



American Telecommunications Certification Body Inc.  
6731 Whittier Ave, McLean, VA 22101

July 16, 2008

RE: Wistron Corporation

FCC ID: PU5-SP500

After a review of the submitted information, I have a few comments on the above referenced Application. Depending on your responses, kindly understand there may be additional comments.

- 1) One of the requirements for the label to be placed in the battery compartment is that the FCC identifier is still visible at the time of purchase. Marketing the device without the battery installed when the label is in the battery compartment is acceptable. The FCC identifier on the box or additional documentation directing the user as to where to find the FCC label also satisfies this requirement. Please explain how this device complies with this requirement.

BT Report

- 2) The Bluetooth supports V2.0 according to information in the application. Due to difference in capability of modulation and envelope, certain tests should be repeated for all modulations (i.e. power, bandwidth (as it affects channel separation), band edge, etc.). Please review. Additionally, please add appropriate designator(s) for BT to the IC form. Typically GXD would apply for the new modulation.

Part 22/24 & RSS-132/133 Reports

- 3) For Licensed – tests appear to follow TIA-603-B. Please note that this is not acceptable. Tests must meet TIA-603-C. Please see :  
<http://www.fcc.gov/oet/ea/eameasurements.html>
- 4) Please explain reference to KDB 94125 throughout and its relevance to testing of this device. This applies to devices with different protocols (CDMA, WCDMA, EVDO, HSDPA, HSPA) than appear to be covered by the EUT (GSM).
- 5) Test Methods Mention ANSI C63.4 – which are not correct for licensed tests. Please review.
- 6) While all equipment appears calibrated, since your 17025 accreditation does not cover licensed tests kindly comment on the traceability of all test equipment used – For example, all equipment is calibrated externally and traceable to \_\_\_\_\_. Ideally this would be added beneath appropriate calibration tables of the licensed test report.
- 7) For RF conducted, it is not clear what type of detectors are used. Please document.
- 8) Section 8 shows a filter – however no calibration or other information is provided to explain what this is. How does this affect the results? Have results been corrected for insertion of this (has this filter been characterized for each measured frequency and where is this corrected)?
- 9) It is uncertain why section 9 reports the fundamental in many tables. Please review.

IC Specific

- 10) Kindly provide a statement on how the device is compliant to RSS-132 section 3.2 and RSS-133 section 5.4.

SAR

- 11) Please explain if the device supports voice over WLAN (i.e. VOIP). If so, Head SAR may be applicable for WLAN.
- 12) There is an attestation stating that WLAN and GSM will not function at the same time. However the test report (i.e. pages 16/17/18 clearly show testing with both functional) and test

data is provided. If this configuration is NOT applicable, then this information should be removed. Please review.

- 13) Please provide information to show the distance between closest points of
  - a) BT antenna and WLAN antenna
  - b) BT antenna and GSM antenna
- 14) NOTE: Please note that we must review current procedures regarding the above information and calculate the antenna pair SAR to peak location separation ratio. If this value exceeds 0.3 as given in the procedures – FCC may need to evaluate this application. However given the photographs and our estimate on the distance, we feel this is highly unlikely – but can not fully determine until antenna distance information is given above.
- 15) FCC requires Probe factors to be shown on each plot page. This information was not provided. Please correct.
- 16) FCC requires Z-axis plots typically for each worse case configuration (i.e. 850 – H, 850 – B, etc) and is also desired for verification. Please provide.
- 17) FCC desires a statement of compliance in the report. Off hand this does not appear to be present. Please review.
- 18) Kindly explain how test signals were accomplished for WLAN.
- 19) Managing Wireless Connections portion of the manual suggests that GSM and WLAN can operate at the same time. Kindly review/correct as necessary. (pages 25 – 27).
- 20) Target value for 900 MHz Body appears off. It appears this should be 2.84.
- 21) Please confirm if the first 2 measurements in a zoom scan are within 1 cm of the surface.
- 22) FYI...Because of changes to various FCC policies, in the future kindly provide information for these types of devices which shows/documents the distance between each of the antennas.
- 23) FYI...Please note that according the new SAR procedures – it is likely a test reduction could have been applied to this case. It appears that due to 802.11 levels (tested alone) that some tests could have been eliminated. Additionally, simultaneous TX with BT may not have been necessary if the antennas were > 5 cm from WLAN and GSM antennas. However this could not fully be determined without distance information. Please see KDB 648474 for more detail.

FYI's

- 24) FYI...In the future, kindly ensure the equipment codes give cover all aspects of the application. For instance, with a composite application, additional codes should be shown on the 731. This application should include PCE, DSS, DTS.
- 25) FYI...For the future on 802.11 devices, the bandedge tests should also show markers at 2400 MHz on the low side. Although this is not a restricted band, compliance to 20 dB down (or 30 dB down if power is an avg method) is also required.
- 26) FYI...Regarding 802.11 devices, in the future, kindly document which tests are applied to each required test from the FCC's guidance. See attachment found at :  
<https://fjallfoss.fcc.gov/oetcf/kdb/forms/FTSSearchResultPage.cfm?id=21124&switch=P>
- 27) FYI...DoC was also applied to this device. Manual requires all 3 items requires by 2.1077 to be placed on a single page together in the manual. This should be implemented into final manuals.



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The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information may result in application termination. Correspondence should be considered part of the permanent submission and may be viewed from the Internet after a Grant of Equipment Authorization is issued.

Please do not respond to this correspondence using the email reply button. In order for your response to be processed expeditiously, you must submit your documents through the [AmericanTCB.com](http://AmericanTCB.com) website. Also, please note that partial responses increase processing time and should not be submitted.

Any questions about the content of this correspondence should be directed to the sender.