To: Randal Roebuck, Texas Instruments
From: Joe Dichoso
jdichoso@fcc.gov
FCC Application Processing Branch
Re: FCC ID A92DCBMPR
Applicant: Texas Instruments Inc
Correspondence Reference Number: 11744
731 Confirmation Number: EA95782
Date of Original E-Mail: 01/31/2000

1) The device operates at 13.56 MHz. With regard to the restricted band 13.36-13.41 Mhz, were the emissions in this band checked for compliance with Section 15.209?
Response: Specific measurements were made at the edge of the 13.56 MHz fundamental emission (see Table 7.1 of the test and measurement report) to ensure the level of the fundamental fell to within the Section 15.209 specification, and did not extend into the 13.36-13.41 MHz restricted band. At 13.5485 MHz, the fundamental was 2.2 dB under the 15.209 limit. No emissions were detected in the 13.36-13.41 MHz restricted band.

2) It appears that you want modular approval for the transmitter. Below is our policy on transmitters that need to be addressed. Please note item #4, you may have a problem since we won't grant modular approval for devices that need to be professionally installed. The antenna connector will have to be permanent or a unique antenna connector will have to be used.
Response: The intentional radiator has its own power supply regulation and, does not require any additional shielding to meet the Part 15 emission limits. There are no input data lines associated with the intentional radiator. The intentional radiator antenna meets the requirements of 15.203. The antenna is a PCB loop antenna specifically designed for the unit and to be supplied with it. The antenna will be permanently connected to the device. The tested unit, however, used a detachable connector. We will review the documentation to make any changes needed to reflect the use of a permanently attached connector for the device as marketed in the United States.

There are no official FCC Rules that permit authorization of a transmitter as a module but the following standards have been uniformly applied as a Commission policy in support of industry needs. For a module to be approved, it must satisfy the following requirements: (1) a modular transmitter must have its own RF shielding, (2) a modular transmitter must have buffered modulation/data inputs (if such inputs are provided), (3) a modular transmitter must have it own power supply regulation, (4) a modular transmitter must have an antenna which complies with the requirements of Section 15.203 to be permanently attached or employ a "unique" antenna coupler. Except for Limited Module Approvals where the module is limited for use in specific enclosures to incorporate a final product, modules cannot be approved for devices that require professional installation to meet the requirements in Section 15.203. (5) a modular transmitter must be tested in a stand-alone configuration, i.e., the antenna, AC or DC power and data input/output lines must be connected to the module but, the module must not be inside another case during testing, and (6) a modular transmitter must be labeled with its own FCC ID number, and if the FCC ID is not visible when the module is installed inside another device, then the outside of the device into which the module is installed must also display a label referring to the enclosed module. This exterior label can use wording such as the following: "Contains Transmitter Module FCC ID: XYZMODEL1" or "Contains FCC ID: XYZMODEL1." The exact wording is not specified in our Rules (since modules are not specifically addressed), so you may use similar wording which expresses the same meaning. OK using our standard external wording
Response: Please see the proposed label in the attached file.

The items indicated above must be submitted before processing can continue on the above referenced application. Failure to provide the requested information within 60 days of the original e-mail date may result in application dismissal pursuant to Section 2.917 (c) and forfeiture of the filing fee pursuant to section 1.1108. DO NOT reply to this e-mail by using the Reply button. In order for your response to be processed expeditiously, you must upload your response via the Internet at www.fcc.gov, Electronic filing, OET Equipment Authorization Electronic Filing. If the response is submitted through Add Attachments, in order to expedite processing, a message which informs the processing staff that a new exhibit has been submitted must also be submitted via Submit Correspondence. 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 e-mail address listed below the name of the sender.

Attachment 2

FCC ID Label

PRODUCT LABELING

#.1 FCC ID Label

FCC ID: A92DCBMPR This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference. And (2) this device must accept any interference received including interference that may cause undesired operation.

#.2 Location of Label on EUT

The label is located on the rear of the Digital Control Board (RI-CTL-DCMA-02) for the entire RFID system.

#.3 Label for the Exterior of Devices Incorporating the EUT

The EUT will be incorporated in other devices such as a fuel dispenser (e.g., a fueling dispenser (gasoline pump) employed at a service station). The following label will be supplied with the EUT for placement on the exterior of the device in which the equipment is incorporated:

FCC ID: A92DCBMPR This equipment contains an intentional radiator approved by the FCC, under the FCC ID number shown above. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference that may cause undesired operation.

#.4 Supplemental Information to be in the Reader or System Manual

In addition to reiteration of required information as on intentional radiator, in keeping with sections 15.21 and 15.105 of the FCC rules, the manual supplied with the reader will also include the following admonitions:

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates users, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which cause the user will be required to correct the interference at his own expense.

NO MODIFICATIONS: Modifications to the devices under this approval license shall not be made without the written consent of Texas Instruments Incorporated. Unauthorized modifications may void the authority granted under Federal Communications Commission Rules permitting the operation of this device.