

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

Model	FCC ID
3165D2W	PD93165D2
	PD93165D2U

## Software Security Description – KDB 594280 D02v01r02 Section II

#### **General Description**

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

<ol> <li>Explain if any third parties have the capability to operate a US sold device on any other regulatory domain, frequencies, or in any manner that is in violation of the certification.</li> </ol>	Third parties do not the capability to operate in any manner that is violation of the certification in the U.S.
2. What prevents third parties from loading non-US versions of the software/firmware on the device? Describe in detail how the device is protected from "flashing" and the installation of third-party firmware such as DD-WRT. (See, for example, <u>http://www.dd-wrt.com/</u> )	RF parameters are programmed into OTP memory at the factory and cannot be reprogrammed or re-flashed by third parties.
3. 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 parameters are not modified outside the grant of authorization.	There are no rf parameters that can be modified. All rf parameters are programmed in OTP memory at the factory and cannot be modified or overridden by third parties. The module is not controlled by driver software on the host and cannot override critical rf parameters stored in module OTP memory.

# SOFTWARE CONFIGURATION DESCRIPTION – KDB 594280 D02v01r02 Section III

### USER CONFIGURATION GUIDE

1. To whom is the UI accessible? (Professional installer,	No UI provided.
end user, other.)	
a) What parameters are viewable to the professional	None
installer/end-user?	
b) What parameters are accessible or modifiable to	None
the professional installer?	
i) Are the parameters in some way limited, so that	The module micro-code reads the parameters from the
the installers will not enter parameters that exceed	module OTP memory. These parameters cannot be
those authorized?	modified or overridden by sw drivers.
ii) What controls exist that the user cannot operate	Default mode is always FCC compliant. Other country
the device outside its authorization in the U.S.?	modes cannot be activated without receiving three
	independent country codes from different APs, otherwise
	remains in FCC default mode (always FCC compliant)
c) What configuration options are available to the	None
end-user?	
i) Are the parameters in some way limited, so that	The module micro-code reads the parameters from the
the installers will not enter parameters that exceed	module OTP memory. These parameters cannot be
those authorized?	modified or overridden by sw drivers.
ii) What controls exist that the user cannot operate	Default mode is always FCC compliant. Other country

the device outside its authorization in the U.S.?	modes cannot be activated without receiving three
	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 changed	Default country code is set in the factory and no UI is
in the UI?	provided for modification.
i) If so, what controls exist to ensure that the	Programmed for default mode which is always FCC
device can only operate within its authorization in the	compliant. Always set for default for all start-ups, resets,
U.S.?	timeouts or other host or network events.
e) What are the default parameters when the device	Always FCC compliant
is restarted?	
2. Can the radio be configured in bridge or mesh mode?	No
If yes, an attestation may be required. Further	
information is available in KDB Publication 905462 D02.	
<b>3.</b> For a device that can be configured as a master and	This is a client device.
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?	
<b>4.</b> For a device that can be configured as different types	This device is not an access point.
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))	

Name and surname of applicant (or <u>authorized</u> representative):

Date: <u>May 11, 2015</u>

Signature: Stor C Utturs

Steven C. Hackett Product Regulations Enginee Intel Mobile Communicationsr