# **RF Exposure Evaluation** in co-locating with other transmitters

#### 1. Configuration

The host device (Tablet PC Series) has the following two types of configuration for the wireless communication features, and three transmission antennas are accommodated for wireless LAN adapter.

The FCC and IC already granted the Main Antenna-1 and Auxiliary antenna on October/18/2006 (FCC), and on October/03/2006 (IC TAC#: ATCB004060).

This application includes the SAR test report for the applying modular transmitter device (FCC ID: **PD9 LEN3945ABG**, IC: **1000M-LEN3945**) measured for the new antenna (Main Antenna-2 shown in the Figure-1).



The Bluetooth module transmits with the applying WLAN device simultaneously, but the WLAN and WWAN transmitter modules do not establish the network link connections, but switch the operation each other within 11 seconds of hand over time when one is in active. (See Section 2 in this exhibit.)

Therefore, any RF Exposure evaluation for the applying WLAN transmitter in co-locating with WWAN transmitters is not required.

### 2. Wireless LAN /WAN switching scheme within 11 seconds of handover time

Location profile switching scenario

- Exclusive control for WLAN and WAN when WLAN and WAN location profile is applied by user (manual mode switching)
- Exclusive control when automatic location switching is performed by Access Connections (automatic profile roaming)



## Radio control by software menu (Fn+F5 hot key)

Exclusive control when WLAN or WAN Radio ON is selected by hot key



Wireless WAN/LAN status indication

The sifting status from WAN(LAN) to LAN(WAN) is also indicated with the following LED. The switching time is actually shorter than 11 seconds of logical control limit time.



#### 3. Justification for SAR testing

The subjected host device is a tablet type PC, and the transmission antennas are very close to the human body. Therefore the applying LMA transmitter and the antenna system is categorized as a Potable device pursuant to FCC CFR 47 Section 2.1093 and RSS-102e clause 2.5.1.

The WLAN and WWAN modules do not establish the network link connections simultaneously, but switch to the other within 11 seconds of handover time when one is in active. So each independent SAR testing for WLAN or WWAN module is available for RF exposure evaluation.

The separate SAR test report (Number: 07U10903-3) was measured for the applying modular transmitter (FCC ID: **PD9LEN3945ABG**, IC: **1000M-LEN3945**). The maximum measurement result was 0.154W/Kg, then the applying device has found to comply with the SAR limits.

The SAR testing was performed with the co-located Bluetooth (FCC ID: MCLJ07H081, IC: 2878D-J07H081) in active and transmitting simultaneously.

The SAR test was performed with the following configuration, and the same terms of each configuration are referred in the SAR test report.







Figure-4: Tablet PL (Primary Landscape)





### Figure-6:Tablet SL (Secondary Landscape)





### [Transmission control in "Tablet" operation mode]

• The system recognizes mechanically that it is transformed from "Notebook mode" to "Tablet mode".



- The screen angle of **Tablet mode** is determined by operators with the screen rotation switch shown below, then the system recognizes which screen mode in **PL**, **PP**, **SL** or **SP** is selected.
- When the SL screen mode was selected, the system performs transmission control according to the kind of each wireless card. The applying card (FCC ID: PD9LEN3945ABG, IC: 1000M-LEN3945) is forced to switch the transmission to the main antenna, and the aux antenna won't be used.
- When the SP screen mode was selected, the system also performs transmission control according to the kind of each wireless card. The applying card (FCC ID: PD9LEN3945ABG, IC: 1000M-LEN3945) is forced to switch the transmission to the aux antenna, and the main antenna won't be used

