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: WFA77387

Product Info

Date of Certification	November 28, 2023
Company	Espressif Systems (Shanghai) Co., Ltd.
Product Name	Wi-Fi & Bluetooth Internet of Things Module
Product Model Variant	ESPRESSIF ESP32-WROOM-32D
Model Number	ESP32-WROOM-32D
Category	Other
Sub-category	Embedded Module

Summary of Certifications

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Connectivity	2.4 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n
Optimization	WMM®
Security	Protected Management Frames WPA2™-Enterprise 2018-04 WPA2™-Personal 2018-04 WPA3™-Enterprise 2018-04 WPA3™-Personal 2019-08

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Wi-Fi Components

Wi-Fi Component Operating System

FreeRTOS, version:V8.2.0

Wi-Fi Component Firmware

bdd9eff

RF Architecture

Bands Supported	Transmit (Tx)	Receive (Rx)
2.4 GHz	1	1

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™-Enterprise 2018-04

EAP methods
    EAP TLS
    EAP TTLS
    PEAPv0

WPA2™-Personal 2018-04

WPA3™-Enterprise 2018-04

EAP methods
    EAP TLS
    EAP TTLS
    PEAPv0

WPA3™-Personal 2019-08

Wi-Fi CERTIFIED™ b

Wi-Fi CERTIFIED™ g

Wi-Fi CERTIFIED™ n

A-MPDU Tx
Short Guard Interval
STBC

Wi-Fi Protected Setup™

PIN
Pushbutton