

SD-Wi-Fi-FP91-88W8801

Firmware Release Notes for FreeRTOS



Contents

1	Package Information	4
2	Firmware Version Information	5
3	Host Platform	6
4	Wi-Fi Certifications.....	7
	4.1 WFA Certifications.....	7
5	Wi-Fi Throughput	8
	5.1 Throughput Test Setup.....	8
	5.2 STA Throughput.....	8
	5.3 Mobile AP Throughput	8
6	EU Conformance tests.....	9
7	Bug Fixes/Feature Enhancements.....	10
8	Known Issues.....	11
9	Notes.....	12
10	Legal Information	13
	10.1 Disclaimers.....	13
	10.2 Trademarks	13

Revision History

Table 1: Document revision history

Revision	Date	Change details
Rev.1	17-Jul-2020	Initial release
Rev.2	30-Nov-2020	Added Wi-Fi certification section. Updated Release Version
Rev.3	05-Jan-2021	Updated Release version and Bug Fixes/Enhancement section
Rev.4	07-Jul-2021	<ul style="list-style-type: none">• Section 1 and Section 2 updated• Section 7 updated
Rev.5	06-Sep-2021	<ul style="list-style-type: none">• Section 1 updated• Section 5 updated
Rev.6	05-Jan-2022	<ul style="list-style-type: none">• Section 1 and Section 2 updated• Section 7 updated

1 Package Information

- SDK Version: 2.11.0
- Wi-Fi FW version: 14.91.36.p191.1

Please refer to the Software feature list in the document : *SD-Wi-Fi-FP91-88W8801-Wi-Fi-Software-Features-for-FreeRTOS*

2 Firmware Version Information

- Wireless SoC : 88W8801
- Wi-Fi Firmware Version : 14.91.36.p191.1
 - 14 - Major Revision
 - 91 - Feature Pack
 - 36 - Release Version
 - p191.1 - Patch number

3 Host Platform

- All i.MX RT platform running FreeRTOS
- Interfaces used
 - Wi-Fi over SDIO (SDIO 2.0 support, SDIO Clock Frequency: 50 MHz)

Test Tools

- iperf (version 2.0.5)

4 Wi-Fi Certifications

The Wi-Fi certifications is obtained with the following combinations.

4.1 WFA Certifications

- STA | 802.11n
- STA | PMF

Refer *TN00066-WFA Derivative Certification Process* document available in SDK Package.

5 Wi-Fi Throughput

5.1 Throughput Test Setup

- Environment: Shield Room - Over the Air
- Access Point: Netgear RAX120
- DUT: W8801 AzureWave (Module: **AW-NM191NF-uSD**) with RT1060 platform
- Client: OnePlus6T
- Channel : 6

Refer to **Section-3.1.1** in *UM11442-NXP Wi-Fi and Bluetooth Demo Applications User Guide for i.MX RT Platforms* to read more about the throughput test setup and topology.

5.2 STA Throughput

External AP: Netgear RAX120

STA Mode Throughput - BGN Mode 2.4GHz Band 20MHz				
Protocol	TCP(Mbps)		UDP(Mbps)	
Direction	Tx	Rx	Tx	Rx
Open Security	22	20	43	40
WPA2-PSK	22	21	42	38
WPA3-SAE	21	21	40	39

5.3 Mobile AP Throughput

External client: OnePlus6T

Mobile AP Mode Throughput - BGN Mode 2.4GHz Band 20MHz				
Protocol	TCP(Mbps)		UDP(Mbps)	
Direction	Tx	Rx	Tx	Rx
Open Security	23	22	27	32
WPA2-PSK	21	22	27	33
WPA3-SAE	20	22	25	30

6 EU Conformance tests

- EU Adaptivity test - EN 300 328 v2.1.1 (for 2.4 GHz)

7 Bug Fixes/Feature Enhancements

Component	Description
Wi-Fi	<ul style="list-style-type: none">• "RF Test Mode configuration failed" Not able to start RF Test mode by using "wlan-set-rf-test-mode" command.• Added support for WPA3 R3 security.

8 Known Issues

Component	Description
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9 Notes

- None

10 Legal Information

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