# 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: WFA100321

## Product Info

| | |
|---|---|
| Date of Certification | October 12, 2020 |
| Company | Jiangsu Toppower Automotive Electronics Co., Ltd. |
| Product Name | IDCM Smartcore |
| Product Model Variant | 2020-10-12 (WFA100321 - merged) |
| Model Number | HHT Vx1 IDCM Smartcore |
| Category | Other |
| Sub-category | In-vehicle Network |

## Summary of Certifications

| CLASSIFICATION | CERTIFICATION |
|---|---|
| Connectivity | 2.4 GHz Spectrum Capabilities<br>5 GHz Spectrum Capabilities<br>Wi-Fi CERTIFIED™ a<br>Wi-Fi CERTIFIED™ ac<br>Wi-Fi CERTIFIED™ b<br>Wi-Fi CERTIFIED™ g<br>Wi-Fi CERTIFIED™ n |
| Optimization | WMM® |
| Security | Protected Management Frames<br>WPA2™-Personal 2018-04 |

# Wi-Fi CERTIFIED™ Certificate

## Certification ID: WFA100321

## Wi-Fi Components

### Wi-Fi Component Operating System

Android, version:10.1

### Wi-Fi Component Firmware

9.40.112.1

### 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®

### WPA2™-Personal 2018-04

### Wi-Fi CERTIFIED™ a

### Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
LDPC Rx
LDPC Tx
MCS 8-9 Rx

### Wi-Fi CERTIFIED™ ac (continued)

Short Guard Interval
STBC

### Wi-Fi CERTIFIED™ b

### Wi-Fi CERTIFIED™ g

### Wi-Fi CERTIFIED™ n

HT Duplicate Mode
OBSS on Extension Channel
Short Guard Interval
STBC
A-MPDU Tx

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### Protected Management Frames

### WMM®

### WPA2™-Personal 2018-04

### Wi-Fi CERTIFIED™ a

### Wi-Fi CERTIFIED™ ac

A-MPDU with A-MSDU
LDPC Rx
MCS 8-9 Rx
Short Guard Interval

### Wi-Fi CERTIFIED™ ac (continued)

STBC
LDPC Tx
SU beamformee

### Wi-Fi CERTIFIED™ b

### Wi-Fi CERTIFIED™ g

### Wi-Fi CERTIFIED™ n

STBC
A-MPDU Tx
HT Duplicate Mode
OBSS on Extension Channel
Short Guard Interval