

Chris Harvey

From: Mike Kuo [mike.kuo@ccsemc.com]
Sent: Monday, May 18, 2009 3:56 PM
To: Chris Harvey
Cc: Claire Hoque; Thu Chan
Subject: RE: Qualcomm Incorporated, FCC ID: J9CUNDP-1L, Assessment NO.: AN09T9102, Notice#1
Attachments: SAR+SAR RF Exposure evaluation_v 2_.pdf; C2PC_letter_2009-02-24 Realtek.pdf

Hi Chris:

Answers to your questions are embedded below: Please do list my name in your PBA upload.

Best Regards

Mike Kuo
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-----Original Message-----

From: Chris Harvey [mailto:charveyemc@gmail.com] On Behalf Of Chris Harvey
Sent: Thursday, May 07, 2009 12:42 PM
To: Mike Kuo
Cc: Claire Hoque; Thu Chan
Subject: FW: Qualcomm Incorporated, FCC ID: J9CUNDP-1L, Assessment NO.: AN09T9102, Notice#1

Mike, I just sent this request for Qualcom which is the FCC response to the HSUPA PBA filing...

Best regards,

Chris Harvey
charvey@ieee.org
410-750-0860

-----Original Message-----

From: charvey-tcb@ccsemc.com [mailto:charvey-tcb@ccsemc.com]
Sent: Thursday, May 07, 2009 3:45 PM
To: Thu.Chan@CCSEMC.COM
Cc: chris.harvey@ccsemc.com; claire.hoque@ccsemc.com
Subject: Qualcomm Incorporated, FCC ID: J9CUNDP-1L, Assessment NO.: AN09T9102, Notice#1

Dear Thu Chan,
You are listed as the Technical Contact for the above referenced TCB application. The following items were raised by the FCC during the Permit But Ask (PBA) process and need to be resolved before the review can be

continued:

1) for WWAN power listings, please ensure maximum source-based time-averaged conducted power (e.g. frame-average power for GXW) is listed and used in analysis, or revise where appropriate
[Mike Kuo] Attached please find revised RF exposure assessment. Source-based time averaging power based upon the duty factors are incorporated in the revised document.

2) attachment "SAR RF Exposure evaluation"

a) at 5.2.2 mention of Table 4, where appropriate please adjust related to item 1) here [Mike Kuo] Source-based time averaging power are used.

b) at 5.2.2, for each configuration please identify whether all specific antennas were installed and are same as what is installed for this filing, and/or explain in case of variances [Mike Kuo] All antennas mentioned in the RF exposure assessment documents are installed in the identical location. The only difference is the TX module.

c) at 5.3, for each configuration please identify whether all specific antennas were installed and are same as what is installed for this filing, and/or explain in case of variances [Mike Kuo] All antennas mentioned in the RF exposure assessment documents are installed in the identical location. The only difference is the TX module.

d) 5.3.1 mentions "in accordance with the FCC KDB 447498"

- KDB 447498 item 3) b) ii) (1) has three AND conditions to establish whether simul.-transmit SAR is required, however not all seem to be considered here

- please expand and explain to apply three conditions, and identify conditions if any where variance is being requested [Mike Kuo] Three conditions mentioned in KDB 447498 are: 1) closest antenna separation distance is > 5 cm; 2) the Sum of 1-g SAR of all simultaneous TX is less than 1.6 W/kg; 3) The output power shall be less than $60/f(\text{GHz})$ for not doing stand-alone SAR measurement. The subject application does not comply item 1 where the WWAN-Main-to-WLAN main separation distance is < 5 cm (3.9 cm). Since item 1 does not comply with the KDB requirements, sum of 1-g SAR < 1.6 W/kg alone does not justify no simultaneous SAR evaluation, additional SAR-to-peak location ratio shall be assessed. Based upon the assessment, the SAR-to-Peak location ratio is $0.147 < 0.3$ thus simultaneous SAR evaluation is not required.

e) at 5.3.2 please expand and explain to apply three conditions of KDB 447498 item 3) b) ii) (1), and identify conditions if any where variance is being requested [Mike Kuo] Section 5.3.2 complies with all three AND conditions with sum of 1-g SAR < 1.6 W/kg.

f) at 5.5 please expand and explain to apply three conditions of KDB 447498 item 3) b) ii) (1), and identify conditions if any where variance is being requested [Mike Kuo] Section 5.3.2 complies with all three AND conditions with sum of 1-g SAR < 1.6 W/kg.

OTHER REMARKS, TO ADDRESS NO LATER THAN TIME OF E-FILING UPLOAD:

3) attachment "C2PC Cover Letter" lists incorrect FCCID X2-RTL8191SE-L
- please ensure letter is corrected [Mike Kuo] Request letter has been modified.

4) attachment "SAR RF Exposure evaluation"

a) pg 1 has "KDB 447498 issued on July/27/2008" - fyi later dated version is available / applicable [Mike Kuo] Revised

- please ensure all relevant parts of atts. corrected

b) at Table 1 please specify figure(s) where distance is shown [Mike Kuo] revised

c) at Table 3 and thru entire exhibit please highlight FCCID(s) for which

collocation is evaluated within this filing [Mike Kuo] revised.

d) at 5.2, please amend title or text to clarify this is tablet mode but not lapheld position [Mike Kuo] revised

e) at 5.2, please amend text to explain these are stand-alone SAR or what [Mike Kuo] revised

f) at 5.2, for each configuration please determine whether all specific antennas were installed and are same as what is installed for this filing, and/or explain in case of variances [Mike Kuo] all antennas are installed at the same location.

5) for the previous 10 permissive change filings under fccid J9CUNDP-1L, please include summary listing explaining which were also applicable for this host computer and how [Mike Kuo] Annex 1 is added to revised RF exposure assessment document.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 30 days of the original e-mail date may result in application dismissal and forfeiture of the filing fee. Also, please note that partial responses increase processing time and should not be submitted. Any questions about the content of this correspondence should be directed to the e-mail address listed below the name of the sender.