



# 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: WFA69503**

## Product Info

<b>Date of Certification</b>	January 4, 2017
<b>Company</b>	Espressif Systems (Shanghai) Co., Ltd.
<b>Product Name</b>	ESP32 Lyra Speaker
<b>Product Model Variant</b>	2017-01-04 (WFA69503 - 4925893)
<b>Model Number</b>	ESP-WROOM-32
<b>Category</b>	Gaming, Media & Music
<b>Sub-category</b>	Digital Audio - Stationary (speakers, receiver, MP3 player)

## Summary of Certifications

CLASSIFICATION	CERTIFICATION
<b>Access</b>	Wi-Fi Protected Setup™
<b>Connectivity</b>	2.4 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n
<b>Optimization</b>	WMM®
<b>Security</b>	WPA2™-Enterprise WPA2™-Personal WPA™-Enterprise WPA™-Personal



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Role: Station

Page 2 of 2

## Wi-Fi Components

### Wi-Fi Component Operating System

Proprietary / Other, version:V8.2.0,  
description:FreeRTOS

### Wi-Fi Component Firmware

V1.0.0

### 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

### WMM®

### WPA2™-Enterprise

EAP methods  
EAP TLS  
EAP TTLS  
PEAPv0

### WPA2™-Personal

### WPA™-Enterprise

### WPA™-Personal

### Wi-Fi CERTIFIED™ b

### Wi-Fi CERTIFIED™ g

### Wi-Fi CERTIFIED™ n

STBC

### Wi-Fi CERTIFIED™ n (continued)

A-MPDU Tx  
RIFS  
Short Guard Interval

### Wi-Fi Protected Setup™

PIN  
Pushbutton