



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

# Certification ID: WFA132520

### **Product Info**

Date of Certification	September 9, 2024
Company	Panasonic Automotive Systems Co., Ltd.
Product Name	Car Audio System
Product Model Variant	Source (Updated WPA3R3+WPA2)
Model Number	CN-SLFER1AJ
Category	Other
Sub-category	In-vehicle Network

### **Summary of Certifications**

CLASSIFICATION	CERTIFICATION
Access	Wi-Fi Protected Setup™
Applications & Services	Miracast®
Connectivity	2.4 GHz Spectrum Capabilities 5 GHz Spectrum Capabilities Wi-Fi CERTIFIED™ a Wi-Fi CERTIFIED™ ac Wi-Fi CERTIFIED™ b Wi-Fi CERTIFIED™ g Wi-Fi CERTIFIED™ n Wi-Fi Direct®
Optimization	WMM® WMM®-Power Save
Security	Protected Management Frames WPA2™-Personal 2021-01 WPA3™-Personal 2022-06
Spectrum & Regulatory Features	Spectrum & Regulatory



# Wi-Fi CERTIFIED<sup>™</sup> Certificate





Wi-Fi Component Firmware 17.68.1.p136   2.4 GHz   1   1     5 GHz   2   2     Certifications     2.4 GHz Spectrum Capabilities     20 MHz Channel Width in 2.4 GHz   Wi-Fi CERTIFIED™ a     Sectrum Capabilities     20 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED™ ac     Source Transes     20 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     LDPC Rx   LDPC Rx     LDPC Rx   LDPC Rx     Source Transes   Short Guard Interval     Spectrum & Regulatory   Wi-Fi CERTIFIED™ g     WI-Fi CERTIFIED™ g   Wi-Fi CERTIFIED™ g     WI-Fi CERTIFIED™ p   Mi-Fi CERTIFIED™ p     WI-Fi CERTIFIED™ p   Mi-Fi CERTIFIED™ p <t< th=""><th>Role: Access Point</th><th></th><th colspan="3">Page 2 of 6</th></t<>	Role: Access Point		Page 2 of 6			
Linux 4.14.75   Bands Supported   Transmit (Tx)   Receive (Rx, 2.4 GHz)     17.68.1.p136   2.4 GHz   1   1     5 GHz   2   2     Certifications     2.4 GHz Spectrum Capabilities   VPA3 <sup>TM</sup> -Personal 2022-06     20 MHz Channel Width in 2.4 GHz   Wi-Fi CERTIFIED <sup>TM</sup> a     5 GHz Spectrum Capabilities     20 MHz Channel Width in 5 GHz     20 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>TM</sup> ac     AMPDU with A-MSDU     Lipe Rx     BOMHz Channel Width in 5 GHz     80 MHz Channel Width in 5 GHz     WI-Fi CERTIFIED <sup>TM</sup> ac     AMPDU Tx     MKS 8-9 Rx     Spectrum & Regulatory     Bootf Guard Interval     Spectrum & Regulatory     BOMM®     WIM®     WIM®     AMPDU Tx     AMPDU Tx     AMPDU Tx     AMPOU Tx     HT     MIG     GERTIFIED	Wi-Fi Components					
Wi-Fi Component Firmware 17.68.1.p136   Bands Supported   Transmit (Tx)   Receive (Rx)     2.4 GHz   1   1   1     5 GHz   2   2     Certifications     2.4 GHz   1   1     Sectrum Capabilities   WPA3 <sup>TM</sup> -Personal 2022-06     WI-Fi CERTIFIED <sup>TM</sup> ac     S GHz Spectrum Capabilities     20 MHz Channel Width in 2.4 GHz     WI-Fi CERTIFIED <sup>TM</sup> ac     AMPDU with A-MSDU LDPC Rx     LDPC Rx     AMPDU with A-MSDU     DY Receive (Rx)     WI-Fi CERTIFIED <sup>TM</sup> ac     AMPDU with A-MSDU     LDPC Rx     LDPC Rx     Sectrum & Regulatory     WI-Fi CERTIFIED <sup>TM</sup> g     WI-Fi CERTIFIED <sup>TM</sup> g     WIM®     Protected Management Frames     Spectrum & Regulatory     WI-Fi CERTIFIED <sup>TM</sup> g     WI-Fi CERTIFIED <sup>TM</sup> g     WI-Fi CERTIFIED <sup>TM</sup> g     WIM®   Powe		RF Architecture				
17.68.1.p136   2.4 GHz   1   1     5 GHz   2   2     Certifications     2.4 GHz   2   2     Certifications     2.4 GHz Spectrum Capabilities   WPA3 <sup>™</sup> -Personal 2022-06     20 MHz Channel Width in 2.4 GHz   Wi-Fi CERTIFIED <sup>™</sup> a     5 GHz Spectrum Capabilities   Wi-Fi CERTIFIED <sup>™</sup> ac     20 MHz Channel Width in 5 GHz     40 MHz Channel Width in 5 GHz     40 MHz Channel Width in 5 GHz     AMPDU with A-MSDU     LDPC Tx     MCS 8-9 Rx     Short Guard Interval     STBC     Spectrum & Regulatory     WI-Fi CERTIFIED <sup>™</sup> b     Spectrum & Regulatory     WI-Fi CERTIFIED <sup>™</sup> g     WIM®     WMM®     WIM®     WI-Fi CERTIFIED <sup>™</sup> g     Uspectrum & Regulatory     Bio Spectrum Save     AMPDU Tx     HT Duplicate Mode     OBSS on Ex		Bands Supported	Transmit (Tx)	Receive (Rx)		
5 GHz   2   2     Certifications     WPA3™-Personal 2022-06     WI-Fi CERTIFIED™ a     20 MHz Channel Width in 2.4 GHz     S GHz Spectrum Capabilities     S GHz Spectrum Capabilities     20 MHz Channel Width in 5 GHz     20 MHz Channel Width in 5 GHz     20 MHz Channel Width in 5 GHz     AMPDU with A-MSDU     LDPC Tx     MICE CERTIFIED™ ac     Spectrum & Regulatory     WI-Fi CERTIFIED™ b     WI-Fi CERTIFIED™ b     MIM®     MIM®     MIM®     AMPDU Tx     HT Duplicate Mode     OSS on Extension Channel     Spectrum & Regulatory     WI-Fi CERTIFIED™ b     WI-Fi CERTIFIED™ b     MiFi CERTIFIED™ n     AMPDU Tx     HT Duplicate Mode     OSS on Extension Channel     Spectrum & State     OS State     <		2.4 GHz	1	1		
2.4 GHz Spectrum Capabilities   WPA3 <sup>™</sup> -Personal 2022-06     20 MHz Channel Width in 2.4 GHz   Wi-Fi CERTIFIED <sup>™</sup> a     5 GHz Spectrum Capabilities   Wi-Fi CERTIFIED <sup>™</sup> ac     20 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU LDPC Rx     40 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     90 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     80 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     80 MHz Channel Width in 5 GHz   MCS 8-9 Rx     80 MHz Channel Width in 5 GHz   Short Guard Interval     80 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED <sup>™</sup> b     802 Mut @   A-MPDU Tx     Legacy Power Save Unschedule auto PS   A-MPDU Tx     H T Duplicate Mode OBS on Extension Channel Short Guard Interval	17.68.1.p136	5 GHz	2	2		
20 MHz Channel Width in 2.4 GHz   Wi-Fi CERTIFIED™ a     5 GHz Spectrum Capabilities   Wi-Fi CERTIFIED™ acc     20 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     40 MHz Channel Width in 5 GHz   LDPC Rx     40 MHz Channel Width in 5 GHz   MGS 8-9 Rx     80 MHz Channel Width in 5 GHz   Short Guard Interval     80 MHz Channel Width in 5 GHz   STBC     80 MHz Channel Width in 5 GHz   StBC     80 MHz Channel Width in 5 GHz   Wi-Fi CERTIFIED™ b     80 Zhth Z Channel Width in 5 GHz   Wi-Fi CERTIFIED™ b     80 Zhth Z Channel Width in 5 GHz   Wi-Fi CERTIFIED™ b     80 Zhth Z Channel Width in 5 GHz   Wi-Fi CERTIFIED™ g     80 Zhth Z Channel Width in 5 GHz   Wi-Fi CERTIFIED™ g     80 Zhth Z Channel Width in 5 GHz   A-MPDU Tx     Regulatory   A-MPDU Tx     Legacy Power Save   OS So n Extension Channel     Unschedule auto PS   OBSS on Extension Channel	Certifications					
S GHz Spectrum Capabilities   Wi-Fi CERTIFIED™ ac     20 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     40 MHz Channel Width in 5 GHz   LDPC Rx     80 MHz Channel Width in 5 GHz   MCS 8-9 Rx     Short Guard Interval   StBC     Spectrum & Regulatory   SU beamformer     802.11d   Wi-Fi CERTIFIED™ b     WMM©   Wi-Fi CERTIFIED™ g     WMM©-Power Save   A-MPDU Tx     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   A-MPDU Tx	2.4 GHz Spectrum Capabilities	WPA3™-Persona	WPA3™-Personal 2022-06			
5 GHz Spectrum Capabilities   A-MPDU with A-MSDU     20 MHz Channel Width in 5 GHz   A-MPDU with A-MSDU     40 MHz Channel Width in 5 GHz   LDPC Rx     80 MHz Channel Width in 5 GHz   LDPC Tx     80 MHz Channel Width in 5 GHz   Short Guard Interval     Street Comment Frames   STBC     Spectrum & Regulatory   STBC     802.11d   Wi-Fi CERTIFIED™ b     WMM©   Wi-Fi CERTIFIED™ g     WIMI©-Power Save   A-MPDU Tx     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   A-MPDU Tx	20 MHz Channel Width in 2.4 GHz	Wi-Fi CERTIFIED	Wi-Fi CERTIFIED™ a			
20 MHz Channel Width in 5 GHz   LDPC Rx     40 MHz Channel Width in 5 GHz   LDPC Tx     80 MHz Channel Width in 5 GHz   MCS 8-9 Rx     Short Guard Interval   Sthort Guard Interval     Spectrum & Regulatory   STBC     802.11d   Wi-Fi CERTIFIED™ b     Wi-Fi CERTIFIED™ g   Wi-Fi CERTIFIED™ g     WMM®-Power Save   A-MPDU Tx     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval   Stort Guard Interval	5 GHz Spectrum Capabilities	Wi-Fi CERTIFIED™ ac				
40 MHz Channel Width in 5 GHz   LDPC Tx     80 MHz Channel Width in 5 GHz   MCS 8-9 Rx     Short Guard Interval   StBC     StBC   SU beamformer     802.11d   Wi-Fi CERTIFIED™ b     WIMI®   Wi-Fi CERTIFIED™ g     WIMI®-Power Save   Wi-Fi CERTIFIED™ n     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval   Short Guard Interval	20 MHz Channel Width in 5 GHz		J			
MCS 8-9 Rx     Short Guard Interval     STBC     SU beamformer     802.11d     WMM®     WMM®-Power Save     Legacy Power Save     Unschedule auto PS						
Protected Management Frames   STBC     Spectrum & Regulatory   SU beamformer     802.11d   Wi-Fi CERTIFIED <sup>TM</sup> b     WMM®   Wi-Fi CERTIFIED <sup>TM</sup> g     WMM®-Power Save   Wi-Fi CERTIFIED <sup>TM</sup> n     Legacy Power Save   A-MPDU Tx     Legacy Power Save   OBSS on Extension Channel     Unschedule auto PS   SSS on Extension Channel	80 MHz Channel Width in 5 GHz					
Spectrum & Regulatory   SU beamformer     802.11d   Wi-Fi CERTIFIED™ b     WMM®   Wi-Fi CERTIFIED™ g     WMM®-Power Save   Wi-Fi CERTIFIED™ n     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   HT Duplicate Mode     OBSS on Extension Channel   Short Guard Interval	Protected Management Frames					
802.11d   Wi-Fi CERTIFIED™ b     WMM®   Wi-Fi CERTIFIED™ g     WMM®-Power Save   Wi-Fi CERTIFIED™ n     Legacy Power Save   A-MPDU Tx     Unschedule auto PS   HT Duplicate Mode     OBSS on Extension Channel   Short Guard Interval		SU beamformer				
802.11d   Wi-Fi CERTIFIED™ g     WMM®   Wi-Fi CERTIFIED™ n     WMM®-Power Save   A-MPDU Tx     Legacy Power Save   HT Duplicate Mode     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval   Short Guard Interval	Spectrum & Regulatory					
WMM®   Wi-Fi CERTIFIED™ n     WMM®-Power Save   A-MPDU Tx     Legacy Power Save   HT Duplicate Mode     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval   Short Guard Interval	802.11d					
WMM®-Power Save   Wi-Fi CERTIFIED™ n     Legacy Power Save   A-MPDU Tx     Legacy Power Save   HT Duplicate Mode     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval   Short Guard Interval		Wi-Fi CERTIFIED	<sup>™</sup> g			
Legacy Power Save   A-MPDU Tx     Legacy Power Save   HT Duplicate Mode     Unschedule auto PS   OBSS on Extension Channel     Short Guard Interval	WMM®	Wi-Fi CERTIFIED	<sup>,™</sup> n			
Legacy Power SaveHT Duplicate ModeUnschedule auto PSOBSS on Extension ChannelShort Guard Interval	WMM®-Power Save					
Unschedule auto PS OBSS on Extension Channel Short Guard Interval	Legacy Power Save					
			hannel			
		Short Guard Interval STBC				



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### **Role: Access Point**

#### Wi-Fi Protected Setup™

PIN

Pushbutton

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# Wi-Fi CERTIFIED<sup>™</sup> Certificate Certification ID: WFA132520



### **Role: Station**

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Wi-Fi Components			
Wi-Fi Component Operating System	RF Architecture		
Linux 4.14.75	Bands Supported	Transmit (Tx)	Receive (Rx)
Wi-Fi Component Firmware 17.68.1.p136	2.4 GHz	1	1
	5 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

#### **Protected Management Frames**

#### WMM®

#### WMM®-Power Save

Legacy Power Save Unschedule auto PS

WPA2<sup>™</sup>-Personal 2021-01

WPA3<sup>™</sup>-Personal 2022-06

Wi-Fi CERTIFIED™ a

#### Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU 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 HT Duplicate Mode **OBSS** on Extension Channel **Power Management** Short Guard Interval STBC

#### Wi-Fi Direct®

#### Wi-Fi Protected Setup™

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## **Role: Station**

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Wi-Fi Protected Setup™ (continued)

PIN

Pushbutton



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#### **Role: Display** Page 6 of 6 **Wi-Fi Components** Wi-Fi Component Operating System **RF** Architecture Linux 4.14.75 Bands Supported Transmit (Tx) Receive (Rx) Wi-Fi Component Firmware 2.4 GHz 1 1 17.68.1.p136 5 GHz 2 2 Certifications Miracast®

HDCP Encryption