

3/16/06

To Whom It May Concern:

RF Monolithics Inc. would like to apply for Limited Modular FCC approval. This letter is our request for such according to FCC public notice DA 00-1407.

Modular Transmitter Requirements

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Requirements**

Manufacturer Clarification

•1) The modular transmitter must have its own RF shielding. This is intended to ensure that the module does not have to rely upon the shielding provided by the device into which it is installed in order for all modular transmitter emissions to comply with Part 15 limits. It is also intended to prevent coupling between the RF circuitry of the module and any wires or circuits in the device into which the module is installed. Such coupling may result in non-compliant operation.	The transmitter is complete with its own rf shielding. The shield is permanently attached to the module's PCB
•2) The modular transmitter must have buffered data inputs (if such inputs are provided). This is intended to ensure that the module will comply with Part 15 requirements in the event of excessive data rates or over-modulation conditions.	The module has a buffered amplifier input for the data input pins on the TX chip.
•3) The modular transmitter must have its own power supply regulation. This is intended to ensure that the module will comply with Part 15 requirements regardless of the design of the power supplying circuitry in the device into which the module is installed.	The module operates on two "coin" battery cells. The battery holder is permanently attached to the module.
•4) The modular transmitter must comply with the requirements of Section 15.203 - the antenna must either be permanently attached or employ a "unique" antenna coupler (at all connections between the module and the antenna, including the cable). The "professional installation" provision of this Section may not be applied to modules. Please note that Section 15.204(c) also applies to modules - any antenna used with the module must be approved with the module,	The antenna is permanently soldered to the PCB. The antenna is a ¼ wavelength wire formed into a coil. There is no antenna connector provided on the PCB.

either at the time of initial authorization or through a Class II permissive change.	
5) The modular transmitter must be tested in a stand-alone configuration, i.e., the antenna, AC or DC power, and data input/output lines must be connected to the module, but the module must not be inside another device during testing. This is intended to demonstrate that the module is capable of complying with Part 15 emission limits regardless of the device into which it is eventually installed. Unless the transmitter module will be battery powered, it must comply with the AC line conducted requirements found in Section 15.207. AC or DC power lines and data input/output lines connected to the module must not contain ferrites, unless they will be marketed with the module (see Section 15.27(a)). The length of these lines shall be the length typical of actual usage or, if that length is unknown, at least 10 centimeters to insure that there is no coupling between the case of the module and supporting equipment. Any accessories, peripherals, or support equipment connected to the module during testing shall be unmodified or commercially available (see Section 15.31(i)).	The module was tested as a stand-alone device. There are no AC, DC, or I/O lines. The only connection provided is data I/I through the header.
•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. This exterior label can use wording such as the	The modular transmitter is inscribed with its own unique FCC ID. Instruction is given in the OEM manual as to labeling requirements.

following: “Contains Transmitter Module FCC ID: XYZMODEL1” or “Contains FCC ID: XYZMODEL1.” Any similar wording that expresses the same meaning may be used. The Grantee may either provide such a label, an example of which must be included in the application for equipment authorization, or, must provide adequate instructions along with the module which explain this requirement. In the latter case, a copy of these instructions must be included in the application for equipment authorization.	
•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. A copy of these instructions must be included in the application for equipment authorization. For example, only cordless phones are permitted to operate under Section 15.233, thus, a module authorized under this Section would be limited to use in cordless phones and the instructions provided with the device must explain this limitation.	The module meets all of the requirements of FCC Part 15, Subpart C. The device operates specifically under 15.249.
•8) In the case of a modular transceiver, the modular approval policy only applies to the transmitter portion of such devices. Pursuant to Section 15.101(b), the receiver portion will either be subject to Verification, or it will not be subject to any authorization requirements (unless it is a Scanning Receiver, in which case it is also subject to Certification,	The device is not a transceiver but is a transmitter.

pursuant to Section 15.101(a)).	
•9) FCC Rules in Sections 2.1091, 2.1093 and specific Sections of Part 15, including 15.319(i), 15.407(f), 15.253(f) and 15.255(g), require that Unlicensed PCS, UNII and millimeter wave devices perform routine environmental evaluation for RF Exposure to demonstrate compliance. In addition, spread spectrum transmitters operating under Section 15.247 are required to address RF Exposure compliance in accordance with Section 15.247(b)(4). Modular transmitters approved under other Sections of Part 15, when necessary, may also need to address certain RF Exposure concerns; typically by providing specific installation and operating instructions for users, installers and other interested parties to ensure compliance.	The device operates under 15.249 with an rf power of 0.75 mW. This device is not subject to routine rf exposure evaluation.