

November 28, 2003

RE: FCC ID: NIT-SCMI250U Attention: Hendry Yang

I have a few comments on this Application.

- 1. Please note that the equipment code on the 731 for this device should be PCE. Please correct the 731 for equipment code. x
- 2. Please note that the type authorization (certification, PC2, Change in identifier) has not been checked. Please specify what type authorization applies.
- 3. Please note that the confidentiality section of the 731 has not been completed. Does the applicant want confidentiality for this application? If so, please check the confidentiality section yes box. x
- 4. If confidentiality is desired, please provide a confidentiality request letter stating the appropriate exhibits to be held confidential. Please note that only certain exhibits can be confidential. These exhibits are the parts list, BOM, schematics, operational description and tune up procedures. x
- 5. Please complete the anti drug attestation and agent authorization section of the 731. x
- 6. Please provide a letter of authorization from Solomon Inc to allow Sporton to act as agent in the application process. x
- 7. Please provide a photo or drawing of where the label will be placed on the device and please explain how the label will be permanently attached to the device.
- 8. Please provide the parts list for this licensed device. x
- 9. Please provide the factory tune up procedure for this licensed device. x
- 10. Please note that the report states the part 22 device is under 22E. Please note that 22E is for paging systems. As this device is a data modem operating in the 824 to 848MHz range it falls under 22H. Please correct your report to show the proper rule part section for this device.
- 11. Please note that the report states the part 24 device is under 24H. Please note that 24H is the Competitive Biding Procedural section for PCS devices. As this device is a wideband data modem operating in the 1850 to 1909MHz range it falls under 24E. Please correct your report to show the proper part rule part section for this device.
- 12. Please note that the antenna substitution method for obtaining ERP/EIRP is easier when measurements are done in dBm not dBuV. Please also note that ERP/EIRP is calculated by adding the substitution antenna gain to the power level delivered to the substitution antenna. You appear to have subtracted the gain of the substitution antenna and not added it. Also, please note that you have the 'Ps' term listed twice. Once as power in dBm and a second time as dBuV. Consequently, it is not possible from your report to determine if you have accounted for the correction between dBuV and dBm (i.e. dBm=dBuV-107) or if you have used the correct terms in the calculations performed. Please note that it would help in the evaluation of the report if you reported the actual factors involved in the tables shown on page 12 of the report (i.e. actual substitution antenna gain, cable loss etc). This way the results can be checked. Please explain. Please verify and correct your calculations as needed.
- 13. Please note that the same concern exists for radiated spurious emissions antenna substitution calculation as with EUT power in item 8.
- 14. Please provide that user manual with the proper rf exposure and other FCC statements.
- 15. You state in the SAR report that a signal source for validation is set to 250mw. However, your report on page 25 indicates that the power actually delivered to the dipole during validation testing is only 20mW. Please note that the FCC has stated that validation is to be done with a minimum power delivered to the dipole of 100mW. Please verify that either the 250 mW or a minimum 100mW was the power delivered to the antenna. If less than 100mW was applied directly to the dipole for validation testing, please retest using at least the minimum FCC required level of 100mW. Please explain the statement on page 25 about the 20mW.

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- 16. Please provide the SAR plots for the 800 and 1900 MHz validation runs showing the reference SAR values obtained during validation testing as per 1528. Please show the normalized SAR values obtained in the system validation test. Also, please clearly identify the target values used.
- 17. Please provide the required Z Axis plots.
- 18. Please provide a brief explanation of the interpolation and extrapolation algorithms used in the SAR report.
- 19. Please provide a brief explanation of the area and zoom scan procedures (i.e. grid size, etc)
- 20. Since this device operates on two separate frequency bands, the statement of compliance on page should list the maximum SAR for both the 800MHz and the 1900MHz bands.
- 21. Please note that the power levels between the EMC and SAR reports must be compared and if conducted power is used they must be within 5% of each other. Your EMC report uses ERP and EIRP and your SAR report uses conducted power. Please provide the conducted power measured during EMC for comparison to the SAR power level. Please show that these measurements are within 5% of each other.

Dennis Ward

Dennis Ward mailto:dward@AmericanTCB.com

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 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.