



114 OLINDA DRIVE • BREA, CALIFORNIA 92823 • (714) 579-0500 • FAX (714) 579-1850

January 15, 2004

RE: FCC ID: CNTWM3B2200BG

Answers to the TCB comments on the above referenced Application (Items #1 through #6).

1. Please note that the equipment code DSS is for Frequency Hopping Spread Spectrum devices, whereas DTS is for WLAN devices. Please correct the 731 to show the proper equipment code.

Reponse: The 731 Form has been revised and re-uploaded to show DTS as the Equipment Code.

2. Please note that while it may be generally understood that HP owns Compaq computers, the 731 grantee is Compaq, yet the Cover letters are from HP. Please show how the particular HP office has authority to act for Compaq Computers.

Response: Compaq Computer is a wholly owned subsidiary of HP.

3. Please also note that the non-modification statement has HP as the responsible party. Please note that the grantee of the device is Compaq. As such, only Compaq can listed as the responsible party in the non-modification statement. Please provide evidence that HP has the authority to act for Compaq. Alternately, please correct the statement to say Compaq instead of HP.

Response: Compaq Computer is a wholly owned subsidiary of HP.

4. Please note that there appears to be more than adequate room on the PCs to accommodate the 2-condition statement of 15.21. Please provide a label with this 2-condition statement and please show where on the device the statement will be placed.

Response: The submission in question is for the WLAN, and the label area available on this product for the WLAN label has been deemed to be 47 X 30mm, as can be seen in the attached file "Labels_Raptor2(1).0_0822". Though there is other surface area on the back of the product, most of it is on pieces that can be removed and thus not really permanently attached to the product. HP will place that statement at the beginning of the user regulatory document (see page 5 of the Raptor Regulatory Manual Reg Notes and page 5 of the Lopez Reg & Safety Notices)



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5. Please note that both laptops show a “Bluetooth Label” location. However, it is not clear if this label is used to show the FCC ID number of the Bluetooth label inside the laptop. This is what is assumed, but there is no evidence of this. Without evidence of what the Bluetooth label says, it may also be assumed that the Bluetooth may be using the same ID number as the WLAN, which would be incorrect. The cover letter stating the purpose of the application states that it is for the WLAN LMA and does not include the Bluetooth on the FCC ID. Please explain. Please verify that the FCC ID number of the Bluetooth is what is referenced on the Bluetooth label (i.e. Contains FCC ID: xxxx for the Bluetooth).

Response: Attached will be the Bluetooth Agency Label showing “Contains FCC ID: LNQBTM200”

6. Please note that documentation states that the Bluetooth antenna is 20cm from the WLAN antenna and thus is not collocated with the WLAN. However, from the drawings of the Raptor, it appears that the right antenna is closer than 20 cm to the Bluetooth. It is not clear from the schematics if only one antenna (the left) is the only antenna used for transmitting. If the right antenna is used to transmit, the Bluetooth antenna may not be 20cm from the WLAN and thus may be collocated. Please explain.

Response: Per the BT test report for the FCC-ID: LNQBTM200, the antenna gain is 1 dBi, the output power is 2.50 dBm (worst case). Therefore, the calculated maximum EIRP is 2.50 dBm + 1dBi = 3.33 dBm = 2.24 mW. Since the calculated maximum EIRP is below 5 mW there is no co-location in this system, this was stated on previous submissions by Bill Graff.

Note: Items #7 through #14 have been answered by Aprel Labs and will appear on the following pages.

19th January 2004

Mr. Luis Olvera

Intel Corporation
San Diego CA

Re: FCC ID CNTWM3B2200BG

Applicant: Hewlett Packard

Dear Mr. Olvera,

Here are the responses to the questions set by ATCB in respect to the above named project.

- 7) Please note that the RF exposure statement in the Lopez manual states a .2cm separation is required. The SAR report makes no such statement for compliance. Please reconcile the SAR report and the manual.**

The manufacturer of the laptop (HP) has created a generic user manual for this unit. The unit tested has the capability for integrating other manufacturer's types of WLAN (MINI-PCI) cards. It seems that when this laptop has been previously assessed for compliance with another manufacturer's card or on a previous grant application (different FCC ID number) a separation distance was needed to show compliance. A separation distance is not necessary for this application and as such the 0.2cm separation distance is NOT applicable to the unit as tested with the WM3B2200BG card.

- 8) Please note that the raptor manual does not appear to have the rf exposure statement. Please provide an rf statement in the manual. Alternately, please explain on which page the statement exists.**

In the event that an exposure statement is needed this will be included in the manual. As the device as tested complies with the requirements as defined by the FCC and is within the limits, no statement is needed.

- 9) Please note that "Hand" or Direct Contact SAR is not able to be evaluated by TCBs at this time. Please also note that Hand SAR is not necessary for certification purposes. As such, all SAR data dealing with Hand SAR, will be ignored and only Body SAR testing will be evaluated. After certification and uploading information to the FCC, the FCC may have questions and concerns about any "Hand" SAR performed.**

APREL Laboratories have asked for a written ruling in regard to the hand SAR issue from the FCC, and at this point we have not received one which can be recorded. As this test is part of the process the results have been included. Please note that the FCC are awaiting standardization from both IEEE and IEC in respect to this matter and will follow their methodologies.

- 10) In section 5.2 of the SAR report for the HP 2080 it states, "Further details of the tissue used during the system validation are provided in section 6.3 Simulated Tissue." However, Section 6.3 is titled "DIRECT CONTACT SAR". Do you mean section 5.4? Please verify and correct as needed.**

This is a type error and has been corrected in the report.

- 11) Please note that the calibration data for the dipole states it was performed on serial number ALCD-10. The list of equipment in Table 2 on page 10 states that a dipole with not serial number (or N/A in the serial number column) was used. Please verify and/or correct the report as necessary to show the dipole calibration is for the dipole listed in table 2.**

Table 2 has been corrected and the report updated.

- 13) Please note that the SAR report states it was tested in the TR1105 laptop. The EMC report states the computer model is the PP3006 Tablet PC. Please explain and/or retest using the same tablet PC for which LMA approval is sought.**

Both units tested in respect to the EMC and SAR reports are the same where the EMC report mistakenly quotes the Agency Series Number as the model number. The SAR reports for both the Raptor and Lopez have been updated to reflect the Agency Series Number and NOT the model number, as per the request of Hewlett Packard.

- 14) Please note that the SAR report states the FCC ID number is CNTPP3006. However, the application is for FCC ID: CNTWM3B2200BG. This is most likely related to the incorrect model tested in item 9 above. Please explain.**

The nature of the operating mode for the Mini-PCI card used within the host unit has changed and as such could not go through as a class two permissive change. At the time of report issue the FCC ID used was the original one for the single band card. Subsequently the SAR report has been updated and reissued as a revised report, which includes the type error changes along with the Agency Series Number, and corrected FCC ID.