



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

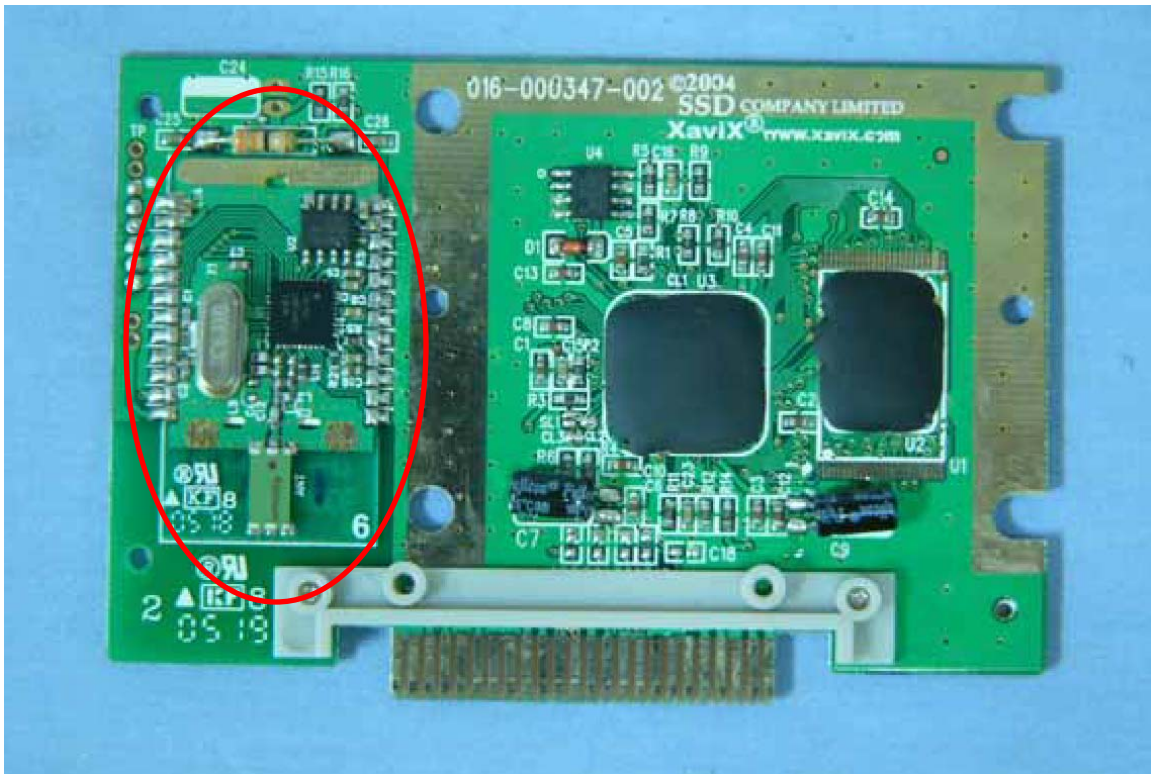
August 11, 2005

RE: Shinsedai Company Limited

FCC ID: TA4PT1FSH11001

After a review of the submitted information, I have a few comments on the above referenced Application.

- 1) Please provide photographs of the back side of the TX board.



- 2) The block diagram should show the frequencies of all oscillators in the TX device (CFR 2.1033(a)(5)). Please update.
- 3) The schematics do not include the TX. Note that a schematic for the TX portion of the device is required as specified 2.1033(b)(5) for the RF section. Please provide.
- 4) Please update the confidentiality and POA letters to show the contact information of the person signing the forms (first/last name, position, phone number, etc.).
- 5) Page 10 of the test report shows a TX frequency of 2400. This would not be allowed as part of the fundamental byproducts would be < 2.4 GHz (out of band). Is the correct low frequency given? Please review. Note that either the first null of a  $\sin x/x$  waveform or the 26 dB bandwidth should still remain in band. Otherwise the TX is considered to be transmitting out of band and is not allowed.

- 6) The frequencies listed on the 731 form should match the TX frequencies of the device. Please review.
- 7) The test report has not been reviewed as it appears confusing. We need to understand if this is being submitted as a DTS under 15.247, DSS under 15.247, Hybrid under 15.247, or possibly under 15.249. Note that given the output power of the device, the simplest suggestion may be to Certify under 15.249, but this will also require a test of the fundamental field strength. Additionally, if this is to be Certified under 15.247 DTS, it appears we are missing information such as 6 dB bandwidth test. If this is being certified as a DSS device, we are missing detailed theory of operation to explain compliance to pseudo-random hopping, tracking and bandwidth of RX's under 15.247(a), compliance with 15.247 (g) and (h), and detailed theory to understand timing and synchronization issues. I have provided an attachment which explains when and how to certify these devices as DTS, DSS or both and how to address. I have also provided guidance in DTS and DSS methods for your review. Again, given the output power and antenna gain, it may be simplest to certify under 15.249 instead. Note that as long as the device meets the measurements of 15.249, complete detailed theory of operation and other requirements are not necessary under 15.249. If this is processed under 15.247 as a DSS, a lot of effort of the review will revolve around the detailed theory of operation information. Please review and provide guidance and exhibits as necessary. Also, be aware given an incomplete report and uncertain nature of how the information here will be addressed, a complete review of the report has not currently been done.
- 8) This device appear to be designed for use only with another specific TX (FCC ID: TA4PT1FSH31001). Note that this application can not be granted until both are ready to be granted. Both are required to be posted to the FCC site within a few days of each other.
- 9) The device appears to be used in either a lay down or upright position. For Radiated emissions (and especially for the fundamental if 15.249 is followed) the device should also have been tested in other positions (upright and possible on its side) if these are expected user positions as well.
- 10) Note that RF exposure issues (exhibit and users manual information) are not necessary if the device is certified under 15.249.
- 11) FYI....Once a final report and other information are received, this application will need to be re-reviewed for completeness.



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Examining Engineer

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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 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.