

Date: May 12, 2004
Control No: ITPD-04-F007A
WLAN Confirm No: EA627815
BT Confirm No: EA136338
GPRS Confirm No: EA687782

To: Stan Lyles / FCC Application Processing Branch
FCC ID: ACJ9TGCF-295
Applicant: Matsushita Electric Industrial Co., Ltd.
Correspondence Ref Number: 26662
731 Confirm Number: EA627815
Product Name: Panasonic Personal Computer CF-29 Family
With Installed Intel WLAN, Alps BT and Siemens GPRS

Please note below answers to your comments issued on April 19, 2004 for WLAN portion of the subject product:

- 1) Refer to filed amended test report of data and spectrum plots for 6 dB bandwidth measurement.
- 2) Refer to filed amended test report of data and spectrum plots for Power Spectral Density measurement.
- 3) Confidential Parts List/Tune Up Info have been provided for the licensed GPRS portion of this device. The unlicensed WLAN or BT portion of this device have no tune up procedures and are not user adjustable. If either of these modules should fail to operate correctly, it would be replaced with a new wireless module at our authorized service center.
- 4) FYI:
 - a) This filing reported Personal Computer, Model CF-29 Family will be marketed with three internal co-located transmitters and the end product enclosure label will display FCC ID: ACJ9TGCF-295. For your reference purpose, we advised these three transmitters were separately certified for Intel, Alps and Siemens under their own unique FCC ID's. The installed transmitters are identical to separately certified transmitters, except we will use our own antennas and performed our own RF exposure evaluation based upon this exact end product PC and transmitters configuration. Based upon this answer, we do not believe it is necessary or desirable to add any additional notice on this matter in the user manual.
 - b) If Intel, Alps or Siemens should make any changes, which might have influence upon past reported transmitter documentation, it is agreed these changes would also have to be evaluated for the subject PC.
- 5) The main user manual provides all general PC related information. For this exact configuration, we also provide supplementary instructions for Intel WLAN, Alps BT and Siemens GPRS, which provide specific wireless device description and functions.
- 6) The subject PC under FCC ID ACJ9TGCF-295 will always be marketed and delivered with all three transmitters installed. We will submit new TCB certification applications for: (1) CF-29+WLAN under FCC ID: ACJ9TGCF-298 and (2) CF-29+WLAN+GPRS under FCC ID: ACJ9TGCF-299.

7) The subject CF-29 Family may be marketed with 1 or 2 external unique antenna connector(s), which can be connected through the optional Car Mounter, Models CF-WEB272 or CF-WEB291. These Car Mounters provides antenna signal pass-through with external TNC antenna connector(s). Model CF-WEB272 has 1 external TNC antenna connector and Model CF-WEB291 has 2 external TNC antenna connectors. These external TNC antenna connector(s) are intended for connection to optional external WLAN, GPRS or CDMA antenna(s). These external antenna(s) are to be professionally installed for mobile application and individual installation instructions will be provided for each different optional wireless configuration with recommended maximum antenna dBi gain. For example, CF-29 +WLAN + CDMA or GPRS maximum recommended external antenna gain would be as follows:

<u>Type</u>	<u>Max Ant Gain</u>	<u>Remarks</u>
Car Mounter	7.0 dBi	CF-WEB272 or CF-WEB291
WLAN	12.5 dBi	56.4mW (17.5dBm) Conducted
GPRS:	3.75 dBi	1.751W ERP GPRS (32.433dBm)
	4.15 dBi	1.596W EIRP PCS GPRS (32.021dBm)
CDMA:	13.35 dBi	0.231W ERP CDMA (23.633dBm)
	11.5 dBi	0.352W EIRP PCS CDMA (25.451dBm)

8) The provided supplemental instructions for each of the individual transmitters include specific FCC RF exposure warning notice with exact required spacing. The main user manual is intended to be generic-in-nature to represent the entire possible PC family configuration. In many cases, we have acceptable SAR test results measured at zero spacing, but in accordance with your comment, we agree to amend future main PC user manual marking to reflect the following type wording:

FCC RF Exposure Warning: (if provided with wireless device)

- This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment.
- This equipment has been approved for portable operation, and unless otherwise advised in separate supplemental instructions for individual wireless transmitter(s), requires minimum 1.5 cm spacing be provided between antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.
- This equipment may use multiple installed transmitters, which may be capable of simultaneous transmission.
- This equipment is provided with PC Card slot that could be used with wireless transmitters, which will be specifically recommended when they become available. Other third-party wireless transmitters have not been RF exposure evaluated for use with this computer and may not comply with FCC RF exposure requirements.
- This equipment is provided with external antenna connector(s) for connection to optional Car Mounter or Port Replicator for mobile external mounted antenna(s). External antenna(s) must be professionally installed and cannot exceed recommended maximum antenna gain as described in individual provided supplement instructions for wireless transmitters. Also, user must maintain minimum 20 cm spacing between external antenna(s) and all person's body (excluding extremities of hands, wrist and feet) during wireless modes of operation.

9) Refer to revised SAR report and the base station simulator screen shots to demonstrate that the device was operating at maximum power.

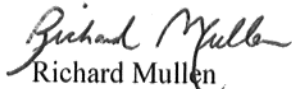
10) Refer to revised page 18 of the SAR report for Lap Position changed to TOUCH.

11) The provided general Wireless Spec Pages (Op Description Exhibit) included general specifications for a total of five possible transmitters, which might get installed into CF-29 Family. This exact filing configuration does not include Sierra CDMA and Sychip WLAN.

12) The usage position for SAR test at 1.5 cm from the back of the display is BYSTANDER Position.

Please advise if you have any further questions or comments. Thank you for your co-operation in this matter.

Sincerely yours,



Richard Mullen

Group Manager

Matsushita Electric Corporation of America

Product Safety & Compliance Division

Cc: Hiroyuki Sakami / MEI-ITPD
Jared Gould / MECA-PCSC
Alfred Cirwithian / PCTEST

