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# The information provided in this document applies to the following Intel Wireless Adapter Modules

FCC ID: **PD9BE201NG** IC: **1000M – BE201NG** 

### Software Security Description

- KDB 594280 D02v01r03 Section II
- RSS 248 (section 11 a, b, & c)

## **General Description**

| 1. Describe how any software/firmware update will     | There is no downloadable software provided by the       |
|---|---|
| be obtained, downloaded, and installed. Software      | manufacturer that can modify critical radio transmitter |
| that is accessed through manufacturer's website or    | parameters. All critical parameters are programmed in   |
| 5   |   |
| device's management system, must describe the         | OTP memory at the factory and cannot be modified or     |
| different levels of security as appropriate.          | overridden by third parties.                            |
|   |   |
| 2. Describe the rf parameters that are modified by    | There are no rf parameters that can be modified. All rf |
| any software/firmware without any hardware            | parameters are programmed in OTP memory at the          |
| changes. Are these parameters in some way             | factory and cannot be modified or overridden by third   |
| limited, such that, it will not exceed the authorized | parties.  |
| RF characteristics?                                   |   |
| 3. Describe in detail the authentication protocols    | The firmware is programmed at the factory and cannot    |
| that are in place to ensure that the source of the RF | be modified by third parties.                           |
| related software/firmware is legitimate. Describe in  |   |
| detail how the software is protected against          |   |
| modification.   |   |
| 4. Describe in detail any encryption methods used     | The firmware is programmed at the factory and cannot    |
| to support the use of legitimate RF                   | be modified by third parties therefore no encryption is |
| relatedsoftware/firmware.                             | necessary.  |
|   | ·   |
| 5. For a device that can be configured as a master    | This is a client module only.                           |
| 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?      |   |
|   |   |
|   |   |

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# **Third-Party Access Control**

| 1. Explain if any third parties have the capability to operate a US sold device on any other regulatory domain, frequencies, or in violation of the device's authorization if activated in the U.S   | Third parties do not the capability to operate in any manner that is violation of the certification in the U.S.  |
|--|--|
| 2.Describe, if the device permits third-party<br>software or firmware installation, what<br>mechanisms are provided by the manufacturer<br>to permit integration of such functions while<br>ensuring that the RF parameters of the device<br>cannot be operated outside its authorization for<br>operation in the U.S. In the description include<br>what controls and/or agreements are in place<br>with providers of third-party functionality to<br>ensure the devices' underlying RF parameters<br>are unchanged and how the manufacturer<br>verifies the functionality. | factory and cannot be reprogrammed or re-flashed by third parties.   |
| 3. For Certified Transmitter modular devices,<br>describe how the module grantee ensures that<br>hosts manufactures fully comply with these<br>software security requirements for U-NII<br>devices. If the module is controlled through<br>driver software loaded in the host, describe<br>how the drivers are controlled and managed<br>such that the modular transmitter parameters<br>are not modified outside the grant of<br>authorization.   | There are no rf parameters that can be modified. All rf<br>parameters are programmed in OTP memory at the<br>factory and cannot be modified or overridden by third<br>parties. The module is not controlled by driver<br>software on the host and cannot override critical rf<br>parameters stored in module OTP memory. |



## SOFTWARE CONFIGURATION DESCRIPTION – KDB 594280 D02v01r02 Section III

#### USER CONFIGURATION GUIDE

| 1. Describe the user configurations permitted                   | No UI provided.   |
|---|---|
| through the UI. If different levels of access are               |   |
| permitted for professional installers, system                   |   |
| integrators or end-users, describe the differences.             |   |
|   |   |
| a) What parameters are viewable and                             | None  |
| configurable by different parties?                              |   |
|   |   |
| b) What parameters are accessible or                            | None  |
| modifiable to the professional installer or system              |   |
| integrator?   |   |
| i) Are the parameters in some way limited, so                   | The module micro-code reads the parameters from the     |
| that the installers will not enter parameters that              | module OTP memory. These parameters cannot be           |
| exceed those authorized?  | modified or overridden by sw drivers.                   |
|   |   |
| ii) What controls exist that the user cannot                    | Default mode is always FCC compliant. Other country     |
| operate the device outside its authorization in the             | modes cannot be activated without receiving three       |
| U.S.?   | independent country codes from different APs, otherwise |
|   | remains in FCC default mode (always FCC compliant)      |
| c) What parameters are accessible or                            | None  |
| modifiable by the end-user?                                     | INOME   |
| noullable by the end-user?                                      |   |
| i) Are the parameters in some way limited, so                   | The module micro-code reads the parameters from the     |
| that  |   |
|   |   |
| the installers will not enter parameters that                   | module OTP memory. These parameters cannot be           |
| exceed those authorized?  | modified or overridden by sw drivers.                   |
|   |   |
| ii) What controls exist that the user cannot                    | Default mode is always FCC compliant. Other country     |
| operate the device outside its authorization in the             | modes cannot be activated without receiving three       |
| U.S.?   | independent country codes from different APs, otherwise |
|   | remains in FCC default mode (always FCC compliant)      |
|   |   |
| d) Is the country code factory set? Can it be                   | Default country code is set in the factory and no UI is |
| changed in the UI?  | provided for modification.                              |
|   |   |
| i) If it can be changed, what controls exist to                 |   |
| ensure that the device can only operate within its              |   |
| authorization in the U.S.?                                      | timeouts or other host or network events.               |
|   |   |
| <ul> <li>e) What are the default parameters when the</li> </ul> | Always FCC compliant                                    |
| device is restarted?  |   |
|   |   |

| <ol><li>Can the radio be configured in bridge or mesh</li></ol> | No                                  |
|---|-------------------------------------|
| mode? If yes, an attestation may be required.                   |                                     |
| Further information is available in KDB Publication             |                                     |
| 905462 D02.   |                                     |
| 3. For a device that can be configured as a master              | This is a client device.            |
| 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?   |                                     |
| 4. For a device that can be configured as different             | This device is not an access point. |
| 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))  |                                     |

Sincerely,

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