

May 9, 2003

American TCB  
6731 Whittier Ave.  
Suite C110  
McLean, VA. 22101

RE: Intel  
FCC ID: PD9WM3B2100A

1.) For the sake of simplicity, please use only one Form 731 for any Composite application. It would be appreciated if a revised form could be uploaded to the AmericanTCB.com website.

**Responds:** Understood.

2.) Both the Internal Photos and the External Photos are too small and not clear enough. 47CFR 2.1033(b)(7) specifies 8" x 10" photographs. It is expected that photographs should be clear enough to easily read major components on the PCB.

**Responds:** New External and Internal Photos Uploaded.

3.) Please address the modular approval concerns of DA 00-1407.

**Responds:** Modular cover letter uploaded

4.) Please provide larger Test Setup photographs [full size landscape orientation would be helpful]. It is not possible to determine compliance with either the modular approval setup requirements of DA 00-1407 or the EMC test setup requirements of ANSI C63.4.

**Responds:** Photos have been place on landscape. New test configuration photos have been provided.

5.) The sample label does not contain an FCC ID. Please provide complete label.

**Responds:** Label with FCC ID has been uploaded.

6.) Two manuals were supplied with this Application. Under what circumstances will one be supplied over the other?

**Responds:** The user guide is what the end user will receive, but it will be implemented in the OEM user guide.

The OEM regulatory notices is what we give the OEM integrator for reference to have in their user guide regulatory notice section.

So both manuals will be given to the OEM Integrator.

7.) The manual titled "Intel(R) PRO/Wireless LAN Mini PCI Adapter User's Guide" references the use of high gain antennas in a fixed environment with the user required to maintain a minimum of 30cm from the antenna. The MPE report does not refer to any high gain antennas. Please explain.

**Responds:** This reference is under the safety precautions mentioning if a high gain antenna is used the included precautions must be followed, under normal conditions this would not be the case due to this card is planned for use in OEM Laptops.

8.) OEM integration manuals should caution against supplying installation and removal instructions to the end user.

**Responds:** This is on page 5 of the User Documentation Guidelines for OEMs and Integrators.

9.) Please help me find the required information of 15.21.

**Responds:** This is on page 6 of the User Documentation Guidelines for OEMs and Integrators.

10.) Please show how this device will meet the integral antenna requirements of 15.407(d).

**Responds:** In most cases this device will be non accessible to the user. In cases where it is possible that the user may find access by design of the laptop, the connector will be permanently affixed to the MiniPCI module via a suitable permanent connection such as glue, solder, epoxy or any other means to comply with 15.407(d) of the FCC Rules.

11.) Please specify the temperature range and operational frequencies for normal operations . Your Operational Description seems to indicate that this product is capable of transmitting directly on the band edges, and consequently will not meet the requirements of 15.407(g).

**Responds:** For the U.S. the 802.11B radio will only operate on channels 1 – 11 (2.4GHz – 2.462GHz), depending on the country Sku the firmware which is not accessible and can not be changed by the user will be flashed to the specific country channels as shown on page 12 of the Functional Description document.

For the U.S. the 802.11A radio will only operate on channels 36 – 64 (5.15GHz – 5.35GHz), depending on the country Sku the firmware which is not accessible and can not be changed by the user will be flashed to the specific country channels as shown on page 12 of the Functional Description document.

12.) Is this dual-band product capable of transmitting in the 2.4 and 5GHz bands simultaneously?

**Responds:** No, it can only operate at one time.

13.) FCC recommends the spectral power density test be performed over a 1.5MHz span.

**Responds:** New PSD measurements have been provided in the report.

14.) The note comments on page 21 of the DTS test report do not seem appropriate to 2.4GHz equipment. Please explain.

**Responds:** Comments have been changed to note correct frequency for 2.4GHz.

15.) Please review the peak excursion data for the UNII report. The quoted value of 2.83dB seems very small for 802.11a emissions.

**Responds:** Peak Excursion has been tested on a separate spectrum analyzer and gave same results (Documents is label "Peak Excursion". Values measured previously show that they are correct.

16.) FYI: Please note that Parts Lists are not required for any unlicensed Part 15 device. Do you still want the parts list included in this Application? If not, a revised Confidentiality letter will be required.

**Responds:** Yes we understand this and it was given as information only.