

Date: August 17, 2004
Control Numbers: ITPD-04-F026A, -F026B
WLAN Confirm No: EA616269
GPRS Confirm No: EA517474

To: Dianne Poole / FCC Application Processing Branch
FCC ID: ACJ9TGCF-188
Applicant: Matsushita Electric Industrial Co., Ltd.
Correspondence Ref Number: 27380
731 Confirm Number: EA616269
Product Name: Panasonic Personal Computer Model CF-18 Family
With Intel WLAN + Siemens GPRS

1) Please confirm that the WLAN antenna is greater than 2.5 cm from the phantom. Otherwise please provide test results for WLAN.

Answer: We confirm that the WLAN antenna is greater than 2.5 cm from the phantom. Refer to attached photograph uploaded today.

2) User Manual states that an external antenna can be used. Please confirm that this is available only for the GPRS transmitter and does not apply to the WLAN transmitter.

Answer: We are in the process to prepare Class II Change Permissive Change to report CF-18 Family may be marketed with optional Car Mounter Model NP-CF18, which contains two unique external antenna connectors for recommended professional installation. One antenna connector is for connection of licensed CDMA or GPRS antenna and the other is for Radiall/Larsen for WLAN antenna, type MS3E2400TNC. This WLAN antenna has 3dBi omni directional antenna gain and magnet roof mounted base. The basic PC User Manual contains general RF exposure warning notices, which includes notice that 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. Also, it advises connection to optional Car Mounter or Port Replicator external mounted antenna(s) are for mobile operation with minimum 20 cm spacing requirement, must be professionally installed, and cannot exceed recommended maximum antenna dBi gain.

3) Please update the test report to include detailed test setup photos. If current report contains these photos please resubmit a version readable on Acrobat 5.0 or earlier. Please show distances from the phantom to the antenna.

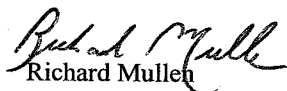
Answer: Refer to attached test setup photographs uploaded today.

4) Please describe how the provided measurements fully evaluates SAR for this device. Please include a discussion of simultaneous collocated SAR as well as SAR for each individual device. On/Off testing of secondary transmitters is not applicable to higher powered devices.

Answer: The dominant transmitter was 1 Watt peak conducted (2 Watts for the cellular band), and the smaller WLAN transmitter was 0.056 Watts conducted. The 1 gram average SAR was found and measured near the dominant antenna (SAR=0.1 W/kg). This result was the same as the original result obtained with an evaluation turning off the minor transmitter. Since the antenna was more than 20 cm away from the dominant antenna, it was expected that the WLAN antenna would not significantly affect the SAR near the GPRS antenna. Please find attached SAR data showing the SAR evaluated near the WLAN antenna internal to the device (SAR=0.04 W/kg). Hence, the worst-case SAR of this device is 0.1 W/kg located near the dominant transmitter antenna.

Thank you for your co-operation in this matter.

Sincerely yours,



Richard Mullen

Group Manager

Product Safety & Compliance Division