SGS

November 3, 2015
Telecommunication Certification Body (and/or)
Federal Communications Commission
Authorization and Evaluation Division
7435 Oakland Mills Road
Columbia, Maryland 21046

Subject: U-NII Device Security Attestation, FCC ID: EHA-1015CP01X1

Dear Application Examiner,

The RF engineering group from Intermec Technologies Corporation has provided the following justifications to show compliance with the software security requirements for U-NII devices. The guidance provided in KDB 594280 D02 U-NII Device Security v01r02 was used.

GENERAL DESCRIPTION
1. Describe how any software/firmware update will be obtained, downloaded, and installed. Software that is accessed through manufacturer's website or device's management system, must describe the different levels of security.

Software/firmware update is provided through the company's Customer Support in the form of Service Release (SR) package. The SR can be downloaded to the device using the device's SD card or remote desktop management software. Once the SR is downloaded to the device, it can be installed automatically or through the device's UI manually. Only authorized SR can be installed on the device as it is needed to be signed with the company certificate's private key. Only properly signed software can be loaded successfully to replace the shipped software.

2. Describe all the radio frequency parameters that are modified by any software/firmware without any hardware changes. Are these parameters in some way limited, such that, it will not exceed the authorized parameters?

None of radio frequency parameters are exposed to the user.

3. Describe in detail the authentication protocols that are in place to ensure that the source of the software/firmware is legitimate. Describe in detail how the software is protected against modification.

Utilizing Microsoft Cryptographic functionality, the software is signed using Intermec Certificate's private key to protect the software content during the Official Build Process. Only authorized people has access to the Intermec Certificate's private key. Since the software is signed against its content, if any of its content is modified, the resulting calculated hash will not match the expected hash.

4. Describe in detail the verification protocols in place to ensure that installed software/firmware is legitimate.

The Intermec Certificate chain is installed on the shipped device. When the software is loaded at startup, it will be verified by the Operating System's executable loader to verify the software is indeed signed by an authorized certificate. If it fails the verification, the software will not get loaded successful and the radio will not be able to operate at all.

5. Describe in detail any encryption methods used to support the use of legitimate software/firmware.

The software uses   Microsoft Cryptographic functionality which is based on the Public Key Infrastructure to

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protect the legitimacy of the software.

6. For a device that can be configured as a master and client (with active or passive scanning), explain how the device ensures compliance for each mode? In particular if the device acts as master in some band of operation and client in another; how is compliance ensured in each band of operation?

Not applicable

THIRD-PARTY ACCESS CONTROL

What prevents third parties from loading non-US versions of the software/firmware on the device? Describe in detail how the device is protected from "flashing" and the installation of third-party firmware such as DD-WRT.6.

There is only one version of the software. Different regulatory domain is controlled through the device's EEPROM setting. The software is protected from being overwritten using the digital signature mechanism described earlier. Without access to the Intermec Certificate's private key, others will not able to load a different version.

USER CONFIGURATION GUIDE

There is no UI for configuring the RF related parameters.

Your efforts in reviewing this application are greatly appreciated. Please contact me if there are questions or additional information needed concerning this request.

Sincerely,

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