

Amended December 11, 2008 ITPD-08-F019A

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

Subject: Authority to Act as FCC Agent for Laptop Personal Computer, Model CF-19mk3 Family

TCB Certification for FCC ID: ACJ9TGCF-19B

- Alps Bluetooth, Model UGNZA
- Intel WLAN(a/b/g/n), Model 512AN_MMW
- Novatel WWAN (HSDPA3.6), Model EU860D

To Whom It May Concern:

On behalf of Panasonic Corp. of North America, we herby authorize PCTEST Engineering Laboratory, Inc., to act on our behalf in matters relating to FCC equipment authorization, including the signing of documents relating to these matters. Any and all acts carried out by PCTEST on our behalf shall have the same effect as acts of our own. This project represents Laptop Computer, Model CF-19mk3 Family with Intel CPU type Core2Duo SU9300 (1.20 GHz), which will be marketed under FCC ID: ACJ9TGCF-19B. This product will be marketed with the following co-located transmitters:

(1) Alps Bluetooth, Model UGNZA (Alps has no FCC ID):

Alps Bluetooth Model UGXZA under specification Ver 2.0 + ERD has maximum symbol rate of 1~3Mbps.

FCC Rule Part Part 15C Preq Range (MHz) Output Watts 2402~2480 O.023276

(2) Intel WLAN Model 512AN_MMW (802.11a/b/g/n) (Intel FCC ID: PD9512ANM)

This device complies with Dynamic Frequency Selection (DFS) requirements in R&O FCC 03-287 as a client only device without radar detection capability and client software and associated drivers will not initiate any transmission on DFS frequencies, which includes transmissions for beacon ad-hoc peer-to- peer modes. The Intel WLAN theory of operation describes 3x3 MIMO capacity (multiple input/multiple output architecture); however this end-product usage will be limited to 2x2 MIMO capacity. The User Manual with provide the following type wording, pursuant to §15.407(e): This PC operation within 5.15~5.25 GHz band is restricted to indoor use only to reduce any potential harmful interference to co-channel Mobile Satellite Systems.

Model 512AN_MMW is compatible with 802.11a/b/g/n. To enable marketing in Asia Pacific and Europe, this WLAN may have its 802.11a/n functions disabled by factory set EEPROM settings. Model 512AG_MMW is compatible with 802.11a/b/g and Model 512BG_MMW is compatible with 802.11b/g.

FCC Rule Part	Type	Freq Range (MHz)	Output Power
Part 15C	802.11(b)	2412~2462	0.02710
Part 15C	802.11(g)	2412~2462	0.03396
Part 15C	802.11(a)	5745~5825	0.02218
Part 15C	802.11(n)	2412~2462	0.03381
Part 15C	802.11(n)	5745~5825	0.01901
Part 15E	802.11(a) UNII Band I	5180~5240	0.02443
Part 15E	802.11(a) UNII Band II	5260~5320	0.02301
Part 15E	802.11(a) UNII Band III	5500~5700	0.02650
Part 15E	802.11(n) UNII Band I	5190~5230	0.02366
Part 15E	802.11(n) UNII Band II	5270~5310	0.01875
Part 15E	802.11(n) UNII Band III	5510~5670	0.02330

BEN BOTROS Project Manager

FCC Rule Part	Type	Freq Range (MHz)	Output Watts	Emission Designator
Part 22H	Cellular GSM	824.20~848.80	1.549 W ERP	243KGXW
Part 22H	Cellular WCDMA	826.40~846.60	0.219 W ERP	4M18F9W
Part 22H	Cellular EDGE	824.20~848.80	0.750 W ERP	246KG7W
Part 24E	PCS GSM	1850.20~1909.80	1.189 W EIRP	246KGXW
Part 24E	PSC WCDMA	1852.40~1907.60	0.107 W EIRP	4M19F9W
Part 24E	PCS EDGE	1850.20~1909.80	0.565 W EIRP	246KG7W

This PC contains the following type transmitter antennas and antenna gains in the normal mode:

- (1) Alps BT Inverter-F type with 2.5dBi (2.4 GHz) antenna gain
- (2) Intel WLAN/UNII Main TX/RX Inverter-F type with -0.17dBi (2.4 GHz), -0.27dBi (5150~5350 MHz), and 1.87dBi (5500~5825 MHz) antenna gains and Aux RX only
- (3) Novatel WWAN Main TX/RX Whip antenna with 1.22dBi (850 MHz Cellular) and 0.37dBi (1900 MHz PCS) antenna gains and Aux RX only antenna.

This PC may be marketed with optional Car Mounter, Model CF-WEB184 that may be configured to have one or two TNC antenna pass-thru connectors. Depending upon exact PC configuration, the WLAN and WWAN external antenna connector(s) may be connected to recommended Radiall/Larsen WLAN antenna, type MS3E2400TNC with 3 dBi antenna gain or type NM05E2400BKTNC with 5.0 dBi antenna gain. The other antenna connector is intended for licensed radio service external antenna and must be professionally installed. Supplemental instructions will be provided for any employed licensed radio service, which will provide recommended maximum external antenna gains. For example, the recommended maximum external antenna gains for WLAN (2412~2462 MHz) is 5.0 dBi, Cellular (824.2~848.8 MHz) is 2.17 dBi, and PCS (1850.2~1909.8 MHz) is 3.84 dBi. This PC with multiple co-located transmitters and optional Car Mounter with external antenna connectors satisfy RF Exposure Evaluation by the provided SAR and MPE test reports.

In accordance with provisions of Section 0.457(d) of the Commission's Rules and Section 552(b)(4) of the Freedom of Information Act, we request permanent confidentiality for transmitter's exhibits, which contain Operation Description, Parts Lists, Block Diagram and Schematic Diagram. The BT and WLAN transmitters are not user adjustable and do not have a Tune-Up Procedure. These exhibits contain proprietary, confidential and trade secrets material, which would not be routinely made available for public inspection.

In accordance with FCC Public DA 04-1705, we request forty-five day short-term confidentiality, starting from the from the issuance of equipment authorization date, for exhibits which contain External Photographs, Internal Photographs, Test Setup Photographs and the Operating Instructions (User Manual). The requested short-term confidentiality exhibits contain pre-market information, which could give our competitors unfair advantage should this information be released before this product is actually introduced into the common marketplace.

We the undersigned, hereby attest to the fact that the subject product is also classified as Class B Computer and will be authorized under Declaration of Conformity to comply with FCC Part 15B to meet Class B limits with computer system tested in accordance with ANSI C63.4-2003.

Sincerely yours,

Ben Botros

Ben Botros Project Manager Reviewed by,

Richard Mullen

Richard Mullen Group Manager