



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

November 3, 2002

RE: MXF-A910910AB

FCC ID: GEMTEK TECHNOLOGY CO., LTD.

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

- 1) Please provide block diagrams that includes all oscillators/frequencies in the device as specified by 2.1033(a)(5). Also, it appears that the block diagrams provided only include the 802.11b card and not the 802.11a card. Block diagrams should be provided for both cards
- 2) Due to the size of the device, the label should also include the appropriate phrases "Tested To Comply With FCC Standards" & "FOR HOME OR OFFICE USE" as required for DoC labeling according to 15.19(b). Please provide an updated label.
- 3) Please provide information regarding each of the mini-PCI RF boards that are in this device (i.e., model, manufacturer, etc.).
- 4) For compliance testing of the radio, this device was tested as a stand-alone unit. However for DoC emissions it should be configured as part of a minimum configuration (including a PC) as specified by ANSI C63.4. Please confirm that the EUT has been properly configured as part of a fully configured system for its DoC authorization.
- 5) The test equipment list does not appear to include equipment capable of testing above 26.5 GHz. This equipment should be tested up to 40 GHz.
- 6) The peak excursion measurements for 802.11a do not appear to be measured properly and do not show the worse case results which appear near the center of the bandwidth. The peak excursion should be measured from the highest peak on the top trace to the lowest valley on the bottom trace within any 1 MHz segment. Additionally, please verify that the bottom traces are using the correct settings according to the recent public notice published by the FCC (see attachment). It also appears that the Turbo Mode may not meet this requirement. Please comment.
- 7) This device contains 2 transmitters which may be assumed to be transmitting simultaneously. Therefore this device must show that it meets co-location requirements (according to multiple frequency exposure criteria, the ratio of field strength or power density to the applicable exposure limit at the exposure location should be determined for each transmitter and the sum of these ratios must not exceed 1.0 for the location to be compliant). Please add this additional information to your RF exposure exhibit to show compliance
- 8) The Users Manual does not include the RF exposure information: "This device must not be co-located or operating in conjunction with any other antenna or transmitter other than those contained within this device." This information is required regardless of whether the two devices internally may function at the same time or not. Please provide an updated manual.

Timothy R. Johnson
Examining Engineer

[mailto: tjohnson@AmericanTCB.com](mailto:tjohnson@AmericanTCB.com)

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.