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Client: Zebra Technologies Corp.  
Model Name/ #: ZBR-3/EYSF2CAXX  
FCC ID: I28MD-BTC2TY2  
FCC: 15.247  
IC: RSS-210

## **APPENDIX A: MODULAR APPROVAL JUSTIFICATION STATEMENT**

Please see the following page.



**Zebra Technologies Corporation**

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10/07/2004

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

To Whom It May Concern:

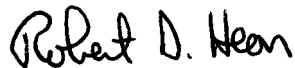
In reference to the application for FCC ID#: I28MD-BTC2TY2 (Zebra ZBR3 Bluetooth radio module), this device is being submitted for limited MODULAR TRANSMITTER APPROVAL based on the guidelines in FCC Publication DA 00-1407. We believe that this transmitter meets all 8 criterion listed in DA 00-1407 as detailed in the paragraphs below.

Note that I28MD-BTC2TY2 is a radio module that will be used exclusively within products made by Zebra Technologies Corporation.

- 1) I28MD-BTC2TY2 is based on a Taiyo-Yuden EYSF2CAXX self-contained Bluetooth radio module. The EYSF2CAXX is fully shielded.
- 2) I28MD-BTC2TY2 has buffered inputs on all digital lines. Overdriving one or more of the digital inputs will have no affect on the transmitter output.
- 3) I28MD-BTC2TY2 contains a voltage regulator that powers the transmitter. The unit is designed to accept regulated 3.3 volts DC at it's input, but transmitter output will not be affected if input voltage is exceeded. Since the module will only be used in Zebra products, Zebra has full control of the power supply to the module.
- 4) I28MD-BTC2TY2 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 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 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-BTC2TY2 was tested in a stand-alone configuration, outside of any Zebra printer.

- 6) I28MD-BTC2TY2 is too small to carry a label containing its FCC ID number. As this module will always be mounted on the interior of a Zebra product, this module will not be visible to an end user anyway. To compensate for the small size of the module and the fact that it is buried within an end product, all products containing this module will have the statement "Contains FCC ID: I28MD-BTC2TY2" clearly visible on an external label. Examples of these external labels have been provided as part of the application.
- 7) I28MD-BTC2TY2 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) Most of the products that I28MD-BTC2TY2 will be used in are body worn devices subject to Part 2.1093 of the FCC rules. However, the output power from this radio module (typically 0 dBm conducted) is so small that it will easily meet all RF exposure requirements and does not require SAR testing.

Sincerely,



Robert D. Heon  
Project Engineer IV  
Zebra Technologies Corporation