



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

June 26, 2007

RE: ADI Engineering Inc.

FCC: SNR-RM1

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) Upon working to generate the grant and to ensure proper grant notes are applied, further clarification is necessary as to which application a change of ID is being performed since there are various applications each with distinguishing differences. The FCC cite shows the following:
  - a) FCC ID: UWT-RX-4002-02 – This was a change of ID application to a Senao device to support a wireless module but disabled the UNII 5150-5350 MHz band.
  - b) FCC ID: UWT-RX-4002-02 – PC to a) above to add higher gain antennas and co-location with the device installed in a specific Network Node Host.
  - c) Note that the a) above was actually a change of ID to a Senao application FCC ID: NI386005001 which was originally approved as a composite DTS and UNII. Note that use of the UNII band will require DFS considerations.

It is assumed that the Change of ID is to a) or c) above depending on the functionality of the device and/or who the device is purchased from. However confirmation of which one is necessary to proceed. Note that a) above suggests in the filing that the host and not the TX may be limiting the 5150-5350 MHz band and not the TX itself.

If a) is applied, then confirmation of the 5150-5350 MHz band and compliance to 15.15 should be provided since it appears that the previous application may have addressed this via software in the host device and not the EUT itself.

If c) is applied above, then changes to the cover letters/731 form for the different manufacturer/FCC ID and consideration of the UNII bands for DFS (at least this must be immediately addressed given the marketing deadline and may require immediate PC applications to address this issue) will apply since this becomes a composite application. Also, please note some recent information regarding the FCC deadline information given on the following page. Note the marketing/importation (even to end user and items left on the shelf) must stop and be removed before July 20, 2007 for devices not compliant to DFS.

Response: The change in ID requested should capture the operation as specified in the PC2 of FCC ID: UWT-RX-4002-02. There is no 5150 – 5350 operation, as captured in the 2<sup>nd</sup> paragraph of the letter that accompanied this submission.



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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.

⌘ Page 2 June 26, 2007

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.

⌘ Page 3 June 26, 2007 From TCB conference call June 2007

## DFS deadline July 20, 2007

UNII devices operating in the 5.25-5.35 and 5.47-5.725 GHz bands and imported or marketed after the deadline must comply with the DFS requirements.

Discussion: A lot of class II PC's to add the band but also some to de-list the 5.25-5.35 band. The FCC has over 20 samples of devices that operate in the Master mode.

If you de-list the 5.25 – 5.35, then the [devices operating only in the band 5.15-5.25 GHz under the provisions of 15.407 \(a\)\(1\)](#) are generally required to ensure that the 20 dB bandwidth of the emission are contained in the band as per 15.215(c). However, if the 20 dB bandwidth of the emission falls in the 5.25-5.35 GHz band, the devices are also subject to the requirements of TPC and DFS ([15.407 \(h\)](#)) and restricted to indoor operation ([15.407 \(e\)](#)).

If the device grant is changed to show operation in the 5.15-5.25 GHz band please ensure that the test data show that the 20dB BW remains in the band.

Mike Kuo said that about 2 months ago, FCC indicated that only a cover letter is required and no test data would be required. Joe indicated that this situation was recently brought to their attention, so this new interpretation is based on updated information. You can still do the software change to remove the 5.25-5.35 GHz band, but data must be shown that the device will continue to comply.

FCC follow up: TCBs are reminded that KDB publication 634817 requires that Part 15 grants must list the center frequency of the lowest channel to the center frequency of the highest channel.

FCC follow up: If the frequency requested and submitted data shows that the 20 dB BW is clearly within the requested band, additional data is not required. However, for requested center frequencies near the band edge and devices with wideband emissions, the data must be submitted to ensure compliance. The data should be requested if there is any doubt. Section 15.215 (c) is not an interpretation and in any case, TCBs must ensure compliance with all rules for the specific device they are granting.

Rashmi indicated that several devices have DFS being added by software upgrade. When the device has a software change it is important to determine who is allowed to upgrade the software and the procedure used to do it. Software distribution to third parties is not allowed for non-SDR devices. Only the manufacturer can make the software changes to new devices if the original approval was not for a SDR.

FCC follow up: The cover letter indicating the purpose of the Class II permissive change should indicate how the software upgrade will be implemented and whether or not there are any hardware changes. Devices requiring hardware changes will require a new identifier. TCBs should also check to see if any other change would require a new fcc identifier before attempting to grant a Class II permissive change.

Mike Heckrotte, asked the FCC to confirm that the 20dB BW is used and not the 26dB BW. Joe confirmed it is the 20dB BW (as per 15.215 (c)).

Bill Graff asked if 'Marketing' has been defined. If the device is on the shelf at BestBuy, does it need to be removed from the shelf?

Rashmi said the restrictions include sales and marketing, so the shelves must be cleared and devices not offered for sale.