

# American Telecommunications Certification Body Inc.

6731 Whittier Ave, McLean, VA 22101

April 28, 2004

RE: M/A-COM Inc.

FCC ID: OWDTR-0022-E

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

1) According to the table in 90.210, this device should be subject to Mask B for voice being transmitted with Low Pass Filter and Mask G & H (depending on TX band) for transmission without low pass filter. Mask EA only apply to specific EA-based systems which may only be for certain installations for specific EA locations in the U.S and is also only applied at the bandedge. Mask H is the most restrictive data mask. Because not all modulations were provided in each of the 4 bands, the masks must also be applied to the cross sections. For example, there are not any plots of 2 level wideband, 9600 modulation in the bands 821-824 or 866-869. It is also not clear if the F1D and F1E waveforms are identical for each modulation (2 Level WB, 2 Level NPSPAC, and 4 Level), nor is it certain which emission (F1D vs F1E is provided in the plots). Please note that the cross sectional presentation of the data in this case, and lack of proper presentation has made reviewing this application more time consuming and difficult, and hard to understand. To show compliance, therefore the most restrictive limits are being applied to the limited cross-sectional data provided. By doing this, it has been determined that 2 Level WB (i.e. plot 8-5) does not meet with Mask H requirements. Note that the data was only provided for the bands requiring the G-mask, but since only a cross sectional set of data was provided, this is the only view that could be found. It is highly recommended that the report for this application show data for each of the appropriate sub-bands. Regardless it is uncertain if the various modulations (F1D vs F1E) have been shown as compliant, as well as the fact that 2 Level WB appears out of compliance with H masks. Further information is necessary to clarify these issues.

Response: The 800 MHz M7100 operates wideband modulation schemes only in the 806-821/851-866 MHz sub-bands, and NPSPAC modulation schemes in the 821-824/866-869 MHz sub-bands. Therefore, Mask H limits do not apply to wideband digital modulation.

Applicable emission masks which apply to the M7100 800 MHz:

806-821/851-866 MHz:

- Mask B for WB Analog Voice
- Mask G for WB Data and Digital Voice (Both Data and Digital Voice are tested using the TX9600WB selection from the FCC Menu)

821-824/866-869 MHz:

- Mask B for NPSPAC Analog Voice
- Mask H for NPSPAC Data and Digital Voice (Both Data and Digital Voice are tested using the TX9600NP selection from the FCC Menu)

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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.