

November 17, 2004
ITPD-04-F104A, -F104B
WLAN Part 15C for DTS: EA205945
WLAN Part 15E for NII: EA726507

Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046 USA

Attn: Stan Lyles / FCC Application Processing Branch

FCC ID: ACJ9TGCF-181A
Applicant: Matsushita Electric Industrial Co., Ltd.
CFN: 28045 and 28044
731 Confirm: EA205945 and EA726507
Type Product: Portable Notebook Computer Model CF-18 With Intel WLAN(a+b+g)

Dear Mr. Lyles,

Please note response to your two comments and FYI issued on November 16, 2004.

Portable Notebook Computer Model CF-18 Family (PC) may be marketed with various co-located transmitters and have been previously granted under individual FCC ID's for various PC configurations. This includes combinations of various transmitters such as BT, WLAN, GPRS and/or CDMA.

The subject PC configuration contains only WLAN with two internal antennas for WLAN Main TX//RX Inverted F type antenna with 1.42 dBi antenna gain and WLAN Aux TX/RX antenna with 2.59 dBi antenna gain. This PC may be marketed with optional Car Mounter / Port Replicator, which contains two unique external antenna connectors for recommended professional installation. One antenna connector is for connection of licensed CDMA or GPRS antenna (for other PC configuration) and one for unlicensed Radiall/Larsen WLAN antenna, type MS3E2400TNC with 3 dBi omni directional antenna gain with magnet roof mounted base.

The basic PC user manual gives general instructions and warning, while the separate supplement user manuals give exact additional details and warning for individual employed transmitters. The basic PC user manual gives the following type FCC RF exposure warning:

FCC RF Exposure Warning:

- 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.

Also, user manual page 10 under title "Names and Functions of Parts" for "External Antenna Connectors" states:

The external antenna connector is for use as an extension in the future.

Caution:

- **FCC RF Exposure Warning:**

Optional Port Replicator contains TNC connector for external mounted antenna. Employed 2.4 GHz wireless LAN antenna cannot exceed 6 dBi antenna gain and must be professionally installed. Also, must maintain minimum 20 cm spacing between external antenna and all person's body during wireless mode of operation.

FCC Comment 1:

Please provide information to support the use under mobile exposure conditions as mentioned in the user manual. This equipment is provided with external antenna connector(s) for connection to optional Car Mounter or Port Replicator for mobile external mounted antenna(s)....." Please include details of specific antenna to be used and how the user will access the connectors. Alternatively, please remove this section from the user manual.

Answer: The basic PC user manual gives portable RF exposure warning for generic PC. The optional Car Mounter or Port Replicator's external antenna connectors are intended for mobile application with recommended maximum antenna gain and instructions that it must be professionally installed. One antenna connector is for connection of licensed CDMA or GPRS antenna (for other PC configuration) and the other is for unlicensed Radiall/Larsen for WLAN antenna, type MS3E2400TNC with 3 dBi omni directional antenna gain with magnet roof mounted base.

FCC Comment 2:

The exhibit titled CF-18 antenna location mentions a CDMA/GPRS and BT antenna. These are not mentioned elsewhere in the filing. Please update the filing accordingly.

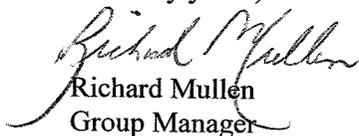
Answer: The subject application for only CF-18 + WLAN and is not related to other configurations, which may include CDMA/GPRS and BT antennas. Please delete this exhibit from this filing.

FCC FYI:

The user manual statement "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" does not appear fully consistent with the test configurations which allow 0 gap for the lapheld position. Please update accordingly.

Answer: The basic PC user manual gives general instructions and warning, while the separate supplement user manuals give exact additional details and warning for individual employed transmitters. Please note even though there are many configurations with acceptable SAR test performed at zero spacing, we have elected to give general recommended minimum spacing of 1.5 cm spacing for consistence. This is because there have been some past PC configurations, which were provided with SAR measurements performed at 1.5 cm. It would not be practical to keep changing the basic PC user manual for each and every different PC configuration.

Sincerely yours,



Richard Mullen
Group Manager

Matsushita Electric Corporation of America
Product Safety & Compliance Division