



July 6, 2005

Federal Communications Commission
7435 Oakland Mills Road
Columbia, MD 21046-1609

To Whom It May Concern:

In reference to the application for FCC ID#: I28MD-M4E-01 (902 – 928 MHz RFID encoder radio module), this device is being submitted for **Limited MODULAR TRANSMITTER APPROVAL** based on the guidelines in FCC Publication DA 00-1407. We believe that this transmitter meets all 8 criterion listed in DA 00-1407 as detailed in the paragraphs below.

Note that I28MD-M4E-01 is a radio module that will be used exclusively within products made by Zebra Technologies Corporation.

- 1) I28MD-M4E-01 is based on a ThingMagic Mercury4e RFID encoder radio module. The RF portion of the ThingMagic Mercury4e is fully shielded.
- 2) I28MD-M4E-01 has buffered inputs on all digital lines. Overdriving one or more of the digital inputs will have no affect on the transmitter output.
- 3) The ThingMagic Mercury4e is part of an assembly that provides accepts 24 VDC and provides a regulated 5.3 VDC to the ThingMagic Mercury4e module. Further, since the module will only be used in Zebra products, Zebra has full control of the power supply to the ThingMagic Mercury4e module and will assure a 5.3 VDC supply.
- 4) I28MD-M4E-01 will always be used with one of a family of approved antennas, all of which are mounted (with the radio) inside a finished printer or other Zebra product. None of these antennas is user accessible, nor is the antenna cable / connector user accessible; for this reason the antennas can be considered to be permanently attached. All of the antennas in the family have been tested with the radio module as part of the limited modular approval; test results are included with the application. If the radio is to be used with a new antenna, further testing will be performed and a Class II permissive change will be obtained.
- 5) I28MD-M4E-01 was tested in a stand-alone configuration, outside of any Zebra printer.
- 6) I28MD-M4E-01 will carry a label containing its FCC ID number. Additionally "Contains FCC ID: I28MD-M4E-01" will appear on the external label of the product the radio is mounted it. All products containing this module will have this statement clearly visible. Examples of both the internal and external labels have been provided as part of the application.
- 7) I28MD-M4E-01 will only be used with Zebra Technologies products; this includes printers built by Zebra that are branded for other companies. Thus Zebra will maintain full control over the use of the module and can guarantee that all conditions for use will be met in any product that the module is installed in.
- 8) The products that I28MD-M4E-01 will be used in will be at least 20 cm away from any body part.

Sincerely,

Gus Medina
Compliance Engineer
Zebra Technologies Corporation

Zebra Technologies Corporation

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