Helen Zhao

Subject: FW: answer: ATHEROS COMMUNICATIONS, INC., FCC ID: PPD-AR5BXB6-M,

Assessment NO.: AN05T5263, Notice#1















AR5BXB6 Board Changes 11-15-05...nfidentiality Reques

AR5BXB6 Schematic 11-3-05.pdf

Photos(revised).pdf DTS Report.pd... UNII Report.pd...

05U3760-1A3 FCC 05U3760-2A3 FCC

HTL017.pdf





Antenna List Added PPD-AR5BXB6...

Antenna WNC001.pdf

Antenna 81EDZ15.pdf

Hi Helen,

Here are the answers.

I attached revised DTS/UNII test reports, revised antenna list with antenna spec., revised schematic, new confi. letter, revised internal photos, board change letter.

Question #1: This Class II change test report lists average power output, the original test report lists the Peak power output only, please explain how you know the power output in Class II test was tuned to the certified power level as documented in the original certification filing. By the way, the original test report shows the peak power output was measured using R&S power sensor NRV-Z53, which does not enable peak power measurement. Please explain.

<answer> The ART power settings referenced in the original FCC test report from Elliott Labs correlate to the average conducted output powers for the specified operating modes (802.11b, 11g, 11a) to within 0.5dB. These power settings were calibrated using an average power meter. The power output in the Class II test was tuned to the certified power level based on the average power. Elliott Labs confirmed the original testing in their report was done using a R&S NRV-Z32 peak power sensor. This was inadvertently left out of the equipment list in the report.

Question #2: This Class II filing contains 1) hardware changes, 2) adding new antennas. Adding new antennas itself is not required a Class Il change filing, as all the new antennas are of the same type as the originally certified, with lesser gain antenna. Now the question is whether the originally certified antennas will be used with this Class Il change, if so, you need to repeat all the radiated spurious emission and bandedge test with the highest gain antenna in each band: 3.6 dBi in 2.4GHz band, 5.6dBi in 5.2GHz band, 4.8dBi in 5.8GHz band. If only the new antennas included in this filing will be used with the hardware changes, the applicant needs to submit a statement to clearly indicate this.

<answer> The Class II Permissive Change reflects the specified board changes with use of the new antennas listed in the separate exhibit. The modified board will not be used with any of the original antennas. The average power levels on selected channels and modes were reduced from the originally certified power levels in order to comply with radiated spurious emissions limits with the new antennas.

Question #3: Please submit the updated Schematics.

<answer> pls see revised schematic.

Question #4: Please take internal photos and resubmit Internal Photos exhibit.

<answer> Pls see revised internal photos.

Question #5: This is for your information, antenna specification was requested to be kept confidential in the original filing, if you would like to keep the antenna specification in this filing (and schematics) confidential too, you may need to submit a Request for Confidentiality Letter.

<answer> pls see new confidentiality letter attached.

Thanks,

Claire