

Re: FCC ID: N7NMC8781-F

Applicant: Sierra Wireless Inc.

Correspondence Reference Number: 36130

Form 731 Confirmation Number: EA171420

Date of Original E-mail: 08/29/2008

FCC Question:

"RF exposure review on this multi-transmitter product application can continue when information is submitted into this filing showing location of all antennas subject to SAR evaluation for simultaneous transmission, and the simultaneous transmission SAR evaluation results; please explain where if any of this info is in filing already"

Response:

Following the rule : "when the sum of SAR (simultaneously transmitting antennas WLAN and WWAN) is < 1.6 mW/g and the antenna pair SAR to antenna separation ratio is < 0.3, **no simultaneous transmission SAR evaluation is required**" additionally the distance between antennas was more than 5cm (it was 8cm). The Bluetooth output power was under 5dBm, and also its antenna was located more than 2.5cm away from any other transmitting antennas. Please see Antenna position information document enclosed with this response.

Here is a summary and DATA that was used to assess the requirements for SAR multiband evaluation:

Report No. M080425 for WLAN Atheros HB92 (FCC ID: EJE-WB0059)

1. 5.6 GHz band – SAR = 0.012 mW/g Position Tablet Antenna 1 Channel 118 Modulation HT0 40MHz.
2. 2.45 GHz band – SAR = 0.026 mW/g Position Tablet Antenna 1 Channel 6 Modulation OFDM.

Report No. M080405 for WLAN Atheros HB92 (FCC ID: EJE-WB0059)

1. 5.6 GHz band – SAR = 0.031 mW/g Position Tablet Antenna 1 Channel 159 Modulation OFDM.
2. 2.45 GHz band – SAR = 0.011 mW/g Position Tablet Antenna 1 Channel 6 Modulation OFDM.

Report No. M080404 for WLAN Intel SP533 (FCC ID: EJE-WB0058)

1. 5.6 GHz band – SAR = 0.047 mW/g Position Tablet Antenna 1 Channel 120 Modulation OFDM.
2. 2.45 GHz band – SAR = 0.041 mW/g Position Tablet Antenna 1 Channel 6 Modulation DSSS.

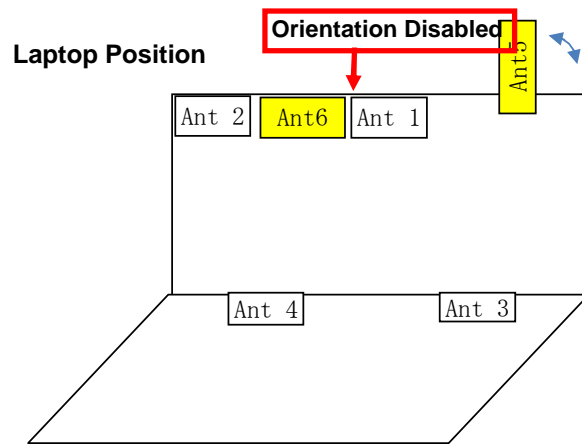
Report No. M080620 T5010 tablet PC with WWAN Module (FCC ID: N7NMC8781-F)

1. SAR = 0.503 mW/g Position Tablet Antenna Main OUT Channel 190 GPRS Class 10 850MHz band (middle channel assessed only as being below 3db away from the SAR limit threshold, and even if doubled would not call for multiband evaluation).

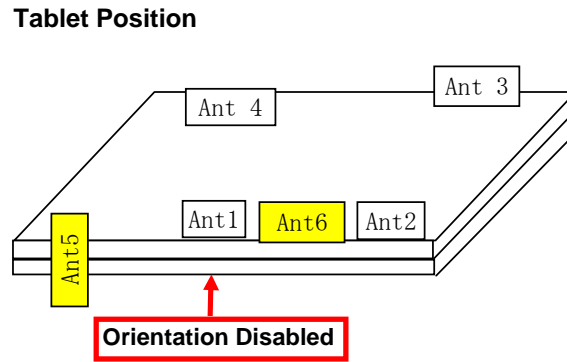
Report No. M080622 T1010 tablet PC with WWAN Module(FCC ID: N7NMC8781-F)

1. Highest SAR = 0.477 mW/g Position Tablet Antenna Main OUT Channel 512 GPRS Class 12 1900MHz band.

Please note that for the WLAN only middle channel was assessed in the Tablet position as this has produced low SAR values that are close to the Noise Floor of the DASY4 measurement system.

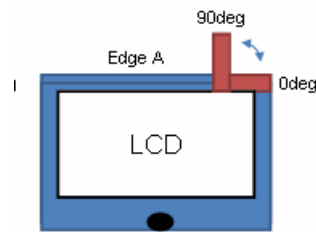
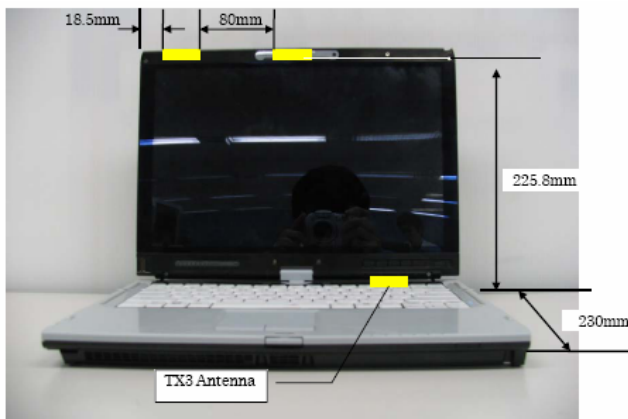


Seneca Antenna Config with UMTS



Radio Module				Connection (Ant - Module port)					
WLAN	UMTS	BT	Ant 1 (Gray cable)	Ant 2 (Black cable)	Ant 3 (Blue cable)	Ant 4 (on Module)	Ant 5 Tx	Ant 6 Rx Only	
ShirleyPeak533 3x3	MC8781	BT	ShirleyPeak	ShirleyPeak	ShirleyPeak	BT	MC8781 Main	MC8781 AUX	
Atheros 2x2 HB92	MC8781	BT	Atheros Main	Atheros AUX	-	BT	MC8781 Main	MC8781 AUX	

WLAN/UMTS Antenna to BT Antenna distance > 5cms



Tablet mode for (T5010) Seneca

Landscape Orientation: Hold the system with the display positioned horizontally with the latch on the top.

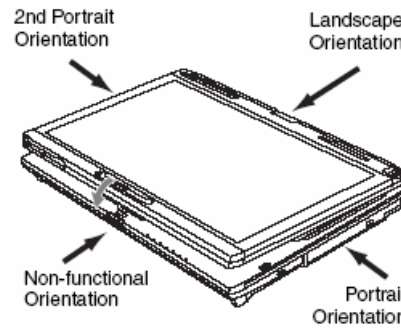


Figure 1. Tablet Mode