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 ID: WFA124434

Product Info

Date of Certification	November 21, 2024
Company	Samsung Electronics
Product Name	SC-51D
Product Model Variant	2024-08-07
Model Number	SC-51D
Category	Phones
Sub-category	Smartphone

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Alternative topologies	Wi-Fi Aware™ Wi-Fi Direct®
Network management	WMM® WMM®-Admission Control WMM®-Power Save Wi-Fi Agile Multiband™ Wi-Fi Optimized Connectivity™ 2020 Wi-Fi QoS Management™
Performance	Voice-Enterprise
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2021-01 WPA3™-Enterprise 2020-02 WPA3™-Personal 2020-12 Wi-Fi Enhanced Open™ 2021-01
Wi-Fi (MAC/PHY)	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 GHz Spectrum Capabilities Spectrum & Regulatory

Wi-Fi CERTIFIED® Certificate

Certification ID: WFA124434

CLASSIFICATION	CERTIFICATION
Wi-Fi (MAC/PHY)	Wi-Fi CERTIFIED 6®
	Wi-Fi CERTIFIED™ a
	Wi-Fi CERTIFIED™ ac
	Wi-Fi CERTIFIED™ b
	Wi-Fi CERTIFIED™ g
	Wi-Fi CERTIFIED™ n

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Wi-Fi Components

Wi-Fi Component Operating System

Android 15.0

Wi-Fi Component Firmware

2.0.0.0.1797.0

RF Architecture

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

Certifications

2.4 GHz Spectrum Capabilities

20 MHz Channel Width in 2.4 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 2020-12

SAE-Public Key

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Wi-Fi CERTIFIED 6® (continued)

Compressed Block Ack Rx (buffer size 256)
Compressed Block Ack Tx (buffer size 256)
LDPC Rx
LDPC Tx
MCS 8-9 Rx
MCS 8-9 Tx
MCS 10-11 Rx
MCS 10-11 Tx
SU beamformer
SU-MIMO
TXOP RTS Threshold
Wi-Fi 6E

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

Wi-Fi CERTIFIED® Certificate

Certification ID: WFA124434

Wi-Fi Components

Wi-Fi Component Operating System

Android 15.0

Wi-Fi Component Firmware

2.0.0.0.1797.0

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

SAE-Public Key

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

Wi-Fi Aware™

Bluetooth® Low Energy - Browser
Bluetooth® Low Energy - Provider
Bluetooth® Low Energy - Seeker
Device Ranging

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-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
M-BSSID
Operating mode control field
Operating mode subfield in A-Control field
Operating mode indication
SU beamformee
SU-MIMO
UL OFDMA
Wi-Fi 6E
- Multiple M-BSSID
Wi-Fi 6 Release 2 features
- M-BSSID control frames

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac

Extended 5 GHz Channel Support
RTS with BW Signaling

Wi-Fi CERTIFIED™ ac (continued)

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 Enhanced Open™ 2021-01

Wi-Fi Optimized Connectivity™ 2020

Active Scan
FILS Shared Key Authentication
    FILS Indication Element support
    AKM Suite Selector Type 15
    FILS Higher Layer Protocol with DHCP v4 Rapid Commit
Pushbutton
Probe Deferral and Suppression

Wi-Fi QoS Management™

MSCS setup at association