![NVIDIA logo] **nVIDIA.**

February 20, 2012

Federal Communications Commission
7435 Oakland Mills Road
Columbia, Maryland 21046
USA

Subject: Correspondence Reference Number 117119; FCC ID: VOB-NB099HA

To whom it may concern,
Please see below in response to FCC Correspondence 117119, dated 03 February 2012.

Q1: Submit a channel/frequency plan for this device showing the channels that have active scanning or passive scanning. Active scanning is where the device can transmit a probe (beacon) and passive scanning is where the device is can listen only with no probes.

Response: The radio supports 802.11d and will not transmit until a valid Master device is detected. In the case when 802.11d is not activated, only non-DFS channels are actively probed as shown in the table below. Also, the test lab performed a boot up test and did not detect a beacon in the DFS bands.

| 2.412 - 2.462 GHz (Ch. 1-11) | 5.15 - 5.25 GHz (CH. 36 - 48) | 5.25 - 5.35 GHz (Ch 52 - 64) | 5.47 - 5.725 GHz (Ch. 100 - 140) | 5.725 - 5.825 GHz (Ch. 149 - 161) | 5.825 - 5.85 GHz (Ch. 165) |
|---|---|---|---|---|---|
| Active Scan | Active Scan | DFS Channels Passive Scan | DFS Channels Passive Scan | Active Scan | Active Scan |

Q2: Verify that this device does not have ad-hoc mode.

Response: This device does support ad-hoc mode on the following channels:

| Band/Sub-band (GHz) | Channels |
|---|---|
| 2.400 - 2.4835 | 1 - 11 |
| 5.15 - 5.25 | 36 - 48 |

Also, we have added 20dB BW plots (please refer to test report R1111165-407) to prove that all 5.15-5.25G band Channels do not leak into the 5.25-5.35G DFS band.

Q3: Verify that this application contains a complete User's Manual and/or Professional Installers Manual. If the manual is not complete, upload an updated User's Manual exhibit.

Response: User's guide/installation manual attached

Q4: Can this device act as an access point on the non-DFS legacy frequencies (5.15-5.25 MHz)

Response: This device does not act as an Access Point on 5.15 – 5.25 GHz but does support Ad-Hoc mode in this band.


Q5: Verify that this device meets the frequency requirements of Section 15.202 .
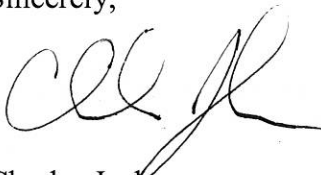
Response: For 5G band, this device supports 802.11d that operates the WLAN transmitter passively until a valid master device is detected in compliance to 15.202. In the case where 802.11d is not activated, the radio will only operate on US non-DFS frequencies until it's under the control of a master device.

For 2.4G band, the product does support AP function (master) on 2.4G Band but can only transmit on US channel (ch1 to ch11).


Q6: For client devices that have software configuration control to operate in different modes (active scanning in some and passive scanning in others) in different bands (devices with multiple equipment classes or those that operate on non-DFS frequencies) or modular devices which configure the modes of operations through software, the application must provide software and operations description on how the software and / or hardware is implemented to ensure that proper operations modes can not be modified by end user or an installer.

Response: On DFS channels, the WLAN driver on the device operates under the control of an AP at all times, except when in ad-hoc mode, on US non-DFS channels. As described in the answer to question 1, the device passively scans DFS frequencies until a master device is detected. As part of the DFS functionality in the WLAN driver, software is implemented to react to radar detection messages and move to a new channel. The control of this functionality is not accessible to anyone under any conditions. Furthermore, the firmware is protected by CRC method and cannot be changed or modified by end user, this will cause WLAN non-workable.


Sincerely,

Charles Jackson
Compliance Engineering Manager
NVIDIA Corporation