



DT Research, Inc.

Add: 3RD FL NO 36 WUQUAN 7TH RD WUGU DISTRICT, NEW TAIPEI, Taiwan

Tel: 886-2-2298-1039-354 Fax: 886-2-2298-1106

Email: kikitang@dttri.com

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FEDERAL COMMUNICATIONS COMMISSION

Authorization and Evaluation Division

7435 Oakland Mills Road

Columbia, MD 21046

Attn: Office of Engineering and Technology

Subject: Attestation letter regarding U-NII DEVICES

FCC ID: **YE3600D**

SOFTWARE SECURITY DECLARATION FOR U-NII DEVICES

SOFTWARE SECURITY DESCRIPTION	
General Description	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. Reply: All the firmware/software update will via DT Research, Inc. (DTRI) FAE or DTRI certified service partners (INTEL information).
	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? Reply: For products sold into the US, all devices are programmed and locked to the FCC regulatory domain at the factory. All the firmware/software update will via DTRI FAE or DTRI certified service partners (INTEL information).
	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. Reply: The software on the device does not support writing to non-volatile storage areas containing firmware, except through the use of our software's upgrade functions. The software upgrade functions will be provided by DTRI FAE or DTRI certified service partners (INTEL information).
	4. Describe in detail any encryption methods used to support the use of legitimate RF-related software/firmware. Reply: No encryption methods were used in image process.
	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? Reply: Our system only supports Wi-Fi client mode.

Third-Party Access Control	1. Explain if any third parties have the capability to operate a U.S.-sold device on any 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. Reply: The regulatory domain and frequencies of Wi-Fi module is automatically switched by Qualcomm Atheros module.
	2. 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. Reply: INTEL only provides Worldwide version software/firmware of Wi-Fi module.
	3. For Certified Transmitter modular devices, describe how the module grantee ensures that host manufacturers 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. Reply: DT Research use the default driver and follow default setting from INTEL.
USER CONFIGURATION GUIDE	1. 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. Reply: There is no difference for different levels access; Qualcomm Atheros locks all configurations setting and no permitted to adjust.
	a) What parameters are viewable and configurable by different parties? Reply: End users can not view any software configuration parameters
	b) What parameters are accessible or modifiable to the professional installer or system integrators? Reply: None, INTEL locks the parameter.
	i) Are the parameters in some way limited, so that the installers will not enter parameters that exceed those authorized? Reply: None, INTEL locks the parameter.
	ii) What controls exist that the user cannot operate the device outside its authorization in the U.S.? Reply: None, INTEL locks the parameter.
USER CONFIGURATION GUIDE (cont.)	c) What parameters are accessible or modifiable by the end-user? Reply: The configurations are manufactory (INTEL) default setting and not changeable by end-user.
	i) Are the parameters in some way limited, so that the installers will not enter parameters that exceed those authorized? Reply: The configurations are manufactory (INTEL) default setting and not changeable by end-user.

	ii) What controls exist that the user cannot operate the device outside its authorization in the U.S.? Reply: The configurations are manufactory (INTEL) default setting and not changeable by end-user.
	d) Is the country code factory set? Can it be changed in the UI? Reply: The country code is setup by manufactory (INTEL). No mechanism to change in the UI.
	e) What are the default parameters when the device is restarted? Reply: ● Operating Country Code: US ● Frequency: auto (Operational frequency bands currently allowed for products sold into FCC regulated areas are: 5150 MHz ~ 5250 MHz、 5250 MHz~ 5350 MHz、 5470 MHz ~5725 MHz、 and 5725 MHz ~5850 MHz.) ● Output power: same with the FCC certification ● Channel width: Auto 20/40/80 MHz DFS: Enabled
	2. 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. Reply: The device cannot be configured in bridge or mesh mode.
	3. 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? Reply: Only support Wi-Fi client mode.
	4. 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)) Reply: Our system is with embedded antenna and Wi-Fi module device. As above descriptions, the End user only use the INTEL default setting.

Sincerely,

Applicant signature:

Kiki Tang

Kiki Tang
Manager