wi-Fi Aware™
<b>Connectivity</b>	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Wi-Fi CERTIFIED 6® Wi-Fi CERTIFIED 6® Release 2 Wi-Fi CERTIFIED 7™ 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™ 2023-12
<b>Optimization</b>	WMM® WMM®-Admission Control WMM®-Power Save Wi-Fi Agile Multiband™ Wi-Fi Optimized Connectivity™ 2020 Wi-Fi QoS Management™



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



## Summary of Certifications (continued)

Page 2 of 8

CLASSIFICATION	CERTIFICATION
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2022-12 WPA3™-Personal 2023-12
Spectrum & Regulatory Features	Spectrum & Regulatory



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



Role: Access Point

Page 3 of 8

## Wi-Fi Components

### Wi-Fi Component Operating System

Android 14.0

### Wi-Fi Component Firmware

2.0.3.1.30.4

### 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

### WMM®

### WPA2™-Personal 2021-01

### WPA3™-Personal 2023-12

### Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

LDPC Rx

LDPC Tx

MCS 8-9 Rx

MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx

SU beamformer

Wi-Fi 6E

### Wi-Fi CERTIFIED™ a

### Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU

LDPC Rx

LDPC Tx

MCS 8-9 Rx

Short Guard Interval

STBC

SU beamformer



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



Role: Access Point

Page 4 of 8

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ n

OBSS on Extension Channel

Short Guard Interval

STBC

A-MPDU Tx

Wi-Fi Enhanced Open™ 2023-12



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



Role: Station

Page 5 of 8

## Wi-Fi Components

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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



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



Role: Station

Page 6 of 8

## WPA3™-Enterprise 2022-12

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

Fast Transition OTA on WPA3-Enterprise

Fast Transition OTA on WPA3-Enterprise transition mode

Server Certificate Validation

## WPA3™-Personal 2023-12

AKM 24

Fast Transition OTA on WPA3-Personal

Fast Transition OTA on WPA3-Personal transition mode

Beacon Protection

## 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 Aware™ (continued)

Bluetooth® Low Energy

- Bluetooth® Low Energy - Browser
- Bluetooth® Low Energy - Provider
- Bluetooth® Low Energy - Seeker
- TCP/UDP NDP Initiator
- TCP/UDP NDP Responder

Device Ranging

Wi-Fi Aware pairing

Unsynchronized Service Discovery

## Wi-Fi CERTIFIED 6® Release 2

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-MIMO

DL MU PPDU multi-tone

HE NDP

LDPC Tx

LDPC Rx

Individual Target Wake Time

MCS 10-11 Rx

MCS 10-11 Tx

MCS 8-9 Rx

MCS 8-9 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



# Wi-Fi CERTIFIED™ Certificate

Certification ID: WFA131717



Role: Station

Page 7 of 8

## Wi-Fi CERTIFIED 6® Release 2 (continued)

UL TB PPDU multi-tone  
Wi-Fi 6E  
Multiple M-BSSID  
Wi-Fi 6 Release 2 features  
UL MU-MIMO  
M-BSSID control frames

## Wi-Fi CERTIFIED 7™

Advertised TID-to-link mapping  
A-MPDU with A-MSDU  
Beamforming sounding  
BSS critical update  
Compressed Block Ack Rx (buffer size 256)  
Compressed Block Ack Tx (buffer size 256)  
DL MU-MIMO  
EPCS (Emergency Preparedness Communications Services) priority access  
LDPC Rx  
LDPC Tx  
Load Balancing in MLO  
MCS 8-9 Rx  
MCS 8-9 Tx  
MCS 10-11 Rx  
MCS 10-11 Tx  
MCS 12-13 Rx  
MCS 12-13 Tx  
Multi-link reconfiguration – AP removal  
Multi-RU  
Operating mode indication  
Static puncturing  
SU-MIMO  
UL MU-MIMO  
UL OFDMA

## 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

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

### Wi-Fi Direct®

Wi-Fi Direct with WPA2

### Wi-Fi Enhanced Open™ 2023-12

### Wi-Fi Optimized Connectivity™ 2020

Active Scan



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Certification ID: WFA131717



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Page 8 of 8

## Wi-Fi Optimized Connectivity™ 2020 (continued)

Fast Transition OTA on WPA2-Enterprise  
Pushbutton

## Wi-Fi QoS Management™

Default DSCP to UP mapping  
DSCP QoS Map  
Mirrored Stream Classification Service  
    MSCS setup at association  
Stream Classification Service