



ARCHROCK

Modular Request Letter

Arch Rock is seeking modular authorization for the RMB-2000 series (RMB-2000,RMB-2001,RMB-2000U,RMB-2001U) IEEE 802.15.4 embedded processor/radio modules (FCC ID: U3SRMB200XR1). The devices meet the requirements as set forth in FCC Public Notice DA 00-147. Compliance to each of these requirements is detailed below:

1. The modular transmitter must have its own shielding.

All RMB-2000 series units have shielding over all its radio components.

2. The modular transmitter must have buffered modulation/data inputs.

All data inputs/outputs are buffered via the incorporated microcontroller. No direct access to the radio is available.

3. The modular transmitter must have its own power supply regulation.

Power supply regulation is provided by the internal 1.8V regulator on radio chip itself. (ref. CC2420 Datasheet pgs. 50-51)

4. The modular transmitter must comply with the antenna requirements of Section 15.203 and 15.204(c).

The RMB-2000 and RMB-2001 use a surface mount pad on the edge of the module specifically designed for a PCB antenna as tested with the module. The RMB-2000U and RMB-2001U employ a U.FL connector.

5. The modular transmitter must be tested in a stand-alone configuration, i.e., the module must not be inside another device during testing.

Power is applied to the EUT via a test fixture and the device is fully exposed.

Control/power for the EUT was provided through a special wire harness attached to the power and necessary control pins of the module .

6. The 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.

The modules will have a label which includes the FCC ID on the device itself.

7. The modular transmitter must comply with any specific rule or operating requirements applicable to the transmitter and the manufacturer must provide adequate instructions along with the module to explain any such requirements.

Installation and operation of the RMB-2000 series is provided via the datasheet and user manual.

8. The modular transmitter must comply with any applicable RF exposure requirements.

The RMB-2000 series complies with all applicable RF exposure requirements including those in DA 00-1407.

Philip Buonadonna
Engineering Director