



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

April 26, 2003

RE: Microlink Communications Inc.

FCC ID: QVZ10020000

I have a few comments on the above referenced Application. These comments are all made upon the assumption that the EUT's maximum conducted output power is 12.74 mW and the antenna gain is 2.0 dBi.

- 1) The operational description states that the output power of the device is a class 1 high power Bluetooth TX with +20 dBm (100 mW) output power. However, the maximum output power listed in the test report and 731 form is 11.05 dBm (12.74 mW). Note that the users manual page 5 mentions that this device supports Class 1, 2, and 3 power levels and the external photographs of the device match the device shown on page 7 of the users manual that consider this version as the high power model. Please clarify this issue and the maximum output expected for this device. Please correct any affected exhibits.
- 2) The users manual and RF exposure exhibits state a 20 cm user to antenna RF safety distance. Please note that the FCC's requires USB dongles to be evaluated as possible touch conditions due to their use in laptops. Therefore reference to the 20 cm distance are not appropriate and should be removed from the users manual and RF exposure conditions.
- 3) The maximum EIRP given in this application for this device is about 20.2 mW (conducted power + antenna gain). However, if the output power may be higher based on comment 1) above, please note that the FCC requires any 2.4835 GHz band USB dongle to require SAR evaluation if the device exceeds 24.5 mW (conducted OR EIRP power). The options available to show compliance should this be the case include one of the following:
 - a) Perform the necessary SAR testing, or
 - b) reduce the maximum output power such that both the conducted and EIRP power are less than 24.5 mW of all manufactured units, or
 - c) Change the connector from a type A USB connector to a Type B, or some other nonstandard connector and provide the required extension cable. Because the connector is non-standard users will be forced to use the cable and the device may be considered as mobile in this case, or
 - d) provide the product with a permanent built in cord so that the user is required to use the cord and an ensure the 20 cm spacing requirements. This configuration may be considered mobile.
- 4) Please provide information regarding the RBW & VBW settings for PEAK radiated emissions > 1 GHz.
- 5) Please explain the large difference in amplitude between peak and average readings of the fundamental shown on the bandedge plots. Please note that FCC guidance for average measurements expect the transmitter carrier to be in 100% duty cycle/continuous transmit. Application of the RBW = 1 MHz and VBW = 10 Hz may be inappropriate if there was a duty cycle associated with the TX output power during the test. If the device was not operating continuously with 100% duty cycle, then the average radiated emissions using a 10 Hz VBW setting may also be considered inappropriate. However, due to the nature of the transmitter being a frequency hopper, alternatively you may adjust the peak emissions by the worse case 100 msec TX duty cycle on a specific channel for purposes of obtaining an average reading.
- 6) This device has been subjected to a DoC for the PC peripheral requirements. However the label is missing the "FOR HOME OF OFFICE USE" and "Tested to Comply with FCC Standards" as required by 15.19(b). Note that due to the size of the device, alternatively this information may be placed in the users manual or as part of the DoC. Please provide a corrected label or users manual.

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- 7) This device has been subjected to a DoC for the PC peripheral requirements. However, the Statement of Compliance information was not provided (this may be in the manual or as a separate sheet). Note that all information required on the compliance sheet must be on a single page.

COMPLIANCE INFORMATION (47CFR 2.1077)

If a product is tested and authorized under a Declaration of Conformity, a compliance information statement shall be supplied with the product at the time of marketing or importation, containing the following information:

- (1) Identification of the product, i.e. name and model number.
- (2) A statement similar to that contained in Section 15.19(a)(3) that the product complies with Part 15 of the regulations.
- (3) The identification, by name, address and telephone number, of the responsible party. The responsible party is defined as either the manufacturer, or if the equipment is imported, the importer. The responsible party for a Declaration of Conformity must be located within the United States.



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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.