Rhein Tech Laboratories, Inc. 360 Herndon Parkway Suite 1400 Herndon, VA 20170 http://www.rheintech.com Client: TMI-USA, Inc. Model: RADIOZIGB1 Standards: FCC 15.247/IC RSS-210 ID's: RMK-ZIGB1/10839A-ZIGB1 Report #: 2013031

Appendix D: FCC Limited Modular Approval

Please refer to the following pages.



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FCC Limited Modular Approval Criteria

 The radio elements must have the radio frequency circuitry shielded. Physical components and tuning capacitor(s) may be located external to the shield, but must be on the module assembly;

Answer:

No, The ZigBeeLog RF module is an electronic board that contains all the electronic components, but uses microstrip shielding, ground plane, and ground plane flooding to effectively control emissions. Spurious emissions have been checked and shown to be compliant. For final products that contain the certified device and do not use a typical enclosure, spurious emissions testing is required to confirm compliance.

ii. The module must have buffered modulation/data inputs to ensure that the device will comply with Part 15 requirements with any type of input signal;

Answer:

Yes, Texas Instrument CC2520 complies with part 15. All modulation data inputs are internal to the transceiver chip.

iii. The module must contain power supply regulation on the module:

Answer:

Yes, The ZigBeeLog module contains its proper power supply regulation, through a LDO regulator, so constant voltage and limitation in current is present on the module. This LDO powers the RF component with constant voltage.

iv. The module must contain a permanently attached antenna, or contain a unique antenna connector, and be marketed and operated only with specific antenna(s), per Sections 15.203, 15.204(b), 15.204(c), 15.212(a), 2.929(b);

Answer:

Yes, there is a permanently soldered coaxial antenna wire on the circuit board attached to a unique antenna connector.

v. The module must demonstrate compliance in a stand-alone configuration;

Answer:

Yes, the ZigBeeLog module complies per 2013031DTS TMI USA FCC-IC 15 247 LMA Test Report

vi. The module must be labeled with its permanently affixed FCC ID label, or use an electronic display (See KDB Publication 784748 about labeling requirements);

Answer:

Yes, The module and host final assembly shall comply with the stated labeling.



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vii. The module must comply with all specific rules applicable to the transmitter including all the conditions provided in the integration instructions by the grantee;

Answer:

Yes, the ZigBeeLog module is not an OEM, TMI is the sole designer and user of the module. The ZigBeeLog module is assembled in a stainless steel enclosure to constitute a radio data logger.

viii. The module must comply with RF exposure requirements (see discussions below).

Answer:

Yes, RF power of the module is less than 5mW. This low RF output power ensures that exposure requirements have been met.

Guillaume Favre V.P. of Operations