September 9, 2014

Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046

Subject: Original Application FCC ID: RMXWSBUB-SDS

Dear Application Examiner:

Intel Corporation is submitting this application for certification of their Model WSBUB-SDS, under FCC ID: RMXWSBUB-SDS. The device is a laptop / tablet convertible computer containing a NFC radio. Previously certified WWAN (FCC ID: RYQ-NF2) and WLAN / Bluetooth (FCC ID: PD97265NG) modular radios are installed. System authorization is sought under FCC 15.225, 15.247, FCC 15.407, FCC 22H, FCC 24E and FCC 27

The WWAN radio is 3G / 4G device operating in the CLR 850, PCS 1900, and AWS 1700 bands; and LTE 2, 4, 5, 7, 13, and 17 bands.

The WLAN / Bluetooth module contains an 802.11abgnac 2x2 MIMO radio. The 2.4 and 5 GHz band use 20 & 40 MHz channel bandwidths for Chain A or B, and A+B combinations. The 5 GHz bands also support 802.11 ac for 20, 40, and 80 MHz channel bandwidths for Chain A or B, and A+B combinations. It also contains a Bluetooth 4.0 radio.

The WLAN radio can operate in the DFS frequency bands as a client device only. It has no radar detection and no ad-hoc capability. Intel Corporation declares that the product cannot transmit between 5600 – 5650 MHz. A DFS test for a client device was performed.

The laptop computer can be used closer than 20 cm to the user's torso so a SAR evaluation was performed. The main antenna for the WWAN radio is co-located with a proximity sensor. Once the sensor is triggered, the output power is lowered for all WWAN bands. An evaluation of the proximity sensor is contained in the SAR report.

The antennas are integral to the laptop computer. They are not user accessible so they meet the requirements of FCC 15.203.

The receiver portion of the WWAN radio has been verified to FCC 15B requirements. The laptop computer has been DoC authorized as a Class B computing device.

The following is a summary of the reports submitted with this application:

Type	Purpose	Reports
EMC: 15.225	System testing of the NFC radio in the laptop.	NWEMC Report – INTE5437.1
EMC: 15.247 15.407	Stand-alone module testing of the WLAN / Bluetooth module. Used to demonstrate compliance for antenna port direct connect measurements, and spurious radiated emissions.	AT4 Reports – 41273RRF.001 41273RRF.002 41273RRF.003
DFS: 15.407	Stand-alone module testing of the WLAN / Bluetooth module. Used to demonstrate compliance for DFS as a client device.	AT4 Report – 41273RRF.004
EMC: 22H 24E 27	Stand alone module testing of the WWAN module. Used to demonstrate compliance for antenna port direct connect measurements, radiated power and spurious radiated emissions.	Sporton Lab Reports – FG352141A, FG352141B, FG352141-01A, FG352141-01B
EMC: 22H 24E 27	System level testing of the WWAN module in the laptop computer for radiated power.	NWEMC Report – INTE5452
EMC 15.207	System level testing used to demonstrate compliance of AC power line conducted emissions.	NWEMC Report – INTE5492
SAR: 2.1093	System level SAR evaluation of the WWAN module in the laptop. Also includes testing of the proximity sensor.	NWEMC Report – INTE5478
SAR: 2.1093	System level SAR evaluation of the WLAN module in the laptop.	NWEMC Report – INTE5434

Best regards,

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