



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: WFA126967

Product Info

Date of Certification	August 8, 2023
Company	CROSSCALL
Product Name	Stellar-X5
Product Model Variant	Add WMMAC&VE
Model Number	Stellar-X5
Category	Phones
Sub-category	Smartphone

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Passpoint® Release 3 Wi-Fi Easy Connect™ Wi-Fi Protected Setup™
Applications & Services	Voice-Enterprise
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities 6 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	TDLS WMM® WMM®-Admission Control WMM®-Power Save Wi-Fi Agile Multiband™



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Summary of Certifications (continued)

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CLASSIFICATION

CERTIFICATION

Optimization

Wi-Fi Optimized Connectivity™ 2020
Wi-Fi QoS Management™

Security

Protected Management Frames
WPA2™-Enterprise 2018-04
WPA2™-Personal 2021-01
WPA3™-Enterprise 2022-12
WPA3™-Personal 2022-06
WPA™-Enterprise
WPA™-Personal



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Role: Access Point

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Wi-Fi Components

Wi-Fi Component Operating System

Android 13

Wi-Fi Component Firmware

WLAN.MSL.1.0.1-01264-QCAMSLSWPLZ-1

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

WMM®

WMM®-Power Save

Unschedule auto PS

WPA2™-Personal 2021-01

WPA3™-Personal 2022-06

Wi-Fi CERTIFIED 6®

Wi-Fi CERTIFIED 6® (continued)

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

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

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n



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Role: Access Point

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Wi-Fi CERTIFIED™ n (continued)

OBSS on Extension Channel

Short Guard Interval

STBC

A-MPDU Tx



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Role: Station

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Wi-Fi Components

Wi-Fi Component Operating System

Android 13

Wi-Fi Component Firmware

WLAN.MSL.1.0.1-01264-QCAMSLSWPLZ-1

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
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
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

Passpoint® Release 3

Display of HS2.0 indication
NAI Home Realm Query element

Passpoint® Release 3 (continued)

Network Information in network selection
Operating Class Indication
Roaming Consortium Selection
Terms and Conditions
Venue Information

Protected Management Frames

TDLS

Voice-Enterprise

WMM®

WMM®-Admission Control

WMM®-Power Save

Legacy Power Save
Unschedule auto PS

WPA2™-Enterprise 2018-04



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Role: Station

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WPA2™-Enterprise 2018-04 (continued)

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

WPA2™-Personal 2021-01

WPA3™-Enterprise 2022-12

EAP methods
EAP AKA
EAP AKA Prime
EAP SIM
EAP TLS
EAP TTLS
PEAPv0
PEAPv1
192-bit security
Server Certificate Validation

WPA3™-Personal 2022-06

WPA™-Enterprise

WPA™-Personal

Wi-Fi Agile Multiband™

ANQP
ANQP-based Neighbor report

Wi-Fi Agile Multiband™ (continued)

BTM Query
Cellular Data capable

Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU
Beamforming sounding
BSRP Trigger frame
Compressed Block Ack Rx (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
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 6E
Multiple M-BSSID

Wi-Fi CERTIFIED™ a

Wi-Fi CERTIFIED™ ac



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Role: Station

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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 Easy Connect™

Bootstrapping methods
QR code responder
Public Key Exchange (PKEX)

Wi-Fi Enhanced Open™ 2021-01

Wi-Fi Optimized Connectivity™ 2020

Pushbutton

Wi-Fi Protected Setup™

PIN
Pushbutton

Wi-Fi QoS Management™

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



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Role: Configurator

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Android 13

Wi-Fi Component Firmware

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RF Architecture

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Certifications

Wi-Fi Easy Connect™

Provisioning Configurator