American Telecommunications Certification Body Inc.
6731 Whittier Ave, McLean, VA 22101

November 9, 2004

RE: Socket Communications, Inc.

FCC ID: LUBUSB-1

After a review of the submitted information, I have a few comments on the above referenced Application.

1) The block diagram states the antenna is 0 – 2 dBi. The RF exposure exhibit states 2.5 dBi max. The RF exposure exhibit calculates MPE power density as well. For MPE estimations to be used, the device must be used in a fashion that ensures 20 cm operational distance exists between the user and antenna during operation. For this type of device and being used in a laptop, the FCC assumes that this can be used in near touch positions, which since it is less than 20 cm, MPE estimations are not valid. For distances less than 20 cm, SAR is applicable depending on thresholds set by the FCC. For 2.4 GHz, currently the FCC has cited that any power (conducted or EIRP) that exceeds 60/f (f in GHz and being the center of band of operation) for a portable device must be tested to SAR to qualify for TCB approval. This yields a limit of 24.6 mW. This device shows a conducted output of 23.12 mW and and EIRP of about 41 mW. For TCB approval SAR testing must be performed.
2) Several exhibits state this is a Class I Bluetooth device (+20 dBm, 100 mW). However, the output power of this device is only 13 dBm. Please explain this discrepancy.
3) RF exposure section 11 in the test report, including manual statements is not applicable since this device may be used in application < 20 cm for user to antenna distance. Please remove this information from the report.
4) The device contains a Bluetooth module. Photographs of the top and bottom of the Bluetooth module should be provided. Additionally, a photograph of the the main board without the Bluetooth installed should be provided.
5) It can not be adequately determined where the EUT is in the test photographs. Please provide a closeup photograph that adequately shows the placement and orientation of the EUT in the test system.
6) Please explain the RBW/VBW settings used for radiated measurements 30 – 1000 MHz and > 1000 MHz.
7) Please explain if the measurements > 1 GHz in section 4.3.2 are peak or average readings.
8) Any peak readings > 1 GHz that exceed 54 dBuV/m must also show that they meet 54 dBuV/m average measurements. Note for pulsed emissions, this is accomplished using worse case duty cycle corrections. Bluetooth uses 3 different packet sizes. Please correct.
9) The users manual does not appear to contain any FCC statements or RF exposure information. Please add:
    a) 15.21 information
    b) 15.105 information
    c) Prohibition against co-location statements
10) Radiated emissions do not appear to show results for any harmonic emissions. Please provide or explain as necessary.

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Examining Engineer

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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the AmericanTCB.com website. 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 sender.