



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

November 2, 2005

RE: ASUSTek Computer Inc.

FCC ID: MSQV66S

After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

- 1) Please correct the various items on the 731 form:
  - a) The FCC ID does not appear correct for this application.
  - b) Shouldn't the frequencies listed on the 731 for the 800 MHz band be listed as 824.2 – 848.8 MHz?
  - c) Section III - Section 6 of the 731. For Part 22, (a) would be listed for ERP. For Part 24, (b) would be listed as EIRP.
  - d) Section III, 8a does not appear to be filled out correctly.
- 2) Please provide appropriate labeling exhibit (sample label + location of label).
- 3) Please provide appropriate Parts List Exhibit.
- 4) Please provide appropriate SAR report.
- 5) Please provide an appropriate schematic exhibit.
- 6) Please provide a separate test configuration photograph exhibit.
- 7) Please provide a Users Manual Exhibit.
- 8) Please provide information regarding both DC voltages AND DC currents applied into the several elements of the final radio frequency amplifying device for normal operation over the power range been provided? (2.1033(c)(8)). If this is already in the application, kindly point to where this information may be found.
- 9) For the tune up procedure by the manufacturer, please explain whether power is measured radiated or conducted. It is hard to achieve the necessary accuracy if this is measured in a radiated fashion. Please explain.
- 10) Test Report for Part 22 lists 32.5 dBm on page 7? It appears that maybe the tune up procedure provided is not complete for this device. Additionally, conducted data was not provided to verify this value.
- 11) This device appears to be capable of connection to a PC and is therefore also considered a PC peripheral device (in addition to the TX requirements, i.e. Part 24, etc.) and is subject to either a Certification or DoC as a PC peripheral. Therefore the application must clarify if you are asking for:
  - a) Certification of the device as a TX, and a DoC has been performed by an appropriately accredited test lab for a PC peripheral
  - b) Certification as a TX + PC peripheral.

Note 1: The option b) would be considered as a composite application and 2 certificates (one for the TX, one for the PC peripheral portion) would be issued. Note that there are additional review costs associated with this additional certification.

Note 2: To qualify to perform DoC applications, the test lab must be accredited (i.e. NVLAP or A2LA) to perform testing under the DoC procedure.

Note 3: Note that for DoC tests, the device is configured with a minimum test configuration as specified by ANSI C63.4 which includes complete computer + 2 I/O

devices attached (one may be the EUT) during this particular test. Information appears to be provided that supports this.

Note 4: Each path (DoC or Certification) has particular labeling requirements that must be followed. For DoC authorizations, the label should also include specific DoC labeling information and also the users manual should include information regarding Part 2.1077. If the device is Certified, the FCC ID and current labeling requirements for the TX will cover the labeling requirements. However, additional grants are generated and review costs are higher. Currently labeling and users manual have not been provide and can not be evaluated to support a DoC or Certification Authorization.

The manufacturer does have a choice of DoC or Certification, however the device labeling must match the appropriate methods used.

- 12) If this device is being approved under a DoC, then all the information required by 2.1077 must be placed on a single page in the users manual.
- 13) FYI....Note that the provided 15 B report has not been reviewed as it is uncertain if this will be Certified or DoC'd.

#### Part 22 Review

- 14) Please note that Part 22 is in ERP and therefore correction factors should be for dBd not dBi. Please correct as appropriate. This will affect information on both page 10 and 11.
- 15) Either the Signal Gen column or the Correction factor column on page 11 does not appear correct (both are the same). Please review.
- 16) Please explain how you get from 5.1 dBm to 29.7 dBm. Information below supporting this does not appear to calculate to these values. Please review.
- 17) Where possible, the conducted power should also be measured and documented in the report. This will be necessary later for reviewing the SAR report as well. Please provide.
- 18) One of the limits on page 16 appears incorrect. Please review.
- 19) Results on pages 14-16 appear to be missing loss of any BP/LP/HP filters used (plots appear to show a low fundamental carrier which suggests use of filter or inadequate sweep times). Has the results been compensated for these filers in addition to the splitter?
- 20) Results on pages 24 – 27 should be for relative to dBd, not dBi. Please correct.
- 21) The data for bandedge is confusing. Please provide tabular data or calculations to show final values relative to the limits. Also please note that results must be integrated so that RBW  $\geq$  1%. This does not appear to be done and will affect the results be a small amount. However the results already appear margin, although final numbers can not easily be resolved.

#### Part 24 Review

- 22) Conducted power on page 7 of the report suggests higher power than given in theory of operation. note all measured power should be  $\leq$  theory of operation.
- 23) Please explain how you get from 15.97 dBm to 28.55 dBm. Information below table supporting this does not appear to calculate to these values – or it appears that the factors are doubly applied. Please review.
- 24) Where possible, the conducted power should also be measured and documented in the report. This will be necessary later for reviewing the SAR report as well. Please provide.
- 25) Results on pages 14-16 appear to be missing loss of any BP/LP/HP filters used(plots appear to show a low fundamental carrier which suggests use of filter or inadequate sweep times). Has the results been compensated for these filers in addition to the splitter?
- 26) The data for bandedge is confusing. Please provide tabular data or calculations to show final values relative to the limits. Also please note that results must be integrated so that RBW  $\geq$  1%. This does not appear to be done and will affect the results be a small amount. However the results already appear margin, although final numbers can not easily be resolved.
- 27) FYI.....Review Notes: Theory cites 29.2 dBm



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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.