



This certificate lists the features that have successfully completed Wi-Fi Alliance interoperability testing. Learn more: www.wi-fi.org/certification/programs

# **Certification ID: WFA132232**

# **Product Info**

**Date of Certification** August 13, 2024

**Company** Elo Touch Solutions, Inc.

Product Name Mobile Computer

Product Model Variant EMC-M51

Model Number EMC-M51

**Category** Phones

**Sub-category** Smartphone

# **Summary of Certifications**

CLASSIFICATION	CERTIFICATION
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**Connectivity** 2.4 GHz Spectrum Capabilities

5 GHz Spectrum Capabilities6 GHz Spectrum Capabilities

Wi-Fi CERTIFIED 6®
Wi-Fi CERTIFIED™ a
Wi-Fi CERTIFIED™ b
Wi-Fi CERTIFIED™ g
Wi-Fi CERTIFIED™ n

Wi-Fi Enhanced Open™ 2023-12

Optimization WMM®

Wi-Fi Agile Multiband™

**Security** Protected Management Frames

WPA2<sup>™</sup>-Enterprise 2018-04 WPA2<sup>™</sup>-Personal 2021-01 WPA3<sup>™</sup>-Enterprise 2022-12 WPA3<sup>™</sup>-Personal 2023-12



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Role: Access Point Page 2 of 6

Wi-Fi Components

**Wi-Fi Component Operating System** 

Android 14

Wi-Fi Component Firmware

FW:1.1.2.0.1103.0

**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

160 MHz Channel Width in 5 GHz

Wi-Fi CERTIFIED 6® (continued)

LDPC Tx MCS 8-9 Rx

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MCS 8-9 Tx

MCS 10-11 Rx

MCS 10-11 Tx SU beamformer

TXOP RTS Threshold

### Wi-Fi CERTIFIED™ a

#### **Protected Management Frames**

**WMM®** 

WPA2™-Personal 2021-01

WPA3<sup>™</sup>-Personal 2023-12

#### Wi-Fi CERTIFIED 6®

A-MPDU with A-MSDU

Compressed Block Ack Rx (buffer size 256)

LDPC Rx

#### 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™ b

Wi-Fi CERTIFIED™ g





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Role: Access Point	Page 3 of 6
Wi-Fi CERTIFIED™ n	
OBSS on Extension Channel Short Guard Interval STBC A-MPDU Tx	



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Role: Station Page 4 of 6

# Wi-Fi Components

**Wi-Fi Component Operating System** 

Android 14

Wi-Fi Component Firmware

FW:1.1.2.0.1103.0

#### **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 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

# WPA2<sup>™</sup>-Enterprise 2018-04 (continued)

EAP methods

EAP AKA

**EAP AKA Prime** 

**EAP SIM** 

EAP TLS

EAP TTLS

PEAPv0

PEAPv1

#### WPA2™-Personal 2021-01

# **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™-Enterprise 2018-04

#### WPA3™-Enterprise 2022-12

EAP methods

EAP AKA

EAP AKA Prime

EAP SIM

EAP TLS

EAP TTLS

PEAPv0 PEAPv1

192-bit security



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#### WPA3™-Enterprise 2022-12 (continued)

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

Fast Transition OTDS on WPA3-Enterprise

Server Certificate Validation

#### WPA3™-Personal 2023-12

Fast Transition OTA on WPA3-Personal

Fast Transition OTA on WPA3-Personal transition mode

Fast Transition OTDS on WPA3-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

BSRP Trigger frame

Compressed Block Ack Rx (buffer size 256)

DL MU-MIMO

DL MU PPDU multi-tone

HE NDP

LDPC Tx

LDPC Rx

#### Wi-Fi CERTIFIED 6® (continued)

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 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

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





**Certification ID: WFA132232** 

