

4/06/2011

Federal Communications Commission Equipment Authorization Branch 7435 Oakland Mills Road Columbia, MD 21046

## Gentlemen:

Synapse Wireless Inc. respectfully requests Part 15 unlicensed modular transmitter approval of the Synapse Wireless Inc. RF200 product FCC ID: U9O-RF200. In accordance with the Part 15.212(a)(1) here is the response to the items listed for the RF200 product.

Item 1: The RF200 module has a metal RF shield that is soldiered to the ground plane on all side, enclosing all electronics, and prevents coupling of the RF circuitry with the host board electronics in which the RF200 is plugged into in order to comply with this item.

Item 2: All input data to the RF200 is buffered in the microcontroller located on the RF200. Firmware in the microcontroller then controls the flow of this data to the transmitter for RF communications to prevent excessive data rates or over-modulations to comply with this item.

Item 3: The RF200 transmitter is the Atmel ATMEGA128RFA1 series of IEEE 802.15.4 transceiver modems. This modem has internal power supply regulation to comply with Item 3.

Item 4: The RF200 has support for an external antenna thru a Reverse Polarity SMA style unique antenna coupler which is mounted on the RF200 which complies with Item 4 requirements.

Item 5: The necessary RF200 and support hardware was provided to the certification lab to show compliance with this item.

Item 6: The FCC ID label assigned to the RF200 will be located on the top outside face of the RF200. In the case that this label on the RF200 is not visible after installation, the "RF200 Datasheet.pdf" will document to the user of the RF200 that the FCC ID labeling requirements must be included on an exterior label of the finished product enclosure using the RF200 stating that the product contains the FCC ID label for the RF200. A copy of "RF200 Datasheet.pdf" will be provided to the FCC to show this compliance.

Item 7: In order to show compliance to this item, a copy of the "RF200 Datasheet.pdf" will be provided to the FCC to show that the issues of Item 7 have been properly documented.

Item 8: The RF200 will be tested to comply with any applicable RF exposure requirements. Also, in order to show compliance to aspects of this item, a copy of the "RF200 Datasheet.pdf" will be provided to the FCC to show that the issues of Item 8 have been properly documented.

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Sincerely,

Name: Jason Scott Gurley

Title: Senior Design Engineer