

#### Washington Laboratories, Ltd.

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July 17, 2006

WLL Project: 9197

FCC ID: H9PRF1224

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

RE: Comments of July 5, 2006

APPLICATION: H9PRF1224 Symbol Technologies, Inc.

Dear Mr. Ward:

Below are the comments that you have provided regarding the application for certification referenced above. Our responses to those comments are in *bold italic*. Many responses refer you to additional exhibit(s) which has been uploaded to the application folder at the ATCB website.

Thank you for your attention. Please feel free to contact us for any additional information that you may require.

Regards,

*Gregory M. Snyder*Chief EMC Engineer, Wireless/Telco Services Manager

Brian J. Dettling
Documentation Specialist

1) Please note that the application indicates that this device is intended for use in "hand held computers". This indicates the use of this device in a host that may be worn on the Body, yet no SAR testing was done in any host. Please explain how this device is used in a hand held computer and how that hand held computer cannot be worn on the body thus not requiring SAR testing. If the device is to be used in a host that can be worn on the body, please identify these type devices and provide SAR data in each type hand held computer in which the device would be used.

R. The RF1224 APEX unit is a finished system containing an RFID module, WLAN card, and Bluetooth module for mounting on a forklift. There is no hand-held or body worn configuration.

2) Please note that the manual states that a 'stand alone' external antenna configuration exists where a 25cm separation distance must be maintained. The manual also states the device is compliant to SAR

requirements (indicating portable use). Please correct the manual as needed and please be consistent on the rf exposure configurations associated with this device.

#### R. The manual has been corrected. Please see exhibit "RF1224 User Manual Rev 2".

3) Please note that the manual states that firmware can be updated. Please also note that the manual states that correct frequency operation in the associated countries is controlled by firmware. Please confirm that a US user cannot download or update firmware in the US that will allow the device to operate on non-US frequencies.

## R. The firmware is factory set and cannot be changed by the end user to operate on non-US frequencies.

4) Please note that the MPE report and EMC report indicates simultaneous transmission on all bands. However, it is not clear from the manual or operational description if simultaneous transmission on different frequency bands is possible in this device. Please confirm if simultaneous transmission is an appropriate mode for this device.

## R. The unit will support simultaneous transmissions for the WLAN, Bluetooth and RFID. Section 7 of the APEX Pt2. Test Report discusses the collocation testing performed.

5) Is this a modular approval or a Limited Modular Approval? If so, please provide a letter stating how the device complies with the modular approval requirements of D001407.

### R. This is not a modular approval. Some of the devices contained in the unit (WLAN and RFID) have been approved as modules.

6) Please note that while the reports state that ANSI C63.4 was used as the test method, spread spectrum devices under 15.247 and UNII devices under 15.407 do not use ANSI C63.4 except in setup configurations. This type device uses specific test procedures established by the FCC. Please confirm that the appropriate approved test method was used to test this device.

## R. The appropriate procedures set out by the FCC were followed when testing the UNII and DTS parts of the APEX.

7) Please note that the MPE data in the EMC report (pages 28 through 30 and 56 through 58) are not correct. The separate MPE report however, does have the correct information. Please either correct the MPE pages 28 through 30 and 56 through 58 of the EMC report or please remove this incorrect section.

# R. The MPE data in the RFID EMC Report is not to be used with the RF1224 APEX approval. Only the conducted data at the antenna port is to be used for this application. The report was not altered as per the copyright information contained in the

8) Please provide a pseudo-random hopping list of the 902-928 FHSS device.

#### R. Please see exhibit "WJ MPR7XXX Operational Desc- Freq Hop".

9) Please note that the 802.11a data provide in report "RF1224 Test Report - 802.11a.pdf" is almost 2 years old and is for a different FCC ID number. The FCC has stated that while they will accept data up to a year old, they will not accept data more than one year old. Please provide test data that is within the allowable time limit and please provide the relevance of test data not specifically issued for this device.

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