# Mike Kuo

From: Claire Hoque

Sent: September26日2003年Friday 3:52 PM

To: Mike Kuo

Cc: Michael Heckrotte; Sunny Shih

Subject: FW: Atheros Communications FCC ID:PPD-AR5BCB-00043, AN03T3295

### Hi Mike,

Here are the answers from Mike and Sunny.

## EMC portion:

Question #1: Since the device is Cardbus card which will be used with notebook computer where the separation distance is less than 20 cm and is classified as portable device per section 2.1093 of FCC rules, section 7.4 of EMC test report contains MPE estimate calculation will not be applicable to justify RF exposure compliance for portable device. Please remove section 7.4 from EMC test report.

#### Answer:

Pls see the revised FCC report as attached.



03U2247-1 FCC Report(revised)....

### SAR portion:

Question #2: The FCC ID number listed in SAR test report does not agree with TCB application form and FCC ID label format. Please make necessary correction.

## Answer:

Pls see the attached revised SAR report.



03U2247-5 SAR Report(revised)....

Question #3: The conducted output power reported in the SAR test report is it Average or peak? What is the manufacturer name and model number of instrument used in making RF conducted power measurement?

## Answer:

The conducted output power is average. We'll updated report.

Measurement instruments as listed below:

Power Meter: Giga-tronic, model 8561A, serial number 8651404 Power Sensor: Giga-tronic, model 8561A, serial number 1834688

Question #4: Based upon preliminary test results, at 802.11b modulation, antenna B with 2Mbps @ middle channel(6/2437MHz) is the worst case with IBM notebook computer. However, during the final measurement, Antenna A port with 2Mbps is used. Please explain the selection process.

#### Answer:

Actually, The worst case is at antenna A with 2Mbps @ middle channel and NOT at antenna B with @ middle channel (6/2437MHz).

Here're the measurement results at Antenna A & B. 0.263mW/g at antenna A with 2Mbps @ middle channel 0.0293mW/g at antenna B with 2Mbps @ middle channel

Question #5: In the final SAR evaluation for Compaq and Dell Notebook computer, SAR measurement only performed at Low and Middle channel. The highest reported SAR value for middle channel is higher than 0.8mW/g which is the threshold to minimize the additional channels. Since the highest reported SAR value at low and middle channel are highest 0.8mW/k, high channel evaluation is required. Please provide additional SAR data for high channels tested with Compaq and Dell computers under the following operating conditions:

- 1. Compaq computer: Test configuration #2 with 802.11 OFDM modulation with 9Mbps data rate, three highest channel ( 2472MHz)
- 2. Compaq computer: Test configuration #2 with 802.11 DSSS modulation with 2Mbps data rate, three highest channel ( 2472MHz)
- 3. Dell computer:Test configuration #2 with 802.11 OFDM modulation with 9Mbps data rate, three highest channel (2472MHz)
- 4. Dell computer:Test configuration #2 with 802.11 DSSS modulation with 2Mbps data rate, three highest channel (2472MHz)

# Answer:

We have performed preliminary & full measurements with IBM notebook computer and found the worse case depend on the output power. We have chosen low channel which power lower than middle channel to ensured our judgment and found the SAR value lower than middle channel, therefore, we skipped high channel measurement.

Thanks,

Claire