



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

December 17, 2002

RE: Intel Corporation

FCC ID: PD9WM3A2100

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

- 1) Please provide a 731 form for this application.
- 2) Please provide photographs of the 2 types of antennas used with the device.
- 3) Please provide a photograph that shows the cable length between the device and the antenna. Please label this information on the photograph.
- 4) The OEM notices provided must instruct the OEM as to the following:
  - a) The device is NOT authorized for co-location installations
  - b) That the end user should NOT be provided any instructions on how to remove or install the device.
  - c) Please see grant notes (given below) and attached document which gives example information for various modular concerns.
  - d) Note that confidentiality the OEM notice was uploaded with a request for confidentiality, but this is not provided in the confidential letter. Please confirm and provide justification as to why this should be held confidential when it appears not to contain any confidential information.
- 5) The users manual must included information regarding the prohibition of co-location. Also, it is not clear from reviewing the users manual that this device is intended for OEM integrators only.
- 6) The label exhibit must also include a photograph or drawing showing the placement of the label on the device. Please provide this.
- 7) The product brochure provided for the operational description states the frequency band as 2.4 - 2.497 GHz. The FCC allowed band is 2.4-2.4835 GHz. Please explain.
- 8) The test report (page 5 of 19) states the antenna gain is 0 dBi nominal. The RF exposure information uses 1.67 dBi, which appears to be from the antenna specifications. Please note that all references to antenna gain should be consistent throughout all exhibits. Please adjust the test report.
- 9) The test report (page 7/8 of 19) mentions a Hitachi and Ethertronics antennas. The antenna information appears to be presented only for Hitachi. Please provide the information for the Ethertronics Antenna and comment on if both antennas are identical or not.
- 10) The antenna specifications provided state "it is recommended that the antenna have similar characteristics.....". Please note that this FCC certification will only cover the device with the antennas it was tested and submitted with in this application. Please confirm the antenna tested with this device is the same as given in this document.
- 11) On page 14 & 16 of 59, please explain the derivation of the 68.3 dBuV limit. The limit for these frequencies should be 20 dB below the power of the fundamental. This limit appears to be about 40 dB below the fundamental.
- 12) Some of the points at the bandedge appear to place the cursor only on the bandedge frequency of 2.390 or 2.4835. Please note that the cursor should be placed on the highest emission in the restricted band. For instance, see the data on pages 22, 26, 30, 34, of 59. The cursor has not been placed on the highest emission. This is a concern especially with the close margins shown. Please review as necessary the data for the bandedge and confirm that all data passes.
- 13) FYI, for MPE exhibits it is best to calculate for distance R and insert the limit into the variable S for the equation you provided.
- 14) FYI, for 15.247 submittals the parts list, board layouts and tune up procedures are not required.
- 15) FYI, Page 17 of 19 and the test data given in the test report use a RBW = 1 MHz and VBW = 300 kHz for antenna conducted measurements. Please note that antenna conducted spurious emissions should be measured using a RBW = 100 kHz, VBW >= RBW (see attached guidance document). Please use proper settings for future test reports.

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16) FYI, For future submittals, please include a separate upload for the test configuration photographs.

17)

FYI.....Grant Conditions:

Modular Approval. Power Output listed is conducted. Approval is limited to OEM installation only. The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter. OEM integrators must be provided with antenna installation instructions. OEM integrators and end-Users must be provided with transmitter operation conditions for satisfying RF exposure compliance. This grant is valid only when the device is sold to OEM integrators and the OEM integrators are instructed to ensure that the end user has no manual instructions to remove or install the device.



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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.