

Software Operational Description

FCC ID: **2AJOTTA-1404**

We, HMD Global Oy hereby declare that the requirements of KDB594280 D02 U-NII Device Security v01r03 and 594280 D01 Software Configuration Control v02r01 have been met and shown on the following questions.

SOFTWARE SECURITY DESCRIPTION	
General Description	<p>1. Describe how any software/firmware updates for elements that can affect the device's RF parameters will be obtained, downloaded, validated and installed. For software that is accessed through manufacturer's website or device's management system, describe the different levels of security as appropriate.</p> <p>Answer: OTA update can be supported.</p>
	<p>2. Describe the RF parameters that are modified by any software/firmware without any hardware changes. Are these parameters in some way limited such that any other software/firmware changes will not allow the device to exceed the authorized RF characteristics?</p> <p>Answer: All the RF parameters could not be modified by any software without any hardware changes.</p>
	<p>3. Describe in detail the authentication protocols that are in place to ensure that the source of the RF-related software/firmware is valid. Describe in detail how the RF-related software is protected against modification.</p> <p>Answer: Firmware and Software is got from chip provider, it is official and sole, and will not be released to any other person or company. And Unisoc efuse security boot mechanism can avoid any others to modify Software.</p>
	<p>4. Describe in detail any encryption methods used to support the use of legitimate RF-related software/firmware.</p> <p>Answer: Firmware is provided with binary method and read-only, and Unisoc efuse security boot mechanism can avoid any others to modify Software and Firmware.</p>
	<p>5. For a device that can be configured as a master and client (with active or passive scanning), explain how the device ensures compliance for each mode? In particular if the device acts as master in some band of operation and client in another; how is compliance ensured in each band of operation?</p> <p>Answer: This device support 2.4GHz and 5.0 GHz. It can scan bands only support in this country when it is a client. It can not support B2\B3, and user can not set bands when it is a master. The configuration is fixed and is not accessible to users to modify. We support sets regulatory domain in the following ways: (1) Mobile Country Code (MCC), 8 or MCC with a Mobile Network code (MNC), received from a CMRS9 carrier and received directly by a receiver on the device (2) Country information derived from multiple adjacent access points (for example using IEEE Std 802.11d provisions)</p>
	<p>6. Explain if any third parties have the capability to operate a U.S.-sold device on any</p>
	Third-Party

<p>Access Control</p>	<p>other regulatory domain, frequencies, or in any manner that may allow the device to operate in violation of the device’s authorization if activated in the U.S.</p>
	<p>Answer: Frequency parameter will be hidden in system path, no third-parties will get rights to modify system property and files.</p>
	<p>7. Describe, if the device permits third-party software or firmware installation, what mechanisms are provided by the manufacturer to permit integration of such functions while ensuring that the RF parameters of the device cannot be operated outside its authorization for operation in the U.S. In the description include what controls and/or agreements are in place with providers of third-party functionality to ensure the devices’ underlying RF parameters are unchanged and how the manufacturer verifies the functionality.</p>
	<p>Answer: Customer only can upgrade the software from OTA, no third-parties can modify it by any other tools.</p>
	<p>8. For Certified Transmitter modular devices, describe how the module grantee ensures that hosts manufactures fully comply with these software security requirements for U-NII devices. If the module is controlled through driver software loaded in the host, describe how the drivers are controlled and managed such that the modular transmitter RF parameters are not modified outside the grant of authorization.</p>
<p>Answer: Not applicable, this device is not a module.</p>	
<p>SOFTWARE CONFIGURATION DESCRIPTION</p>	
<p>USER CONFIGURATION GUIDE</p>	<p>9. Describe the user configurations permitted through the UI. If different levels of access are permitted for professional installers, system integrators or end-users, describe the differences.</p>
	<p>Answer: User with valid account. Both the Professional installer and end user can use UI within the same level.</p>
	<p>a. What parameters are viewable and configurable by different parties?</p>
	<p>Answer: Basic parameters , such ad Scan, connect, dis-connect, browse the scanning list, view the connection.</p>
	<p>b.What parameters are accessible or modifiable by the professional installer or system integrators?</p>
	<p>Answer: Same as above.</p>
	<p>i. Are the parameters in some way limited, so that the installers will not enter parameters that exceed those authorized?</p>
	<p>Answer: Yes.</p>
	<p>ii. What controls exist that the user cannot operate the device outside its authorization in the U.S.?</p>
	<p>Answer: NO. The device only can operate on the channel list supported in the U.S.</p>
	<p>c. What parameters are accessible or modifiable by the end-user?</p>
	<p>Answer: NO. There are no configuration options available to the end-user.</p>
	<p>i. Are the parameters in some way limited, so that the user or installers will not enter parameters that exceed those authorized?</p>
<p>Answer: Yes, all the parameters should be changed only in the right range.</p>	

	ii. What controls exist so that the user cannot operate the device outside its authorization in the U.S.?
Answer:	No. The channel and frequency only are limited to use in U.S.
	d. Is the country code factory set? Can it be changed in the UI?
Answer:	The country code is factory set. It could not be changed in the UI.
	i. If it can be changed, what controls exist to ensure that the device can only operate within its authorization in the U.S.?
Answer:	NA, cant be changed
	e. What are the default parameters when the device is restarted?
Answer:	configure to an optimized channel map for the given country detected. As the default configuration, We preset FCC regulatory domain. Before we can determine the regulatory domain, we default to the U.S. country code.
	10. Can the radio be configured in bridge or mesh mode? If yes, an attestation may be required. Further information is available in KDB Publication 905462 D02.
Answer:	No, cannot be configured in bridge or mesh mode.
	11. For a device that can be configured as a master and client (with active or passive scanning), if this is user configurable, describe what controls exist, within the UI, to ensure compliance for each mode. If the device acts as a master in some bands and client in others, how is this configured to ensure compliance?
Answer:	The device could be configured as a master and client at the same time. It can scan bands only support in this country when it is a client. It can not support B2\B3, and user can not set bands when it is a master. On the latest version of the Android, offload features are already supported by devices that can now support both clients and master.
	12. For a device that can be configured as different types of access points, such as point-to-point or point-to-multipoint, and use different types of antennas, describe what controls exist to ensure compliance with applicable limits and the proper antenna is used for each mode of operation. (See Section 15.407(a))
Answer:	Follow Unisoc original design. User can only configure AP Band(2.4G/5G), Security Type, Max connections. Can not configure channels.

If you should have any question(s) regarding this declaration, please don't hesitate to contact us. Thank you!



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Date: December 17, 2021